Companies looking to take advantage of a place where automotive innovation is supported through a strong and continuous stream of highly skilled workers and the industry’s top talent, fostered by a strong network of university programs and research centers, and propelled forward with a myriad of industry resources, need only to come to Michigan to pass through the gateway to global automotive innovation.
Contact Information
The Michigan Automotive Research and Development Directory is now online as a searchable database. This database is continually being updated with new Michigan R&D facilities. For the complete and most up-to-date information on Michigan’s automotive R&D facilities, go to: www.michigan.org/autotech

Update Information
This directory contains a listing of companies that have automotive / vehicle related research and development (R&D) facilities in Michigan. If you would like to include your company or make changes, please contact Eric Shreffler at 517-373-9808 or shrefflere@michigan.org

Author
Eric Shreffler, Advanced Automotive / Manufacturing / Materials Technology Development, MEDC

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This is the third edition of vehicle-related R&D facilities located in Michigan. The directory lists over 330 companies that have facilities located in the state that are devoted to basic or applied vehicle-related research, engineering, testing, and/or product development. The companies range from multi-national, multi-industry conglomerates to one-shop, specialty enterprises and are responsible for significant innovation of vehicles around the world.
Michigan: The Gateway to Global Automotive Innovation

Michigan gave the automotive industry the upper hand over 100 years ago when it put the world on wheels. Michigan today continues to foster the innovation of how the world moves by serving as the global capital of automotive research and development (R&D). Wherever in the world you compete, Michigan can give you the upper hand.

The sheer concentration of automotive R&D companies and facilities making their home in Michigan represents a story of innovation unparalleled in the world. Why is there a nexus for automotive R&D in Michigan? The story runs long and deep from the time the world’s first automobiles were being produced to the latest in vehicle and alternative energy technology. Companies looking to take advantage of a place where automotive innovation is supported through a strong and continuous stream of highly skilled workers and the industry’s top talent, fostered by a strong network of university programs and research centers, and propelled forward with a myriad of industry resources, need only to come to Michigan to pass through the gateway to global automotive innovation.

Innovation breeds success, and the R&D companies in this edition of the directory have realized significant success in the last several years, including the expansion of their impressive roster. Whether a company is making vehicles travel lighter and swifter, reducing the impact of movement on the world’s precious resources, creating materials and processes that will change the shape of the industry to come, or saving lives of those on the go, success is less than six degrees away from the companies that choose to have a presence in Michigan.

Through the gateway, there is also potential for companies to connect to one of the most important revolutions of mobility today—alternative fuels and powertrains. Michigan is poised to usher in a new era for alternative energy and fuel advancements on the foundation of the state’s current prowess in R&D. The network of companies and resources presented in this directory are on the cusp of the next iteration of alternative fuels and hybrid development and waiting for you to join them.

The invitation to come to Michigan is standing, and a new connection is always ready to be made through the gateway. If this story of innovation and success does not engage you, then the facts will.
Automotive R&D

Basic Facts

Michigan is the world leader in Automotive Research and Development. The density, diversity and depth of Michigan’s vehicle research and development community is unmatched anywhere in the world.

- Over 330 automotive R&D companies¹
- #1 state for vehicle-related R&D activity, spending $10.7 billion annually and employing an estimated 65,000 professionals statewide²
- Michigan’s vehicle-related R&D spending exceeds all other states and countries in North America combined³
- 9 of the 10 world’s largest OEM’s have research, product development, or production facilities in Michigan. (The top 10 produce 85% of the world’s vehicles.)⁴

Industrial R&D Intensity

Michigan leads the nation in industrial R&D spending per dollar of gross state product. (With $15.2 billion in total industrial R&D spending second only to California.)⁵

- #4 state for engineering graduates⁶
- In 2006, Michigan universities and colleges granted over 6,500 engineering degrees⁷
- The University of Michigan is #2 in the nation for research and development spending, according to the National Science Foundation⁸
- Michigan is ranked seventh for patents. Michigan entrepreneurs, companies and universities filed 3,367 patents in 2005⁹
- Michigan produces more cars and light trucks than any other state—2,516,663 in 2006 accounting for 22% of US vehicle production¹⁰
- Of the top 50 global auto suppliers, 46 have facilities in Michigan¹¹

Sources:

1. MEDC Directories and Survey
2. National Science Foundation, Table 37 Funds for Industrial R&D Performance in the U.S. by industry and company size 2003; “motor vehicle related” defined as NAICS 3361-3363, and the Center for Automotive Research
4. Automotive News and Ward’s Automotive 2006
5. National Science Foundation, Table 37 Funds for Industrial R&D Performance in the U.S. by industry and company size 2003; and U.S. Bureau of Economic Analysis 2003, and the Center for Automotive Research. GSP in current dollars
8. National Science foundation, Survey of R&D expenditures at Universities and colleges. FY 2003 and The University of Michigan
10. Wards Calendar Year Car and Truck Production by Make by State, 2007
11. Ward’s Automotive 2006
Michigan’s Automotive Research & Development Infrastructure

The global automotive industry is both a massive generator and consumer of technologies. Supporting the world’s largest concentration of vehicle related R&D companies is a unique network of organizations, associations, universities, and programs unmatched anywhere in the world.

These Michigan based entities, combined with over 330 individual vehicle R&D companies, and tens of thousands of professionals constitute the world’s most internationally diverse industrial research community.

**Resources**

- **Automotive Industry Action Group (AIAG)** is a managerial-level forum dedicated to improved business processes / communications throughout the supply chain. [www.aiag.org](http://www.aiag.org)
- **Center for Automotive Research (CAR)** is an internationally respected non-profit organization focused on the analysis of trends and the research of significant issues that relate to the future direction of the global automotive industry. [www.cargroup.org](http://www.cargroup.org)
- **CSM Worldwide** provides automotive market forecasting services and strategic advisory solutions to the world’s top automotive manufacturers, suppliers and financial organizations. [www.csmauto.com](http://www.csmauto.com)
- **ELM International Inc.** is a comprehensive source of auto industry information to include the mapping of assembly, parts and supplier facilities. [www.elm-intl.com](http://www.elm-intl.com)
- **IRN Inc.** is a prominent automotive / advanced manufacturing consulting firm serving a wide range of North American, European and Asian clients. [www.thinkirn.com](http://www.thinkirn.com)
- **MICHauto** A broad-based auto industry advocacy, information and marketing association. [www.michauto.org](http://www.michauto.org)
- **Michigan’s 12 SmartZones and 7 Business Accelerators** formed to stimulate the growth of technology-based businesses and jobs by creating recognized clusters of technology enterprises and research institutions throughout the state. [www.michigan.org/smartzones](http://www.michigan.org/smartzones)
- **Michigan Center for Manufacturing Sciences (MCMS)** works to build cross-industry partnerships facilitating the introduction of new technologies in the manufacturing sector. [www.mcms.org](http://www.mcms.org)
- **Michigan Manufacturing Technology Center (MMTC)** provides customized training and consultation specifically designed for small and medium sized manufacturers. [www.mmtc.org](http://www.mmtc.org)
- **Michigan Small Business & Technology Development Center** provides services to assist technology companies, including the areas of IP protection, financing, planning, and commercialization strategies. Michigan is one of two states whose small business centers carry the “technical” designation. [www.misbtd.org](http://www.misbtd.org)
• **Michigan Small Tech Association (MISTA)** Helps micro and nano technology companies find partners, list intellectual property, find funding, promote events and make connections to grow their small tech business. [www.michigansmalltech.org](http://www.michigansmalltech.org)

• **National Automotive Center (NAC)** The Department of Defense/Army focal point for collaborative ground vehicle research and development. The NAC serves as a catalyst linking industry, academia and government agencies in the development and exchange of automotive technologies. [www.tacom.army.mil/tardec/nac](http://www.tacom.army.mil/tardec/nac)

• **NextEnergy** is a non-profit corporation founded to enable research, testing, and the commercialization of energy technologies that positively contribute to economic competitiveness, energy security and the environment. [www.nextenergy.org](http://www.nextenergy.org)

• **The Original Equipment Suppliers Association (OESA)** serves as a resource for industry information and analysis for its nearly 400 auto supplier member companies representing $300 billion in global sales. [www.oesa.org](http://www.oesa.org)

• **R.L. Polk & Co.** is the premier provider of automotive registration and marketing data for the automotive and related support industries. Polk conducts extensive operations around the world. [www.polk.com](http://www.polk.com)

• **SAE International – World Congress** Since its founding over 100 years ago the Society of Automotive Engineers has held its annual World Congress in Detroit. 35,000 engineers present over 1,500 technical papers. 16% of SAE International’s worldwide membership is in Michigan. [www.sae.org](http://www.sae.org)

• **Specialty Equipment Marketing Association Technology Development Unit (SEMA)** Representing the $40 billion vehicle customization and aftermarket, SEMA’s 6,500 company association has housed its technology development functions in Michigan. [www.sema.org](http://www.sema.org)

• **Tank – Automotive Research, Development and Engineering Center (TARDEC)** The Nation’s laboratory for advanced military automotive technology pushes the state-of-the-art in programs including power and energy, advanced collaborative environments, robotics, electric drive and embedded simulation to provide the Army with the material solutions it demands. [www.tacom.army.mil/tardec/](http://www.tacom.army.mil/tardec/)

• **U.S. Army Tank-Automotive and Armaments Command (TACOM)** military and civilian associates find and implement technology and logistics solutions for the soldier. From tank-automotive and armaments weapons systems research and development, through procurement and fielding, TACOM’s associates provide support to America’s Armed forces. [www.tacom.army.mil](http://www.tacom.army.mil)

• **U.S. Environmental Protection Agency’s (EPA’s) National Vehicle and Fuel Emissions Laboratory (NVFEL)** develops national regulatory programs to reduce mobile source related air pollution; evaluates emission control technology; tests vehicles, engines, and fuels; and determines compliance with federal emissions and fuel economy standards. [www.epa.gov/nvfel](http://www.epa.gov/nvfel)

• **Vehicle Infrastructure Integration Initiative (VII)** Michigan’s Department of Transportation is the leader among this national coalition of ten State Departments of Transportation, auto manufacturers, and the US Department of Transportation in developing, testing and determining the feasibility of an interactive communications network between the vehicle, roadway and community services. [www.vehicle-infracture.org](http://www.vehicle-infracture.org)

• **Wireless Integrated Microsystems (WIMS) Engineering Research Center** handles biomedical and environmental microsystems, micropackaging and fabrication technologies, wireless interfaces and micropower circuits. The center is funded by the National Science Foundation, Michigan State University, the University of Michigan, Michigan Technological University, the State of Michigan and a consortium of automotive, chemical and microelectronic companies. [www.wimserc.com](http://www.wimserc.com)

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Michigan is poised to usher in a new era for alternative energy and fuel advancements on the foundation of the state’s current prowess in R&D.
University Programs and Research Centers

Michigan’s 15 public universities and more than 30 private universities and colleges contribute significantly to Michigan’s outstanding knowledge base and cutting edge research capabilities in the automotive industry. In addition to annually granting more than six-thousand undergraduate and graduate engineering degrees, thereby creating the automotive innovators and leaders of tomorrow, these higher learning centers stimulate opportunities for automotive advancement, some of which are highlighted below. When it comes to advancing how the world moves, Michigan’s university programs and research centers are best in class.

**University of Michigan**

- The University of Michigan Transportation Research Institute (UMTRI) conducts broad research in the field of transportation, including automotive industry trends, vehicle dynamics and safety, intelligent transportation systems, energy efficiency and emissions, and alternative powertrains. [www.umtri.umich.edu/news](http://www.umtri.umich.edu/news)

- Transportation Energy Center (TEC), part of the University of Michigan College of Engineering, is engaged in fundamental and applied research in the areas of advanced energy conversion and storage technologies. [www.engin.umich.edu/research](http://www.engin.umich.edu/research)

- Research Center (ARC) is a University-based U.S. Army Center of Excellence for advancing technology of high-fidelity simulation of military and civilian ground vehicles. Research areas include vehicle dynamics, simulation, high performance structures and materials, advanced and hybrid powertrains, and vehicle systems integration. [http://arc.engin.umich.edu](http://arc.engin.umich.edu)

- Hydrogen Energy Technology Laboratory (HETL) conducts research on hydrogen production and fuel cells. [www.engin.umich.edu/dept/che/research](http://www.engin.umich.edu/dept/che/research)

**Michigan State University**

- Biomass Conversion Research Laboratory develops cost effective and environmentally attractive means of generating fuels, chemicals, materials, foods and feeds from renewable plant biomass. [www.everythingbiomass.org](http://www.everythingbiomass.org)

- Automotive Research Experiment Station conducts automotive research in areas that include powertrain technology, electronic control strategies, fluid mechanics, thermoelectric materials, and small engine emissions. [www.egr.msu.edu/erl/index](http://www.egr.msu.edu/erl/index)

- Center for Sustainable Materials conducts research into materials and processes from renewable biomass to replace petroleum-based products. [egr.msu.edu/bio/presentations/center_asustain_matls/CSM](http://egr.msu.edu/bio/presentations/center_asustain_matls/CSM)
Wayne State University

- **Center for Automotive Research** conducts research on combustion, performance, fuel economy, emission controls, friction and wear, and simulation of automotive engines. [www.eng.wayne.edu/page.php?id=751](http://www.eng.wayne.edu/page.php?id=751)

- **National Biofuel Energy Laboratory**, formed through a partnership between Wayne State University and NextEnergy, will develop and strengthen B20 specifications and standards in order to facilitate widespread warrant of B20 use by vehicle and engine OEMs and component suppliers. [www.eng.wayne.edu/page.php?id=4469](http://www.eng.wayne.edu/page.php?id=4469)

Michigan Technological University

- **Sustainable Futures Institute** conducts sustainability initiatives related to water, air, and energy, industrial ecology, environmentally conscious manufacturing, green engineering, public policy, the built environment and sustainable development. [www.sfi.mtu.edu](http://www.sfi.mtu.edu)

Grand Valley State University

- **Center for Rapid Prototyping and Innovation (CRPI)** provides research, product development, prototyping and educational services directed to the auto industry. Specialized equipment allows for work in ferrous metals, aluminum and plastics. [www.svsu.edu/cbed/crpi](http://www.svsu.edu/cbed/crpi)

Kettering University

- **Center for Fuel Cell Systems and Powertrain Integration** accelerates the development and commercialization of fuel cells for stationary and mobile applications by providing world-class fuel cell engineering education and technological leadership in R&D, testing and evaluation. [www.fuelcells.kettering.edu](http://www.fuelcells.kettering.edu)

Lawrence Tech University

- **College of Engineering Alternative Energy** promotes alternative fuels and renewable energy technologies. [www.ltu.edu/engineering/mechanical/altenergy.asp](http://www.ltu.edu/engineering/mechanical/altenergy.asp)

Saginaw Valley State University

- **Center for Rapid Prototyping and Innovation (CRPI)** provides research, product development, prototyping and educational services directed to the auto industry. Specialized equipment allows for work in ferrous metals, aluminum and plastics. [www.svsu.edu/cbed/crpi](http://www.svsu.edu/cbed/crpi)

Western Michigan University

- **Center for Advanced Vehicle Design and Simulation (CAViDS)** is an industry / university collaboration providing breakthrough computer simulation technology in the areas of vehicle design and performance. [www.mac.wmich.edu/faculty/liou/CAViDS](http://www.mac.wmich.edu/faculty/liou/CAViDS)

College for Creative Studies

- Based in Detroit, this highly regarded private school of art and design has a long history of supplying design talent to the world’s automotive industry. [www.ccscad.edu](http://www.ccscad.edu)
How To Use The Directory

The first section of the directory consists of company information, listed alphabetically, followed by a number of separate indexes. The indexes are grouped by company location, vehicle component/specialties, company activities and special services.

After finding a company name in one of these indexes, turn to the main alphabetic section for detailed information.

Information in the listings includes:

- Name, address, phone numbers and website of research facilities
- Parent organization and country of origin
- Principal executives at the facility
- Employment and make-up by degree and/or specialty
- Description of R&D activities
- Products
- Description of the facility
- Services offered by the facility

Obtaining and Presenting the Data

Michigan automotive R&D companies were contacted by e-mail and telephone and were asked to fill out a form to obtain the most current information about their businesses. If a company did not respond, key information about their operations was obtained through Internet research, or the data from the 2005 directory was verified.

A number of companies have multiple R&D facilities or sites in Michigan. For those companies, only their largest or most diverse R&D facility is listed in this directory. For an alphabetical list of company data sources, please refer to page 105.
COMPANY LISTINGS
3M Automotive Innovation Center

CONTACT INFORMATION
19460 Victor Parkway, Livonia 48152
734-953-9300
www.3M.com

R&D ACTIVITIES
Prototyping, engineering, applied research, product development

PRODUCTS
Attachment solutions for automotive accessories

FACILITY DESCRIPTION
60,000 sq. ft. center is a multi-function ‘visioneering’ center for visualization, on-line design/engineering and worldwide communications

A&D Technology

CONTACT INFORMATION
4622 Runway Boulevard, Ann Arbor 48108
734-973-1111
www.aanddtech.com

PARENT ORGANIZATION
A&D Co, Ltd

PRINCIPALS
Yoichiro (Eddie) Koyama—President & CEO
Robert Lamb—Global Marketing Manager

TOTAL EMPLOYMENT
87

PRODUCTS
Powertrain testing solutions for a variety of industries, including automotive, off-highway, small engines, diesel, fuels and lubricants, and motorsports. Full range of testing tools, including data acquisition and control, combustion analysis, dynamometers, automated calibration and rapid prototyping tools, and test data management. Portable Measurement & Control, Combustion Analysis, Data Acquisition & Control, Dynamometers, Model-Based Development, Lab Management, NVH, High Fidelity Torque & Force Measurement

OTHER VEHICLE SPECIALTIES
Powertrain Testing Solutions

ACT Laboratory

CONTACT INFORMATION
28031 Grand Oaks Court, Wixom 48393
248-347-6310
www.actlaboratories.com

R&D ACTIVITIES
Testing, engineering, simulation

PRODUCTS
Full range of environmental, durability, vibration and physical test services

FACILITY DESCRIPTION
100,000+ sq. ft.

OTHER SERVICES
Product Testing: Environmental, durability, vibration, physical testing, simulation

ADAC Plastics, Inc

CONTACT INFORMATION
5920 Tahoe Drive, Grand Rapids 49588
616-957-0311
www.adacplastics.com

TOTAL EMPLOYMENT
84

AUTOMOTIVE R&D SPENDING
100%

R&D ACTIVITIES
Engineering, product development, testing, validation

PRODUCTS
Interior and exterior door assemblies, cowl vent grills, lighting, and other products

FACILITY DESCRIPTION
CMM lab, engineering facilities, product validation and testing
Adaptive Materials

CONTACT INFORMATION
4403 Concourse Drive, Suite C, Ann Arbor 48108
734-302-7632
www.adaptivematerials.com

PRINCIPALS
Aaron Crumm—President
Michelle Crumm—CFO
John Halloran—Technical Advisor
David Nicholas—Director of Operations
Brad Clawson—Director of Government Programs

TOTAL EMPLOYMENT
37

PROFESSIONAL STAFF
PhD: 3
Engineers: 14
Technicians: 14

R&D ACTIVITIES

PRODUCTS

FACILITY DESCRIPTION
11,000 sq. ft. lab and office

Advanced Design Resources International, Inc

CONTACT INFORMATION
2295 North Opdyke Road, Suite A, Auburn Hills 48326
248-371-1820
www.adrintl.com

PRINCIPALS
Timothy Calkins—President
Michael Finn—VP
Timothy Wellman—Data Management
Ken Cation—Software Development

TOTAL EMPLOYMENT
20

AUTOMOTIVE R&D SPENDING
25%

PROFESSIONAL STAFF
Engineers: 1
Designers: 10
Technicians: 2
Researchers: 2
Software: 2

R&D ACTIVITIES
Complete design and engineering resources on-hand, coupled with OEM direct connectivity and collaboration applications to support advanced engineering and product development.

PRODUCTS
VinyasaMT and MTExpress: web-based project management applications developed in cooperation with Tier-1 suppliers to streamline processes and improve efficiency in design, engineering and manufacturing.

FACILITY DESCRIPTION
ADR International is housed in a 10,000 sq. ft. facility located in Auburn Hills, Michigan—just two miles from Interstate 75. Facility includes in-house design capabilities on all major CAD platforms, OEM connectivity, available office space and 2,500 sq. ft. of available industrial space for testing, prototyping, etc.

OTHER VEHICLE SPECIALTIES
Class ‘A’ Development

Advanced Magnet Source Corp

CONTACT INFORMATION
47929 Michigan Avenue, Canton 48188
734-484-5228
www.advancedmagnetsource.com

PRINCIPALS
Simon Shi—President

PROFESSIONAL STAFF
Material Science Engineers: 3
Magnetic Circuit Designer: 1
Magnetic Material Researcher: 1

R&D ACTIVITIES
Prototyping of magnetic circuit for motor sensor with all types of magnetic material.

PRODUCTS
Licensed NdFeB permanent magnet sintered type, bonded neo magnets, Alnico, SmCo, Ferrite, Rubber magnets, magnet assembly and devices

FACILITY DESCRIPTION
Fully equipped with magnet manufacturing, testing and quality control

OTHER SERVICES
Consulting: For magnet material selection, magnet application

AGC Automotive Americas R&D, Inc

CONTACT INFORMATION
1401 South Huron Street, Ypsilanti 48197
734-547-2370
www.agc-automotive.com

PARENT ORGANIZATION
Asahi Glass Co, Ltd

PRINCIPALS
Tom Throop—President
Max Sato—VP & CTO
Mark Ackerman—Division Manager

TOTAL EMPLOYMENT
26

AUTOMOTIVE R&D SPENDING
100%

R&D ACTIVITIES
Product development and engineering.

PRODUCTS
Automotive glass and glazing technologies

FACILITY DESCRIPTION
30,000 sq. ft. laboratory and test facility

Aisin World Corp of America

CONTACT INFORMATION
46501 Commerce Center Drive, Plymouth 48170
734-453-5551
www.aisinworld.com

PARENT ORGANIZATION
Aisin Seiki Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

TOTAL EMPLOYMENT
148

R&D ACTIVITIES
Product engineering, testing, evaluation.

PRODUCTS
Brakes and chassis, engine and drivetrain, body parts and information products.
Akebono R&D Engineering Center

CONTACT INFORMATION
34385 West Twelve Mile Road, Farmington Hills 48331
248-489-7400
www.akebonobrake.com

PARENT ORGANIZATION
Akebono Brake Corporation

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Engineering, design, prototyping, testing, product development

PRODUCTS
Develop, test and manufacture a range of advanced automotive brake friction materials and components

Akzo Nobel Car Refinishes
North America R&D

CONTACT INFORMATION
1845 Maxwell Street, Troy 48084
248-637-0400
www.akzonobel.com

PARENT ORGANIZATION
Akzo Nobel

PARENT COUNTRY OF INCORPORATION
Netherlands

PRINCIPALS
Michael Shesterkin—Manager, Local Supporting R&D
Andy Robertson—Manager, International Product Development
Alex Yahkind—Manager, International Product Development
Jan Moos—Manager, OEM Local Support R&D

TOTAL EMPLOYMENT
110

AUTOMOTIVE R&D SPENDING
Not available

PROFESSIONAL STAFF
PhD Chemists: 5
MS Chemists: 15
BS Chemists: 50

R&D ACTIVITIES
Automotive OEM and refinish coatings development, product commercialization, field technical support and paint analytical chemistry

PRODUCTS
Automotive refinish and OEM coatings for interior and exterior applications

FACILITY DESCRIPTION
Laboratory is housed in an 80,000 sq. ft. building that contains paint wet labs, an analytical laboratory, with state of the art microscopy and other analytical instrumentation, spray booths and materials testing capabilities

OTHER SERVICES
Product Testing: ISO17025 Certified laboratory for paint testing
Avail Equip/Facility: State of the art paint analytical laboratory and other unique paint test equipment

Alcan Automotive –
Applied Engineering Center

CONTACT INFORMATION
1845 Maxwell Street, Troy 48084
248-637-0400
www.akzonobel.com

PARENT ORGANIZATION
Akzo Nobel

PARENT COUNTRY OF INCORPORATION
Netherlands

R&D ACTIVITIES
Automotive OEM and refinish coatings development, product commercialization, field technical support and paint analytical chemistry

PRODUCTS
Automotive refinish and OEM coatings for interior and exterior applications

FACILITY DESCRIPTION
Laboratory is housed in an 80,000 sq. ft. building that contains paint wet labs, an analytical laboratory, with state of the art microscopy and other analytical instrumentation, spray booths and materials testing capabilities

OTHER SERVICES
Product Testing: ISO17025 Certified laboratory for paint testing
Avail Equip/Facility: State of the art paint analytical laboratory and other unique paint test equipment

Alcoa

CONTACT INFORMATION
3655 Corporate Drive, Suite 185, Farmington Hills 48331
248-455-5700
www.alcoa.com

R&D ACTIVITIES
Design and build parts and systems that deliver on consumer benefits such as performance, safety, fuel efficiency, and environmental performance

PRODUCTS
High performance automotive components and assemblies, including aluminum sheet for body panels, forged and cast wheels, electrical distribution systems, chassis and suspension components, and assemblies for bumpers, engine cradles, drive shafts, roof systems, and others

Allied Photochemical, Inc

CONTACT INFORMATION
48 North Airport Drive, Kimball 48074
810-364-6910
www.alliedphotochemical.com

PRINCIPALS
Michael P. Kelly—CEO & President
Roy Krohn—CSO & Founder
Scott Howe—VP Operations
Dan Sweetwood—Director of Sales

AUTOMOTIVE R&D SPENDING
$750,000

PROFESSIONAL STAFF
Engineers: 5
Masters Degrees: 2
Overseas Assignments: 3

R&D ACTIVITIES
Product research & development, formulation, testing, applications engineering, production development and formulation of 100% VOC Free/100% HAP Free/100% Solid/100% UV curable inks, dielectrics, paints and coatings

PRODUCTS
Silver conductive inks, dielectrics, paints, coatings
(100% VOC Free/100% HAP Free/100% Solid/100% UV curable)

FACILITY DESCRIPTION
14,000 sq. ft. state-of-the-art production facility
Alps Automotive

CONTACT INFORMATION
1500 Atlantic Boulevard, Auburn Hills 48326
248-391-9950
www.alpsautomotive.com

R&D ACTIVITIES
Research and product development

PRODUCTS
Custom switches, keyless entry systems, electronic control modules, column systems, position sensors, steering controls, and standard components for various automotive applications

Altair Engineering, Inc

CONTACT INFORMATION
1820 East Big Beaver Road, Troy 48083
248-614-2400
www.Altair.com

PARENT ORGANIZATION
Altair Engineering, Inc

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Dave Mason—EVP
Brett Chouinard—US Regional VP
Jim Brancheau—CTO

TOTAL EMPLOYMENT
1,200 (globally)

AUTOMOTIVE R&D SPENDING
18%

PROFESSIONAL STAFF
Majority are M.S. in Engineering or Computer Science, or PhDs

R&D ACTIVITIES
Concept through prototype design and engineering services including: industrial design, concept generation, detailed design and computer aided engineering for packaging, safety, noise and vibration, vehicle handling, robustness and optimization. Develop advanced Computer Aided Engineering suite of software for simulation and optimization of structures

PRODUCTS
Product design and development services. HyperWorks software suite. Grid computing: PBS Professional software

FACILITY DESCRIPTION
Industrial design studio, engineering offices, hardware test and development lab

OTHER SERVICES
Product Testing: concept and development testing
Avail Equip/Facility: garage, hoists, fabrication, instrumentation Consulting: customer site services
Other: clay studio

OTHER VEHICLE SPECIALTIES
Body structure

American Axle and Manufacturing – AAM Technical Center

CONTACT INFORMATION
2965 Technology Drive, Rochester Hills 48309
248-299-2900
www.aam.com

PARENT ORGANIZATION
American Axle

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Develop innovative driveline and powertrain systems solutions for passenger cars, light trucks and SUVs in the global marketplace

PRODUCTS
Manufacture, engineering, design and validation of driveline systems and related components and modules, chassis systems and metal-formed products including power transfer units, transfer cases, drive-line and transmission differentials, multi-piece driveshafts, rear drive modules (RDM) and independent front drive axles (IFDA)

FACILITY DESCRIPTION
80,000 sq. ft. design, validation and testing facility

American Electric Vehicle Company

CONTACT INFORMATION
1250 Woodward Heights, Ferndale 48220
248-542-8970
www.getkurrent.com

R&D ACTIVITIES
Vehicle integration and concepts

PRODUCTS
Product development and custom manufacturing

American Honda Motor Co

CONTACT INFORMATION
3947 Research Park Drive, Ann Arbor 48108
734-994-8441
www.honda.com

PARENT ORGANIZATION
Honda Motor Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Tommy Chang—Laboratory Manager
John German—Manager

PROFESSIONAL STAFF
Engineers
Technicians

R&D ACTIVITIES
Vehicle emission testing

PRODUCTS
Analyses of emission and energy factors

AM General Engineering & Product Development Center

CONTACT INFORMATION
12200 Hubbard Road, P.O. Box 3330, Livonia 48151
734-522-4200
www.amgeneral.com

R&D ACTIVITIES
Engineering, design, product development

PRODUCTS
Military Humvee, civilian HUMMER
American Mitsuba

CONTACT INFORMATION
1032 Karl Greimel Drive, Brighton 48116
810-225-2458
www.mitsuba.co.jp

PARENT ORGANIZATION
Mitsuba Corporation

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Mr. Toshifumi Khono—President & CEO
Mr. David Stevens—VP Administration
Mr. Tetsuya Manabe—AVP Sales & Marketing
Mr. Shinichi Nagashima—Engineering Director
Mr. Tomoyasu Nakayama—Purchasing

TOTAL EMPLOYMENT
60

R&D ACTIVITIES
Design, development and testing

PRODUCTS
DC electric motors and actuators including wiper systems, power slide door systems, power window, seat, and sunroof motors, starter motors, electronic throttle control motors, cooling fans with motor, relays, lamps, etc.

FACILITY DESCRIPTION
North American corporate headquarters and technical center

American Specialty Cars—ASC

CONTACT INFORMATION
One ASC Center, Southgate 48195
734-285-4911
www.ascglobal.com

TOTAL EMPLOYMENT
1,000

R&D ACTIVITIES
Alias animation, surfacing and Taurus 5-axis milling C3P and I-man connectivity, structural analysis via FEA, full concept vehicle builds/prototyping

PRODUCTS
Specialty vehicle creation; create new value to existing automobiles, and develop completely new vehicles from concept to manufacture

Application Research Center

CONTACT INFORMATION
6855 Commerce Boulevard, Canton 48187
800-332-2040
www.bksv.com/4313.asp

PARENT ORGANIZATION
Brüel & Kjaer, Link Engineering, Material Sciences Corporation

R&D ACTIVITIES
NVH simulation, measure structural vibration of components, sub-systems, and full vehicles, acoustics testing

PRODUCTS
Test/research center to help companies optimize the sound and vibration characteristics of their products

FACILITY DESCRIPTION
65,000 sq. ft. testing facility with several hemi-anechoic chambers and Link Engineering 4-wheel drive dynamometers. The facility contains engineering and benchmarking rooms as well as an education center

Applied Dynamics International

CONTACT INFORMATION
3800 Stone School Road, Ann Arbor 48108
734-973-1300
www.adl.com

R&D ACTIVITIES
Development of hardware and software tools

PRODUCTS
Chassis and powertrain simulators, electronics module testing and rapid prototyping

ArvinMeritor Automotive

CONTACT INFORMATION
2135 West Maple Road, Troy 48084
248-435-1000
www.arvinmeritor.com

R&D ACTIVITIES
Engineering, design, and development

PRODUCTS
Advanced systems, modules and components to the motor vehicle industry including suspension modules, exhaust systems, emissions controls, steel wheels, roof systems and modules, door systems and modules, suspension components and ride control

ATEQ Corporation

CONTACT INFORMATION
42000 Koppernick Road, Suite A4, Canton 48187
734-451-9449
www.atequsa.com

PRINCIPALS
Guy Dewailly—President & Chief Engineer
George Cherian—General Manager

TOTAL EMPLOYMENT
13

PROFESSIONAL STAFF
Engineers: 9
Technicians: 3

R&D ACTIVITIES
Engineering, testing, calibration

PRODUCTS
Design and manufacture high technology leak testers for the manufacturing industry

FACILITY DESCRIPTION
Sales, service, calibration and test facilities
Auburn Engineering

CONTACT INFORMATION
2961 Bond Street, Rochester Hills 48309
248-852-6250
www.auburn.com

R&D ACTIVITIES
Prototyping, testing

PRODUCTS
Rapid prototyping, rapid tooling, short-run injection molding, functional plastic parts, metal castings

Autocam Corporation

CONTACT INFORMATION
4436 Broadmoor SE, Kentwood 49512
616-698-0707
www.autocam.com

R&D ACTIVITIES
Engineering, design, product development

PRODUCTS
Precision-machined solutions for fuel systems, power steering, electric motors, airbag systems, and braking systems

Autoliv, Inc

CONTACT INFORMATION
1320 Pacific Drive, Auburn Hills 48326
248-475-9000
www.autoliv.com

PARENT ORGANIZATION
Autoliv, Inc

PARENT COUNTRY OF INCORPORATION
Sweden

PRINCIPALS
Ray Pekar—Facility Director

TOTAL EMPLOYMENT
450

PROFESSIONAL STAFF
Engineers: 200
Professionals: 190
Technicians: 60

R&D ACTIVITIES
Design and develop vehicle safety components. Component and vehicle testing of automotive safety systems

PRODUCTS
Safety restraints

FACILITY DESCRIPTION
North American headquarters containing crash laboratory

Automated Software Technology, LLC

CONTACT INFORMATION
2325 Harding, Lansing 48910
517-316-2138
www.autosofttech.net

PRINCIPALS
Dan Shangraw, P.E.—President

PROFESSIONAL STAFF
Certified LabVIEW developer: 1

R&D ACTIVITIES
Custom PC based test, measurement, and control systems specializing in LabVIEW system integration

OTHER SERVICES
Product Testing: LabVIEW software Development
Product Validation: Instrumentation Development
Avail Equip/Facility: Custom Test and Measurement systems
Consulting: National Instruments Alliance Member

AVL Powertrain Engineering, Inc

CONTACT INFORMATION
47519 Halyard Drive, Plymouth 48170
734-414-9600
www.avl.com/pei

PRINCIPALS
Ray Corbin—President

TOTAL EMPLOYMENT
220

R&D ACTIVITIES
Testing and engineering

PRODUCTS
Modern gasoline and diesel engines as well as alternatively fueled power plants for a world-wide customer base. Totally new design and development of an engine or engine family and improvement of existing engines

FACILITY DESCRIPTION
Complete test cell facility including powertrain validation testing with 20 dispersed test sites including vehicle facilities

AW Technical Center USA

CONTACT INFORMATION
1203 Woodridge, Ann Arbor 48104
734-741-9900
www.aisin-aw.co.jp/en

PARENT ORGANIZATION
Aisin AW

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Electronics research and testing, product development

PRODUCTS
Vehicle navigation systems

AxleTech International

CONTACT INFORMATION
3001 West Big Beaver Road, Suite 400, Troy 48084
248-816-5401
www.axletech.com

R&D ACTIVITIES
Engineering, design, product development

PRODUCTS
Advanced planetary axles, transfer cases, independent suspension systems, dry disk and drum brakes, shaft speed and wheel speed wet disc brakes, and drivetrain components for military, off-highway, and specialty vehicles
### Aztec Manufacturing

**CONTACT INFORMATION**
15378 Oakwood Drive, Romulus 48174
734-942-7433
www.aztecmfgcorp.com

**R&D ACTIVITIES**
Product development, engineering and rapid prototyping

**PRODUCTS**
Chassis, suspension and powertrain components

### Baker Engineering, Inc

**CONTACT INFORMATION**
17165 Power Drive, Nunica 49448
616-837-8975
www.bakerengineeringinc.com

**R&D ACTIVITIES**
Engineering, design, prototyping, testing, product development

**PRODUCTS**
Complete engine development services featuring custom high performance engines and racing engines for auto and offshore racing, engine upgrades, dyno testing, engine component manufacturing, plus engine design, prototyping and testing for the US military

### Ballard Power Systems

**CONTACT INFORMATION**
15001 Commerce Drive North, Dearborn 48120
313-583-5980
www.ballard.com

**PARENT ORGANIZATION**
Ballard Power Systems Inc

**PARENT COUNTRY OF INCORPORATION**
Canada

**TOTAL EMPLOYMENT**
80

**AUTOMOTIVE R&D SPENDING**
$12 Million

**R&D ACTIVITIES**
Complete electric powertrains, electric powertrain components, stationary power inverters

**PRODUCTS**
Electric Drive Powertrains for HYBRID, Fuel Cell and Ground Support vehicle markets along with custom stationary inverter products for use in applications such as Photo-voltaic and micro grid products

**FACILITY DESCRIPTION**
Product development, test and manufacturing facilities including state of the art electric drive dynamometers, EMC testing, thermal chambers along with a grid connect and stand alone stationary power inverter development lab and a class 10,000 clean room for customized integrated power semiconductors development and manufacturing

**OTHER SERVICES**
Product Testing: Hybrid and Fuel Cell Powertrains
Product Validation: Hybrid and Fuel Cell Powertrains
Avail Equip/Facility: Electric Drive Dynamometers, EMC test facilities, Thermal Chambers

### BASF Corp

**CONTACT INFORMATION**
1609 Biddle Avenue, Wyandotte 48192
734-324-6242
www.basf.com

**PARENT ORGANIZATION**
BASF AG

**PARENT COUNTRY OF INCORPORATION**
Germany

**TOTAL EMPLOYMENT**
12,000 (North America)

**PROFESSIONAL STAFF**
Chemical Engineers

**R&D ACTIVITIES**
Basic and applied research, product development

**PRODUCTS**
Molded automotive parts made of microcellular polyurethane for suspension applications. Jounce bumpers, spring aids, coil spring isolators, shock mounts and body mounts made of Elastocell

### Behr America

**CONTACT INFORMATION**
2700 Daley Drive, Troy 48083
248-743-3700
www.behrgroup.com

**PARENT ORGANIZATION**
Behr GmbH & Co KG

**PARENT COUNTRY OF INCORPORATION**
Germany

**PRINCIPALS**
Dr. Markus Flik—CEO Behr Group
Frank Mueller—President, Behr America, Inc

**TOTAL EMPLOYMENT**
2,940

**PROFESSIONAL STAFF**
Engineers: 300

**R&D ACTIVITIES**
Full service design and development including simulation, prototyping and validation

**PRODUCTS**
Engine cooling and air conditioning components, modules and systems

**FACILITY DESCRIPTION**
Facilities include office space, lab area and climatic wind tunnel. Equipped for providing full scale of R&D services including design, simulation, validation, prototyping

### Behr-Hella Thermocontrol, Inc

**CONTACT INFORMATION**
43811 Plymouth Oaks Boulevard, Plymouth Township 48170
734-414-0900
www.bhtc.com

**PARENT ORGANIZATION**
Hella KG Hueck & Co. and Behr GmbH & Co.

**PARENT COUNTRY OF INCORPORATION**
Germany

**R&D ACTIVITIES**
Engineering, design, testing, product development

**PRODUCTS**
Operator and control units for vehicle air conditioning, linear and clocked blower control units, and electrical heaters
Benteler Automotive Corporation

CONTACT INFORMATION
1780 Pond Run, Auburn Hills 48326
248-377-9999
www.benteler.com

PARENT ORGANIZATION
Benteler AG

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
N.N. Ghoussaini—CEO
Robert DePierre—President (NAO Region)
Robert Smart, Jr.—VP Business Development

TOTAL EMPLOYMENT
13,000

PROFESSIONAL STAFF
Engineers
Technicians
Research Scientists

R&D ACTIVITIES
Product development and advanced application engineering

PRODUCTS
Chassis components and modular systems, structural products,
exhaust systems, and tubular products used in engine applications

FACILITY DESCRIPTION
Five technical centers globally including its Auburn Hills location,
which includes product engineering, design prototype, and appli-
cation testing for core products. 12 North American manufacturing
locations, including several Michigan manufacturing plants

Blue Water Automotive Systems

CONTACT INFORMATION
1515 Busha Highway, Marysville 48040
810-364-4550
www.bwasi.com

R&D ACTIVITIES
Design and manufacturing of plastic components and assemblies

PRODUCTS
Exterior, blow molded, interior trim, fuel systems, under hood,
HVAC, and seat

BorgWarner Powertrain

Technical Center

CONTACT INFORMATION
3800 Automotive Avenue, Auburn Hills 48326
248-754-9600
www.bwauto.com

PROFESSIONAL STAFF
Design Engineers
Mechanical Engineers

R&D ACTIVITIES
Engineering, product development

PRODUCTS
Engine performance reliability and fuel economy, transmissions,
four-wheel drive systems and air fluid systems

BOS Automotive Products, Inc

CONTACT INFORMATION
2619 Product Drive, Suite 108, Rochester Hills 48309
248-852-5846
www.bos.de

PARENT ORGANIZATION
BOS GmbH & Co KG

PARENT COUNTRY OF INCORPORATION
Germany

TOTAL EMPLOYMENT
25

PROFESSIONAL STAFF
Program Managers: 5
Designers: 7
Engineers: 4
Technicians: 3

R&D ACTIVITIES
Design, engineering, product development

PRODUCTS
Luggage covers, retaining nets, passenger sun protection systems
and cargo management systems

FACILITY DESCRIPTION
Sales, program, management, engineering, and prototype facility

Bosal International North America

CONTACT INFORMATION
345 Metty Drive, Ann Arbor 48103
734-994-4382
www.bosalna.com

PARENT ORGANIZATION
Bosal International Lummen

PARENT COUNTRY OF INCORPORATION
Belgium

PRINCIPALS
John Miles—President
Mike Matthews—Director, Engineering

TOTAL EMPLOYMENT
35

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Mechanical Engineers: 19
Technicians

R&D ACTIVITIES
Basic research and testing

PRODUCTS
Exhaust systems for original equipment customers

FACILITY DESCRIPTION
Anechoic chamber (noise data), model shop, and noise test track
Bosch Rexroth Corp

CONTACT INFORMATION
1701 Harmon Road, Auburn Hills 48236
248-393-3330
www.boschrexroth-us.com

PARENT ORGANIZATION
Robert Bosch Corp GmbH

PARENT COUNTRY OF INCORPORATION
Germany

PROFESSIONAL STAFF
Applications Engineers
Technicians

R&D ACTIVITIES
Product development, engineering

PRODUCTS
Assembly technology providing standardized modules for the fast, simple execution of manual and automated production lines. Products include ball and roller rail systems, linear bushings and shafts, ball screw assemblies, linear motion systems, aluminum structural framing, ergonomic workstations and accessories, robot and handling systems, flexible assembly conveyors and planning software and training.

Branson Ultrasonics Corporation

CONTACT INFORMATION
2650 Commerce Drive, Rochester Hills 48309
248-299-0400
www.branson-plasticsjoin.com

PARENT ORGANIZATION
Emerson Electric

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Brian McEntee—Automotive Manager
Ken Hunter—Engineering Manager
Bill Heatherwick—Marketing Manager

R&D ACTIVITIES
Product design and performance, plus technology for repeatable, dependable production. Instrument panels, glove box/knee bolters, instrument clusters, interior trim, HVAC housings, intake manifolds, carbon canisters, electronic modules, bottles, resonators, exterior lighting

PRODUCTS
Equipment Includes: Ultrasonic welding, vibration welding, hot-plate welding, spin welding, laser welding, thermal processing, ultrasonic metal welding

FACILITY DESCRIPTION
Sales and Engineering Technology Center

OTHER SERVICES
Product Testing: Capable of welding plastic test specimens for research and development

Brose

CONTACT INFORMATION
3933 Automation Avenue, Auburn Hills 48326
248-339-4000
www.brose.de

R&D ACTIVITIES
Engineering, product development

PRODUCTS
Window regulators, door modules, seat adjusters, and closure systems

FACILITY DESCRIPTION
85,000 sq. ft. engineering, design and production facility

Brue and Kjaer North America

CONTACT INFORMATION
6855 Commerce Boulevard, Canton 48187
800-332-2040
www.bksv.com

PARENT ORGANIZATION
Brüel & Kjaer North America

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Alan Humphrey—President
Martin Gerard—Director of Sales and Marketing
Tom Alo—Director of Operations
Marc Marroquin—Regional Manager
Joe Chou—Technical Support Specialist
Terry Sparks—Calibration and Service Manager

TOTAL EMPLOYMENT
60

R&D ACTIVITIES
Noise and Vibration Harshness (NVH) test equipment + NVH consulting

PRODUCTS
Noise and Vibration Harshness (NVH) test equipment + NVH consulting

FACILITY DESCRIPTION
Complete acoustic test laboratory including: 3 vehicle sized anechoic chambers (1 with a 4WD dyno), 1 fully anechoic chamber, 2 reverberant chambers, jury test room, and 50 person training facility

OTHER SERVICES
Product Testing: NVH testing of auto, aero/def, consumer products
Product Validation: NVH testing of auto, aero/def, consumer products
Avail Equip/Facility: Full acoustic test laboratory (4 anechoic + 2 reverberant chambers)
Consulting: Noise and Vibration Test Equipment

Burke E. Porter Machinery Co

CONTACT INFORMATION
730 Plymouth Avenue NE, Grand Rapids 49505
616-234-1200
www.bepco.com

PARENT ORGANIZATION
Burke E. Porter Machinery Company

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Kevin Kemp—Senior VP

TOTAL EMPLOYMENT
450

AUTOMOTIVE R&D SPENDING
~7% of gross revenue

PROFESSIONAL STAFF
Approximately 100 engineers worldwide

R&D ACTIVITIES
Product development activities carried out in both the US and Europe

PRODUCTS
Roll/brake machines, non-contact wheel aligners, headlamp aimers, dynamometers, tire and wheel assembly equipment, custom equipment

FACILITY DESCRIPTION
105,000 sq. ft. of research and manufacturing facility in the US. Plants also in Belgium (~80,000 sq. ft.), Wuxi China (~50,000 sq. ft.)

OTHER SERVICES
Product Testing: Automotive Testing
Product Validation: Vehicle validation
Avail Equip/Facility: Three test facilities available for auto testing in the US

OTHER VEHICLE SPECIALTIES
Custom Automotive Testing Equipment
ByTec, Inc
CONTACT INFORMATION
44801 Centre Court East, Clinton Township 48038
586-228-9410
www.bytecinc.com
R&D ACTIVITIES
Engineering, design, product development
PRODUCTS
Electro-mechanical clutch assemblies, electronic products (switches, actuators, solenoids, etc.), and driveline components

Cadence Innovation
CONTACT INFORMATION
977 East Fourteen Mile Road, Troy 48083
248-457-4400
www.cadenceinnovation.com
R&D ACTIVITIES
Engineering, design, product development
PRODUCTS
Interior products include soft trim, door trim, sidewall trim, door panels, instrument panels, airbag covers, cockpit modules and consoles. Exterior products include thermoplastic bumper fascia, exterior trim and structural components

Cadillac Products
Automotive Company
CONTACT INFORMATION
5800 Crooks Road, Troy 48098
248-813-8200
www.cadprod.com
R&D ACTIVITIES
Engineering, design, product development
PRODUCTS
Vehicle door watershields, interior automotive trim, injection molded parts and protective plastic

CalsonicKansei North America, Inc
CONTACT INFORMATION
27000 Hills Tech Court, Farmington Hills 48331
248-848-4800
www.calsonic.com
PRINCIPALS
Dave Keeney—VP, Engineering
Matt Mikesell—Director, Engineering, Electro-Mechanical
Bharat Vennapusa—Director, Engineering, IP & Interior Trim
David Young—Manager, Testing & Development
Ken Nelson—Senior Manager, Business Development
TOTAL EMPLOYMENT
20
R&D ACTIVITIES
Automotive HVAC, engine cooling, and exhaust components and systems. Vehicle front-end and cockpit modules, and interior components
PRODUCTS
HVAC, engine cooling, and exhaust components and systems. Cockpit and front-end modules
FACILITY DESCRIPTION
Design and Development Center. Vehicle wind tunnel, and electromagnetic chamber
OTHER SERVICES
Product Testing: HVAC, engine cooling, exhaust
Avail Equip/Facility: Wind tunnel, electromagnetic chamber

Cascade Engineering
CONTACT INFORMATION
3400 Innovation Court, Grand Rapids 49512
616-975-4800
www.cascadeng.com
PRINCIPALS
Fred Keller—Chairman, President & CEO
Steve Peterson—CFO
Kenya Brame—VP Business Services
TOTAL EMPLOYMENT
600
AUTOMOTIVE R&D SPENDING
50%
R&D ACTIVITIES
Interior automotive trim, exterior automotive body panels, under hood and firewall sound abatement products, interior and exterior truck components
PRODUCTS
CAD/CAM/CAE design center, materials laboratory, CMM lab, R&D laboratory and process engineering facility
FACILITY DESCRIPTION
Materials lab services, CMM lab services, custom compounding of thermal plastics and design analysis

Center for Rapid Prototyping and Innovation
CONTACT INFORMATION
7400 Bay Road, University Center 48710
989-964-4676
www.svsu.edu/cbed/crpi
PARENT ORGANIZATION
Saginaw Valley State University
PARENT COUNTRY OF INCORPORATION
USA
PRINCIPALS
Dr. Robert Tuttle—Director
Bruce Hart—Researcher
PROFESSIONAL STAFF
Engineer: 1
Technicians: 4
Researcher: 1
R&D ACTIVITIES
Product prototyping services for a variety of companies. Products can be prototyped using a variety of methods. Plastic parts can be produced using a Stratasys Dimension fused deposition machine. Metal prototypes can be produced either through CNC machining or ultrasonic consolidation via a Solidica Form-ation machine. The Form-ation machine can create aluminum prototypes with internal cavities
PRODUCTS
Finished prototype parts
FACILITY DESCRIPTION
The facility is located on campus. It has 3,000 sq. ft. of dedicated high bay manufacturing space
OTHER SERVICES
Product Testing: The Independent Test Lab at SVSU supports product testing of prototypes and finished components
Other: Rapid Prototyping
Clark Engineering Services, LLC
CONTACT INFORMATION
821 East Front Street, Buchanan 49107
269-697-8632
www.ceslab.com
TOTAL EMPLOYMENT
109
PROFESSIONAL STAFF
Test Engineers
R&D ACTIVITIES
Testing
PRODUCTS
CES product testing experience ranges from small components such as starters and air motors to transmissions and axles in excess of 1000 (up to 3000) horsepower and up to 16,000 rpm input speeds
FACILITY DESCRIPTION
The CES test facility covers over 55,000 sq. ft. located on a 24-acre test site. The facility is capable of testing vehicles, sub-assemblies or individual components

Clark-MXR Incorporated
CONTACT INFORMATION
7300 West Huron River Drive, Dexter 48130
734-426-2803
www.cmxr.com
PRINCIPALS
Bill Clark—President & CEO
Dr. Larry Walker—VP R&D
R&D ACTIVITIES
Femtosecond micromachining and microprocessing of materials
PRODUCTS
Femtosecond lasers, optical parametric amplifiers, optical delay lines, harmonic converters, and femtosecond micromachining workstations
FACILITY DESCRIPTION
11,000 sq. ft. production facility

Cobasys
CONTACT INFORMATION
3740 Lapeer Road South, Orion 48359
248-620-5700
www.cobasys.com
PARENT ORGANIZATION
Joint venture between Chevron Technology Ventures and Energy Conversion Devices
PRINCIPALS
Thomas S. Neslage—President & CEO
Scott Lindholm—VP Sales & Systems Engineering
Gary Absher—VP Product Development
Raymond Wagner—VP Marketing & Communications
Joseph Crocenzi—VP Finance
TOTAL EMPLOYMENT
185
R&D ACTIVITIES
Advanced battery and battery back up systems
PRODUCTS
Prototype development of battery modules and related test equipment for batteries and battery systems. Perhaps the largest array of battery test equipment under one roof in North America
FACILITY DESCRIPTION
Consultation, engineering support, development and manufacturing for high volume Hybrid Electric Vehicles (HEV), Electric Vehicles (EV) and 42 Volt Mild Hybrid applications. Also, backup power supply for mission critical stationary customers
OTHER VEHICLE SPECIALTIES
Hybrid Battery Systems

Coherix, Inc
CONTACT INFORMATION
3980 Ranchero Drive, Ann Arbor 48108
734-922-4096
www.coherix.com
PARENT COUNTRY OF INCORPORATION
USA
PRINCIPALS
Dwight D. Carlson—President & CEO
Neil Barlow—VP, Automotive Sales & Marketing
Ron Swonger—VP, Product Development
Bob Rayunas—VP, Operations
Alice Grisham—VP, Human Resources
Brad Pines—Director, Customer Engineering
Matt Schwantes—Manager, Applications Engineering
TOTAL EMPLOYMENT
50
PROFESSIONAL STAFF
Optical Engineers: 4
Software engineers: 7
Applications Engineers: 6
Field Service Engineers: 3
Metrology Algorithmists: 4
Electronics Engineers: 2
Mechanical Engineers: 2
R&D ACTIVITIES
Develop and deliver non-contact high-definition 3-D shape and surface metrology and inspection systems that measure and detect shape, dimensions and defects. Resolutions and accuracies are provided from nanometers through microns for a variety of critical semiconductor and automotive engineering and process control applications. Metrology results are produced in 3-D color graphic, as well as numeric, form to enable instant intuitive process performance understanding and action where microns matter. Processing is performed within in-line or off-line cycle times, consistent with the part manufacturing or handling requirements on the plant floor
PRODUCTS
1. ShaPix Surface Detective holographic interferometer system for complete high-definition measurement of precision surfaces up to square meters in size to one-micron accuracy in minutes or less
2. 3DX and i-cite 2-D and 3-D machine vision solutions providing micron-level measurement and inspection in diverse applications ranging from packaged semiconductor quality control to food product inspection
FACILITY DESCRIPTION
Corporate Headquarters and primary technical facilities (Optics, Electronics, Mechanical Assembly, System Production and Metrology Services) are located in Ann Arbor Michigan. Additional customer engineering support and sales facility in Singapore, Asia
OTHER VEHICLE SPECIALTIES
Metrology of machined surfaces and packaged semiconductors

Collins & Aikman Corporation
CONTACT INFORMATION
47785 West Anchor Court, Plymouth 48170
734-207-7000
www.colailk.com
PARENT ORGANIZATION
Collins & Aikman Corp
PARENT COUNTRY OF INCORPORATION
USA
R&D ACTIVITIES
Basic and applied research, testing, engineering and product development
PRODUCTS
Auto interiors, interior panels, headliners, carpets and trunk liners
FACILITY DESCRIPTION
Vibro-acoustic testing
Comau Pico

CONTACT INFORMATION
21000 Telegraph Road, Southfield 48034
248-353-8888
www.comaupico.com

R&D ACTIVITIES
Engineering, process design

PRODUCTS
Develop turnkey manufacturing systems utilizing automated assembly tooling, as well as product/project engineering services

Compact Power

CONTACT INFORMATION
1857 Technology Drive, Troy 48084
248-291-2380
www.compactpower.com

PARENT ORGANIZATION
LG Chem

PARENT COUNTRY OF INCORPORATION
South Korea

PRINCIPALS
Prabhakar Patil—CEO
Mohamed Alamgir—R&D Director
Martin Klein—Engineering Director
Scott Wilder—Sales & Marketing Director

TOTAL EMPLOYMENT
17

R&D ACTIVITIES
Research and product development, prototype battery packs, testing

PRODUCTS
Lithium polymer battery packs for hybrid electric vehicles

Concept Design Lighting

CONTACT INFORMATION
P.O. Box 871383, Canton 48187
734-495-0095
www.conceptdesignlighting.com

R&D ACTIVITIES
Prototyping, engineering, design, product development, testing

PRODUCTS
LED lighting systems for interior and exterior applications

OTHER SERVICES
Consulting: Concept design, engineering and manufacturing

Continental Teves / Continental Temic

CONTACT INFORMATION
One Continental Drive, Auburn Hills 48326
248-393-5300
www.contiteves.com

R&D ACTIVITIES
Product development, systems development, engineering, testing

PRODUCTS
Brake and safety systems, chassis and powertrain, electric drives, body electronics

Control Power-Reliance, LLC

CONTACT INFORMATION
310 Executive Drive, Troy 48083
248-583-1020
www.cp-r.com

PARENT ORGANIZATION
JE Myles, Inc

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Ed Myles—President

TOTAL EMPLOYMENT
40

AUTOMOTIVE R&D SPENDING
$5 Million, 17%

PROFESSIONAL STAFF
Mechanical & electrical—8

R&D ACTIVITIES
Naval vessel design (300+ ton capacity), electronic & hydraulic hybrid machine tool drives, high pressure liquid & gas systems (up to 100,000 psi), electro-hydraulic & electronic servo drive systems, functional & fatigue testing systems, 6 axis transportation simulation & real time rail impact testing products & services

PRODUCTS
An array of product functional testing equipment including a 6,000 horsepower six-axis 15,000 lb capacity testing machine and a rail impact test machine simulating real world rail car humping, a major cause of product damage when shipping. This is a proprietary full size rail car (15’ long) operating over 100 feet of track with computer controlled acceleration and deceleration

FACILITY DESCRIPTION
50,000 sq. ft.

OTHER SERVICES
Product Testing: Automotive & Military functional & durability
Product Validation: 6 axis simulation, life cycle, vibration, environmental, rail impact
Avail Equip/Facility: 6000 HP 6 axis 10’ vibe table, full size rail car 15’ long on 100’ track
Consulting: Mechanical, electronic/hydraulic servo systems

OTHER VEHICLE SPECIALTIES
Transportation simulation testing of all automotive assemblies & components

Continental Teves – Brimley Development Center

CONTACT INFORMATION
9301 South M-221, Brimley 49715
906-248-6700
www.contiteves.com

R&D ACTIVITIES
Testing

FACILITY DESCRIPTION
46,500 sq. ft. automobile testing facility (cold weather)

OTHER SERVICES
Testing
**Cooper-Standard**

**CONTACT INFORMATION**
39550 Orchard Hill Place, Novi 48375
248-596-5900
www.cooperstandard.com

**R&D ACTIVITIES**
Design, development, prototype, test and manufacture sealing system products, fluid systems, vibration control applications and other related products

**PRODUCTS**
Sealing, plastics, NVH, and fluids products including vehicle mounts, bumpers, dampers, weather seals and moldings, subsystems and components that control, sense, deliver and measure fluids and vapors

**Cosma International**

**CONTACT INFORMATION**
1807 East Maple Road, Troy 48083
248-524-5300
www.cosma.com

**PARENT ORGANIZATION**
Magna International

**PARENT COUNTRY OF INCORPORATION**
Canada

**R&D ACTIVITIES**
Engineering, design, product development

**PRODUCTS**
Light truck and SUV frames, as well as a market leader for both suspension modules and complete body-in-white systems

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**DaimlerChrysler Corporation**

**CONTACT INFORMATION**
1000 Chrysler Drive, Auburn Hills 48326
248-576-5741
www.daimlerchrysler.com

**PARENT ORGANIZATION**
DaimlerChrysler

**PARENT COUNTRY OF INCORPORATION**
Germany

**PRINCIPALS**
Dieter Zetsche—Chairman, DaimlerChrysler AG
Thomas W. LaSorda—President and CEO, DaimlerChrysler Corp.
Eric R. Ridenour—COO, DaimlerChrysler Corp.

**TOTAL EMPLOYMENT**
63,788 (DaimlerChrysler Corp. U.S.)

**AUTOMOTIVE R&D SPENDING**
Approx. $7.7 billion

**R&D ACTIVITIES**
Design, engineer and evaluate DaimlerChrysler vehicles, powertrains and components. Powertrain test facility, wind tunnel, road simulators and emissions test facilities

**PRODUCTS**
Chrysler, Jeep and Dodge cars, trucks SUVs and minivans

**FACILITY DESCRIPTION**
Multiple sites, including 5.5 million sq.ft. DaimlerChrysler Headquarters and Technology Center

**Dana Corporation**

**CONTACT INFORMATION**
8000 Yankee Road, Ottawa Lake 49267
419-535-4200
www.dana.com

**PRINCIPALS**
Jack Dawson—VP Technology Planning
Chuck Heine—CTO & Engineering
Bob Fesenmyer—President Business Development
Gary Corrigan—VP Communications

**AUTOMOTIVE R&D SPENDING**
$9.1 Billion

**R&D ACTIVITIES**
Design, test and manufacture structures, engine components, chassis systems and drivelines for the automotive, commercial vehicle, and off-highway market

**PRODUCTS**
Gaskets, engine bearings, axles, drivshafts, piston rings, frames, heat shields, off highway transmissions and fluid routing components

**FACILITY DESCRIPTION**
Product development and test facilities

**Dearborn Group, Inc**

**CONTACT INFORMATION**
27007 Hills Tech Court, Farmington Hills 48331
248-488-2080
www.dgtech.com

**PRINCIPALS**
Mark Zachos—General Manager
Keith Zerwas—VP

**TOTAL EMPLOYMENT**
100

**AUTOMOTIVE R&D SPENDING**
20%

**PROFESSIONAL STAFF**
Design Engineers: 25
Software Developers: 40
Customer Support Engineers: 10

**R&D ACTIVITIES**
Electronic circuit design and prototyping. Software engineering. Product development and testing

**PRODUCTS**
OBD (On Board Diagnostics) interface devices. CAN protocol development tools. PC software for vehicle diagnostics and testing

**FACILITY DESCRIPTION**
12,000 sq. ft. office and laboratories

**OTHER SERVICES**
Product Testing: Vehicle diagnostic equipment testing

**OTHER VEHICLE SPECIALTIES**
Vehicle Diagnostics
Defiance Testing and Engineering

CONTACT INFORMATION
1628 Northwood Drive, Troy 48084
248-458-5900
www.defiancetest.com

PARENT ORGANIZATION
GenTek

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Peter Dodd—VP & General Manager

TOTAL EMPLOYMENT
160

AUTOMOTIVE R&D SPENDING
90%

R&D ACTIVITIES
Block cycle and real time simulation testing, fatigue durability, safety, noise and sound quality evaluations, data acquisition, environmental, CAE

PRODUCTS
Components for full vehicle, car, light truck, heavy truck and off highway chassis, bumpers, suspension and steering, electrical components and systems, body structure and closures, powertrain and exhaust interior

FACILITY DESCRIPTION
A2LA and ISO guide 17025 certified, 270,000 sq. ft. facility. Structural test lab using primarily hydraulic actuators

Delmia Corporation

CONTACT INFORMATION
900 North Squirrel Road, Auburn Hills 48326
248-267-9696
www.delmia.com

PARENT ORGANIZATION
Dassault Systemes S.A.

PARENT COUNTRY OF INCORPORATION
France

R&D ACTIVITIES
Software design, testing

PRODUCTS
Comprehensive suite of digital manufacturing software that streamlines manufacturing processes to bring products to market faster

Delta Technologies Group

CONTACT INFORMATION
1350 Harmon Road, Auburn Hills 48326
248-391-6800
www.deltatechgroup.com

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Pete Mozer—CEO
Bob Vamos—President
John Wagner—CFO
Doug Cleland—Sales, Production Parts, Product Development
Vince Elliott—Plant Manager, Tool Manufacturing
John Arkles—Sales, Production Tooling
Tibor Toreki—VP, Technology

TOTAL EMPLOYMENT
250

PROFESSIONAL STAFF
Tool Designers: 24
Product Designers: 4
Product Engineers: 15
Tool Making Technicians: 120
Production Part Technicians: 30

R&D ACTIVITIES
Styling studios, 3D solid modeling, simulation

PRODUCTS
Product designs, plastic production parts, plastic injections tools, concept and proveout modeling, secondary tools, gages and check fixtures

FACILITY DESCRIPTION
Four facilities comprising 240,000 sq. ft. on our campus style, Auburn Hills location

OTHER SERVICES
Product Validation: Styling, tooling, and production parts verification, gantry CMM
Avail Equip/Facility: Production tryout facility in large injection presses (e.g., 3500 ton)
Consulting: Tooling engineers, production development and support professionals
Other: New applications for under-the-hood plastic parts, Aerospace
Denso International America, Inc

CONTACT INFORMATION
24777 Denso Drive, Southfield 48086
248-350-7500
www.globaldenso.com

PARENT ORGANIZATION
Nippondenso

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Matt Matsushita—President & CEO
Doug Patton—Senior VP Engineering & Development

TOTAL EMPLOYMENT
650

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers
Technicians

R&D ACTIVITIES
Product development in the areas of climate control products, fuel pumps and electronic displays. Testing is conducted for Denso's product line at the component, system and vehicle levels

PRODUCTS
Climate control systems, engine controls and sensors, starter motors, alternators, accessory drive motors, telematics systems, display and information products, gasoline and diesel fuel handling systems, safety system items and related products

FACILITY DESCRIPTION
Vehicle test capabilities include a full size anechoic chamber, emission test chamber, two engine dyno cells, high temp chamber, high/low temp chamber, climatic wind tunnel, component and system bench test capabilities, materials lab, EMC component chamber, vibration test capabilities, BSR chamber, a full machine shop and rapid modeling capabilities

Design Intent Engineering, Inc

CONTACT INFORMATION
23399 Commerce Drive, Suite B-10, Farmington Hills 48170
248-478-0134
www.designintenteng.com

PARENT ORGANIZATION
Eicher Motors Limited

PARENT COUNTRY OF INCORPORATION
India

PRINCIPALS
Matthew Pyzik—President & CEO
Tony Hopkins—Director, Engineering Services
John Pacella—Manager, Design
Terry Hopkins—Shop & Prototype Services
Dave Wright—Sales & Marketing

TOTAL EMPLOYMENT
85

PROFESSIONAL STAFF
Design Engineers: 60
Technicians: 10
Engineers: 10

R&D ACTIVITIES
Class A surface development, product development and design through production release, buck and mule vehicle build, verification milling, industrial design/studio support, CAE / FEA, reverse engineering and show properties

PRODUCTS
Complete product design and development, low volume proto-

Detroit Diesel Corporation

CONTACT INFORMATION
13400 Outer Drive West, Detroit 48239
313-592-5000
www.detroitdiesel.com

PARENT ORGANIZATION
DaimlerChrysler

PARENT COUNTRY OF INCORPORATION
Germany

R&D ACTIVITIES
Engineering, design, product development, testing

PRODUCTS
Diesel engines for truck and commercial applications

Detroit Testing Laboratory, Inc

CONTACT INFORMATION
27485 George Merrelli Drive, Warren 48092
586-754-9000
www.dtl-inc.com

R&D ACTIVITIES
Testing

PRODUCTS
Broad range of testing capabilities including automotive components, physical and mechanical properties of materials, environmental simulation and accelerated weathering, chemical/thermal analysis, metallurgical services, mechanical/fatigue, electrical/electronics, EMI/EMC, fuel systems and components, vibration/shock, full vehicle chambers and certification programs

FACILITY DESCRIPTION
Independent, accredited facility including ASTM, SAE, FMVSS, ISO, DIN, JIS testing capabilities as well as specific requirements of automotive manufacturers and suppliers. DTL maintains accreditation through the American Association for Laboratory Accreditation (A2LA) to ISO/IEC 17025:1999

OTHER SERVICES
Testing
Dow Automotive

CONTACT INFORMATION
1250 Harmon Road, Auburn Hills 48326
248-391-6300
www.dow.com/automotive

PARENT ORGANIZATION
Dow Chemical Company

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
George Hamilton—President
John Hacskaylo—VP R&D

R&D ACTIVITIES
Plastics, adhesives, sealants, plastics-enhanced products, and body engineered systems for the global automotive industry.
Engineering capabilities include modularization, CAD/CAE, finite element analysis, design optimization through tool and prototype development, and processing methodology selection mold-filling analysis. Occupant safety testing

FACILITY DESCRIPTION
In-house testing and validation, along with program and supply-chain management expertise (including equipment selection and processing method recommendations)

Dow Corning

Analytical Solutions Laboratory

CONTACT INFORMATION
2200 West Salzburg Road, Building DC-4, Support Lab 1C2, Auburn 48611
877-322-8378
www.dowcorning.com/analytical

PARENT ORGANIZATION
Dow Corning Corporation

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Jennifer Stasser—Business Manager
Jeff Kelly—Analytical Specialist
Ronda Grosse—Analytical Specialist

TOTAL EMPLOYMENT
50

PROFESSIONAL STAFF
PhD Chemists: 40%
Bachelor & Master Degree Chemists: 35%
Technicians: 25%

R&D ACTIVITIES
Characterizing a multitude of materials and troubleshooting problems related to development, manufacturing and application performance including materials analysis and characterization, product formulation, method development, contaminant determination, etc.

OTHER SERVICES
Product Testing: Materials analysis, contaminant determination
Avail Equip/Facility: Spectroscopy, spectrometry, XRD, chromatography, microscopy
Other: Contract research

Dow Corning Corp

CONTACT INFORMATION
47799 Halyard Drive, Suite 77, Plymouth 48170
734-454-2000
www.dowcorning.com/auto

PARENT ORGANIZATION
50/50 Joint Venture between Dow Chemical and Corning, Inc

PARENT COUNTRY OF INCORPORATION
USA

TOTAL EMPLOYMENT
9,000

AUTOMOTIVE R&D SPENDING
Around 6% of Sales invested in R&D

R&D ACTIVITIES
Materials research, engineering, product development

PRODUCTS
Chemical products for automotive applications including adhesives, protection materials, sealing and gasketing materials and torque transfer fluids

FACILITY DESCRIPTION
We are aligned with the automotive quality system standards by transitioning our existing QS-9000 certifications to the certification of ISO/TS16949:2002

OTHER SERVICES
Variety of testing and services of import to the auto industry

dSPACE, Inc

CONTACT INFORMATION
28700 Cabot Drive, Suite 1100, Novi 48377
248-567-1300
www.dspaceinc.com

PARENT ORGANIZATION
dSPACE GmbH

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Kevin Kott—President
Vivek Moudgal—Sales Director
Santhosh Jogi—Technical Support Supervisor
Alicia Alvin—Marketing Manager
Michele Kramer—Human Resources Manager
Rick Wenson—Accounting Manager

TOTAL EMPLOYMENT
660

PROFESSIONAL STAFF
PhDs, engineers, designers, technical specialists, researchers: 75%
Support staff: 25%

R&D ACTIVITIES
Rapid control prototyping; automatic code generation; simulation; calibration; testing

PRODUCTS
TargetLink (production code generator); dSPACE Simulators (for ECU controller testing); dSPACE Prototyping Systems; RapidPro (hardware for rapid prototyping); ControlDesk (experiment software for controller development); AutomationDesk (for test automation); MTest (for systematic and automated model-based testing); MotionDesk (3-D online animation system); CalDesk (universal measurement, calibration and diagnostics software); Automotive Simulation Models; MicroAutoBox (rapid prototyping ECU); processor boards; I/O boards; numerous other software and hardware solutions

FACILITY DESCRIPTION
dSPACE, Inc. is the North American subsidiary operation for dSPACE, headquartered in Paderborn, Germany. Other subsidiary operations are located in France, Japan and the United Kingdom, along with numerous project centers and satellite offices

OTHER SERVICES
Product Testing: for embedded controllers
Product Validation: for embedded controllers
Avail Equip/Facility: for embedded controllers
Other: Training on product applications

OTHER VEHICLE SPECIALTIES
Tools for embedded control development, testing and optimization
### DuPont Automotive

**CONTACT INFORMATION**
950 Stephenson Highway, Troy 48083
248-583-8200
www.dupont.com/automotive

**PARENT ORGANIZATION**
DuPont Company

**PARENT COUNTRY OF INCORPORATION**
USA

**PRINCIPALS**
- Dennis Emerick—Laboratory Director, Coatings
- Christopher Murphy—Automotive Development Director, Engineering Materials

**TOTAL EMPLOYMENT**
400

**AUTOMOTIVE R&D SPENDING**
100%

**PROFESSIONAL STAFF**
- Chemists & Chemical Engineers: 130
- Manufacturing & Process Engineers: 20

**R&D ACTIVITIES**
Applied research, product development

**PRODUCTS**
- Paints, coatings, and plastics for powertrain, fuel, electrical/electronics, body interior, coatings, body exterior and safety glass

**FACILITY DESCRIPTION**
- Chemical lab, process equipment, physical test facilities

### Dura Automotive Systems, Inc

**CONTACT INFORMATION**
2791 Research Drive, Rochester Hills 48309
248-299-7202
www.duraauto.com

**R&D ACTIVITIES**
- Applied research, testing and advanced product development

**PRODUCTS**
- Driver control systems, door modules, glass systems, seat mechanisms and structures, exterior trim systems, and engineered assemblies

### Durr Industries, Inc

**CONTACT INFORMATION**
40600 Plymouth Road, Plymouth 48170
734-459-6800
www.durr.com

**PARENT ORGANIZATION**
Durr AG

**PARENT COUNTRY OF INCORPORATION**
Germany

**PRINCIPALS**
- Joseph M. Klobucar—Senior Engineering Manager, R&D

**TOTAL EMPLOYMENT**
200

**AUTOMOTIVE R&D SPENDING**
90%

**R&D ACTIVITIES**
- Applied research, product development

**PRODUCTS**
- Vehicle finishing equipment and systems, spray booths, bake ovens and paint circulation systems

### Dynamic Corporation

**CONTACT INFORMATION**
2565 Van Ommen Drive, Holland 49424
616-399-2200
www.dynamicinc.com

**PRINCIPALS**
- Steve Connelly—VP Testing & Development
- Ray Atwood—VP Prototyping
- Jack Feddema—VP Quality & Inspection

**TOTAL EMPLOYMENT**
120

**AUTOMOTIVE R&D SPENDING**
90%

**PROFESSIONAL STAFF**
- Engineers: 10
- Programmers: 15
- Machinists: 5
- Quality Assurance: 7
- Technicians: 7
- Expediters: 20
- Production Supervisors: 10

**R&D ACTIVITIES**
- Product development, testing, inspection, prototyping

**PRODUCTS**
- Safety restraints, steering systems, suspension design and prototyping, axle design and prototyping, fuel systems engineering and prototyping

**FACILITY DESCRIPTION**
- Product development, testing and prototyping (Saginaw), A2LA accredited inspection lab (Holland), and QA 9000 registered class-A prototype facility (Auburn Hills)

### Eaton Innovation Center

**CONTACT INFORMATION**
26201 Northwestern Highway, Southfield 48076
248-354-2844
www.eaton.com

**PARENT ORGANIZATION**
Eaton Corporation

**PARENT COUNTRY OF INCORPORATION**
USA

**R&D ACTIVITIES**
- 3D CAD modeling and design, mechanical and electronic simulations and analysis, eMatrix support systems, noise and vibration testing, and environmental, hydraulic and vibration testing

**PRODUCTS**
- Engine air management systems (superchargers & cylinder heads, valves, lifters & valve actuation), torque controls, transmission & engine controls, specialty controls (fuel vapor, capless fueling system, mirror)
Eberspächer North America, Inc

CONTACT INFORMATION
29101 Haggerty, Novi 48377
248-994-7010
www.eberspaecher.com

PARENT ORGANIZATION
J. Eberspächer GmbH & Co

PRINCIPALS
Dennis Berry—President & CEO
Martin Romzek—VP, Advanced Engineering
Betsy Diplock—VP, Human Resources
Allen Buntin—VP, Finance & Continuous Improvement
Dan Gilmer—Director, Sales & Marketing
Frank Zsirai—Director, Business Unit & Product Development

TOTAL EMPLOYMENT
447 (North America)

AUTOMOTIVE R&D SPENDING
$70 Million

R&D ACTIVITIES
Design (3D packaging, 3D modeling, 2D drawings), acoustics (simulation & testing), thermodynamics (simulation & testing), durability (simulation & testing) and prototyping

PRODUCTS
Exhaust technology, manifolds, converters, mufflers, assemblies

FACILITY DESCRIPTION
Product Development, prototype shop, test facilities, mass production facilities

OTHER VEHICLE SPECIALTIES
Exhaust

Edgewater Automation

CONTACT INFORMATION
481 Renaissance Drive, Saint Joseph 49085
269-983-1300
www.edgewaterautomation.com

PRINCIPALS
Rick Blake—President
Paul Gray—Director, R&D

TOTAL EMPLOYMENT
45

PROFESSIONAL STAFF
Engineers: 14
Technicians: 16

R&D ACTIVITIES
Manufacturing process development, design and build of custom automation systems

PRODUCTS
Specializing in the manufacturing processes for automotive brake systems and lead-acid batteries

FACILITY DESCRIPTION
35,000 sq. ft. engineering manufacturing and office space

Edscha North America

CONTACT INFORMATION
2800 Centerpoint Parkway, Pontiac 48341
248-205-3700
www.edscha.com

PARENT ORGANIZATION
Edscha AG

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Dr. Thomas Wuensche—CEO & President

R&D ACTIVITIES
Product development, engineering

PRODUCTS
Hinge systems, driver controls, convertible top systems, sliding roofs for trucks and full vehicle engineering

FACILITY DESCRIPTION
The ENA headquarters and engineering center
ElectroJet, Inc

CONTACT INFORMATION
6833 Strawberry Lake Road, Whitmore Lake 48189
810-231-2065
www.electrojet.org

PRINCIPALS
Kyle Schwulst—CEO & Founder

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Analog design engineer: 1
Software design engineer: 1
Mechanical design/emissions engineer: 1

R&D ACTIVITIES
Build low volume prototypes in-house. Machine shop, electronics lab, and a suite of development software

PRODUCTS
Small engine-specific fuel injection systems. Reduces the cost of EFI systems when compared to traditional automotive EFI systems through reducing the number of sensors required to effectively run an engine. These EFI systems are bolt compatible with carburetors and no modifications are necessary to apply accurate emissions controls to engine currently in production

FACILITY DESCRIPTION
ElectroJet occupies a space of approximately 1,300 sq. ft. in Whitmore Lake, MI. This space includes fabrication, electronics development, office space, and general work area for testing

Emhart Fastening Tecnologies

CONTACT INFORMATION
49201 Gratiot, Chesterfield 48051
586-949-0440
www.emhart.com

PRINCIPALS
Jim Berry—Director of Sales

R&D ACTIVITIES
Product engineering

PRODUCTS
Coils, fasteners, screws, and other components of various types. Specialized products available

ELESYS North America, Inc

CONTACT INFORMATION
44191 Plymouth Oaks Boulevard, Suite 1200, Plymouth 48170
734-451-4494
www.elesys-na.com

R&D ACTIVITIES
Applied sensor research, engineering, design, product development

PRODUCTS
Automotive safety systems including electronic steering and stability control, and occupant sensing systems

Emmeskay, Inc

CONTACT INFORMATION
47119 Five Mile Road, Plymouth 48170
734-207-5562
www.emmeskay.com

PRINCIPALS
Swami Gopalswamy—President & CEO
Shiva Sivashankar—VP Technology

R&D ACTIVITIES
Advanced technology solutions for control of conventional, hybrid electric and fuel cell based powertrains, control of chassis, and safety systems. New methods for virtual prototyping and testing of automotive components for drivability enhancements, fuel economy improvements and emissions reductions

PRODUCTS
Simulation models for vehicle components, conventional and hybrid powertrains, fuel cell stack, automotive sensors and actuators. Software products and toolboxes to accelerate model based control systems development

FACILITY DESCRIPTION
Computer aided design, analysis, virtual prototyping and testing facilities

Emergent Systems

CONTACT INFORMATION
3 Parklane Boulevard, Suite 1120, Dearborn 48126
313-996-8285
www.emergentsys.com

PRINCIPALS
John Gelmisi—Business Development Manager

TOTAL EMPLOYMENT
70

PROFESSIONAL STAFF
Design, Engineering, Product Development, Program Management, Staffing

R&D ACTIVITIES
Engineering and design

PRODUCTS
Engineering and design. Information technology programming for automotive and engineering knowledge management applications. Contracting and staffing, FEA/CAE analysis and testing

FACILITY DESCRIPTION
5,000 sq. ft. design center with 30 CAD workstations

OTHER SERVICES
Product Testing: CAE/FEA Analysis
Avail Equip/Facility: CAE/FEA Analysis

Encel LLC

CONTACT INFORMATION
4370 Varsity Drive, Ann Arbor 48108
734-477-9300
www.encel.com

PRINCIPALS
Bruce Jonic—VP Engineering & Research
Dr. Tom Hunt—Chief Science Officer

TOTAL EMPLOYMENT
22

PROFESSIONAL STAFF
Engineers: 5
Scientists: 3
Technicians: 4

R&D ACTIVITIES
Alkali Metal Thermal to Electric Conversion (AMTEC) technology

FACILITY DESCRIPTION
21,000 sq. ft. of office space, research labs, a machinining shop, and prototype manufacturing
Company Listings

**Engineered Machined Products, Inc**

**CONTACT INFORMATION**
2701 North 30th Street, Escanaba 49829
906-789-7497
www.emp-corp.com

**PRINCIPALS**
- Brian Larche—Chairman & CEO
- David Allen—Executive VP, Product Development
- Jerry Guindon—VP, Sales & Customer Service
- Ralph Bedogne—VP, Government Affairs
- Bob Vardigan—Sales Manager, Advanced Products

**TOTAL EMPLOYMENT**
790

**PROFESSIONAL STAFF**
- Engineers: 52
- Technicians: 10

**R&D ACTIVITIES**
Design and analysis for development of advanced thermal and oil management products and systems. Development leaders in rapid prototyping, performance testing and reliability testing. Over 90 proprietary software programs are utilized including CFD, CFX, Fluent, FEA, Mechanica, ProE, Catia, Ideas, Imagine, MatLab, MathCad

**PRODUCTS**
- Advanced thermal management components and systems (electric water pumps, electronic thermostats, electric diesel grade fans)
- Advanced oil management components and systems (electric oil pumps, oil management systems, oil level sensors)

**FACILITY DESCRIPTION**
Advanced product development and testing conducted in a 60,000 sq. ft. R&D technology center on EMP's campus

**EnVironmental Transportation Solutions, LLC**

**CONTACT INFORMATION**
1303 Edmundton Drive, Grosse Pointe Woods 48236
313-717-4321
www.ecovelectric.com

**PRINCIPALS**
- Richard W. Marks—President

**R&D ACTIVITIES**
Product and process vehicle engineering

**PRODUCTS**
Road-worthy, commercial fleet, urban-based electric Low Speed Vehicle (LSV), named EcoVElectric, that retails for under $10,000

**OTHER SERVICES**
Consulting: For electric and hybrid vehicles

**Enterprise Automotive Systems**

**CONTACT INFORMATION**
21445 Hoover, Warren 48089
586-755-3180
www.think-eas.com

**TOTAL EMPLOYMENT**
350

**R&D ACTIVITIES**
Design, engineering, product development

**PRODUCTS**
Simple and complex manufacturing commodities including assembled components, machined and fabricated parts from forgings and castings

**FACILITY DESCRIPTION**
400,000 sq. ft. facility

**Environmental Protection Agency – National Vehicle and Fuel Emissions Laboratory (NVFEL)**

**CONTACT INFORMATION**
2000 Traverwood Drive, Ann Arbor 48105
734-214-4300
www.epa.gov/nvfel

**TOTAL EMPLOYMENT**
400

**R&D ACTIVITIES**
Develops national regulatory programs to reduce mobile source related air pollution from light-duty cars and trucks, heavy-duty trucks and busses, non-road engines and vehicles, and their fuels. Determines compliance with federal emissions and fuel economy standards. Tests vehicles, engines and fuels

**PRODUCTS**
Assists in the development of automotive technology to reduce conventional pollutants and greenhouse gas emissions, such as the Clean Automotive Technology initiative, low NOx diesel engine, and alternative fuel technologies

**OTHER VEHICLE SPECIALTIES**
Regulatory

**ETAS**

**CONTACT INFORMATION**
3021 Miller Road, Ann Arbor 48103
734-997-9393
www.etasgroup.us

**PARENT ORGANIZATION**
ETAS GmbH

**PRINCIPALS**
- Carl Squire—Director of Sales

**PROFESSIONAL STAFF**
- Salespeople
- Marketing
- Applications Engineers
- Software Development Engineers

**R&D ACTIVITIES**
Software engineering activities for best-in-class INCA software application for automotive electronic control unit calibration. Local engineering services for customized software products for automotive companies

**PRODUCTS**
Engineering software (INCA, ASCET, INTECRIIO, RTA-OSEK) and specialized electronic hardware to develop and diagnose automotive control systems. Product development for data acquisition and vehicle calibration products. Sales, marketing and product support headquarters for North America
EXPERT Corporation

CONTACT INFORMATION
900 Wilshire Drive, Suite 205, Troy 48084
248-269-6137
www.expertna.com

PRINCIPALS
Jesus Taboada—CEO
John LaPorte—Director of Business Development
Ed Strzelecki—Director of Engineering & Design
Joe Ruddy—CFO

TOTAL EMPLOYMENT
72

AUTOMOTIVE R&D SPENDING
6% of annual sales

PROFESSIONAL STAFF
CAD designers: 6
Development engineers: 3
Simulation researchers: 2

R&D ACTIVITIES
Based on simulation models, advanced evaporative emission solutions are developed. These scenarios are validated using prototype and production products. Evaporative emission solutions address automotive legislative requirements (LEV II, PZEV...) as well as the forthcoming EPA and CARB regulations for small engine, commercial and marine applications. Structural analysis capability in the application of combining metal and plastic structures to achieve weight and strength objectives

PRODUCTS
Evaporative emission canisters, hybrid structural front end modules

FACILITY DESCRIPTION
Design & Engineering—5,000 sq. ft. office—CAD stations. Emissions testing facility located at manufacturing facility—6,000 sq. ft. of 55,000 sq. ft.

OTHER SERVICES
Product Testing: Emissions testing

OTHER VEHICLE SPECIALTIES
Structural hybrid applications

FANUC Robotics America, Inc

CONTACT INFORMATION
3900 West Hamlin Road, Rochester Hills 48309
248-377-7000
www.fanucrobotics.com

PRINCIPALS
Rick Schneider—President & CEO

R&D ACTIVITIES
Largest robotic product development organization in North America

PRODUCTS
Industrial robots for manufacturing. The company also manufactures software, controls, and vision products that aid in the development of intelligent robotic systems

FACILITY DESCRIPTION
Manufacturing complex located on 56 acres of property along the Clinton River. Facility is 375,000 sq. ft.

Faurecia Automotive Seating, Inc

CONTACT INFORMATION
2380 Meijer Drive, Troy 48084
248-288-1000
www.faurecia.com

PARENT ORGANIZATION
Faurecia SA

PARENT COUNTRY OF INCORPORATION
France

R&D ACTIVITIES
Engineering, design, testing, product development

PRODUCTS
Seats, instrument and door panels

FCI Automotive

CONTACT INFORMATION
28100 Cabot Drive, Novi 48377
248-592-2700
www.fciconnect.com

PARENT ORGANIZATION
FCI

PARENT COUNTRY OF INCORPORATION
France

PRINCIPALS
André Louin—Senior VP & General Manager

PROFESSIONAL STAFF
Application Engineers

R&D ACTIVITIES
Engineering, applied research

PRODUCTS
Interconnection systems for safety restraint applications, integrated packaging for electronic control units as well as miniaturized harness connectors. Terminal and interconnection systems for instrument panels, engine compartment, harness sectioning and electronic control units

Federal-Mogul—Advanced Technology Center

CONTACT INFORMATION
3990 Research Park Drive, Ann Arbor 48108
734-995-8550
www.Federal-Mogul.com

PRINCIPALS
Keri Westbrooke—Director, Product Technology

TOTAL EMPLOYMENT
36

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers
Technicians

R&D ACTIVITIES
Testing, engineering and product development for heavy-duty pistons

PRODUCTS
Piston development for heavy duty machinery

FACILITY DESCRIPTION
Engineering, design and testing labs for heavy duty engines

Fasco DC Motors

CONTACT INFORMATION
402 East Haven Street, Eaton Rapids 48827
517-663-2161
www.fasco.com

R&D ACTIVITIES
Applied engineering and design engineering

PRODUCTS
Custom fractional horsepower motors, blowers and gear motors
FEV Engine Technology, Inc

CONTACT INFORMATION
4554 Glenmeade Lane, Auburn Hills 48326
248-373-6000
www.fev.com

PARENT ORGANIZATION
FEV Motorentechnik GmbH

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Gary W. Rogers—CEO
Robert Last—VP Marketing & Operations

TOTAL EMPLOYMENT
160

AUTOMOTIVE R&D SPENDING
80%

PROFESSIONAL STAFF
Project Engineers: 60
Sr. Engineers & Program Managers: 10

R&D ACTIVITIES
Wide range of engineering services for fuel cell development, engine integration and in-vehicle calibration

PRODUCTS
Design, prototype, and development of advanced gasoline, diesel, and alternative-fueled combustion engines, fuel cell development, engine integration and in-vehicle calibration services

FACILITY DESCRIPTION
Engine and vehicle design, testing and development labs

Foamex International, Inc

CONTACT INFORMATION
28700 Cabot Drive, Suite 500, Novi 48377
248-553-1039
www.foamex.com

PARENT ORGANIZATION
Foamex International, Inc

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Material/chemical research, product development

PRODUCTS
Polyurethane foam for use in a wide range of automotive applications including dash/hood insulators, floor carpet underlay, door panel absorbors, headliner laminate absorbers, luggage compartment acoustical components, quarter panel trim absorbers, energy absorption in headliners and visors, cushions, back, armrests and headrests

Ford Motor Company
Scientific Research Labs

CONTACT INFORMATION
One American Road, Dearborn 48126
313-322-3000
www.ford.com

PARENT ORGANIZATION
Ford Motor Company

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Richard Parry-Jones—Chief Technical Officer
Gerhard Schmidt—VP, Research & Advanced Engineering

R&D ACTIVITIES
Automobile related technology

PRODUCTS
Automobiles, trucks and components

FACILITY DESCRIPTION
600,000 sq. ft. of labs, test facilities and general research

Fisher & Co

CONTACT INFORMATION
33180 Fisher Drive, St. Clair Shores 48082
586-746-2000
www.fisherco.com

R&D ACTIVITIES
Product design, engineering

PRODUCTS
Seat recliners, arm rests, floor latches and headrests

Flex-N-Gate Michigan Technology Center

CONTACT INFORMATION
5663 East Nine Mile Road, Warren 48091
586-759-8921
www.flex-n-gate.com

R&D ACTIVITIES
Full service prototyping capability, CAD draw development and computer simulation, CNC machining, plaster development shop, in-house foundry, hydraulic and mechanical pressroom, 5-axis lasers for final trim and development, welding/assembly operations

PRODUCTS
Front/rear bumper systems, tubular side bars, running boards systems, receiver hitches, towing accessories body side molding, bumper systems, fascias, grille programs, running board systems, injection molded tail gates, rocker panels, instrument panels, wheel covers, grille guards, radiator support, ground effects kits, box top rails, wheel house lining
Fraunhofer USA, Inc

CONTACT INFORMATION
46025 Port Street, Plymouth 48170
734-354-4333
www.fraunhofer.org

PARENT ORGANIZATION
Fraunhofer Gesellschaft

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Prof. Dennis Tsichritzis—President
Dr. William Hartman—VP
Erin Simmonds—Treasurer
Frances Roland-Lee—Corporate Communications Administrator

PROFESSIONAL STAFF
2/3rds of staff are engineers, technicians or scientists

R&D ACTIVITIES
Applied research, engineering/design, prototyping, simulation, novel production processes, improve existing manufacturing operations, fiber based laser systems, fiber coupled diode lasers

FACILITY DESCRIPTION
5 research facilities/laboratories with two in Michigan; one in Plymouth and one at Michigan State University

OTHER SERVICES
Product Testing: High precision, process-centric automation systems
Product Validation: Process improvement, Capability Maturity Model (CMM) & (CMMI)
Consulting: Partnering opportunities with industry, universities and governmental agencies
Other: Applied research

OTHER VEHICLE SPECIALTIES
Applied Research, engineering design, laser welding of powertrain components

Fredricks Design, Inc

CONTACT INFORMATION
6 Sherman Avenue, Grand Haven 49417
616-846-7526
www.fredricks.com

PRINCIPALS
Maury Fredricks—co-CEO
Bruce Fredricks—co-CEO
Eric Toth—Industrial Design Group Manager
John Phillips—Industrial Design Group Manager—Transportation
Brett Kooistra—Engineering Group Manager

AUTOMOTIVE R&D SPENDING
2.5—5% of revenue

PROFESSIONAL STAFF
Group Managers Industrial Design
Group Manager Engineering
Industrial Designers
Mechanical Engineers

R&D ACTIVITIES
Opportunity definition—assessments, strategies, research, initial ideation/feasibility, product definition—benchmarking/brainstorming, ergonomics, mock-up models, craftsmanship reviews, concept development—feasibility studies, initial CAD models/drawing (CATIA, Unigraphics, Ideas, Pro-E and SolidWorks), preliminary engineering, design engineering—production CAD models/drawings, engineering development, testing and validation, production release—design refinement, final CAD models/drawings, value analysis and process validation

FACILITY DESCRIPTION
9,000 sq. ft. design/engineering studio with on-site prototyping capabilities in Grand Haven, Michigan. 3,000 sq. ft. studio with Industrial design, engineering and full show vehicle and prototype build capabilities in Plymouth, Michigan

OTHER SERVICES
Product Testing: FEA, DFA
Product Validation: VAVE

OTHER VEHICLE SPECIALTIES
Exterior mirrors, lighting and body design

Freudenberg-NOK

CONTACT INFORMATION
47960 East Anchor Court, Plymouth 48170
734-451-0020
www.freudenberg-nok.com

PRINCIPALS
Dr. Ted Duclos—CTO

TOTAL EMPLOYMENT
250

AUTOMOTIVE R&D SPENDING
30%

PROFESSIONAL STAFF
Technicians: 20
Engineers: 30
Chemists: 10
R&D Managers

R&D ACTIVITIES
Advanced product/process development for sealing and vibration control components, component sub-system and vehicle testing

PRODUCTS
Powertrain sealing components, chassis sealing components and vibration control for both

FACILITY DESCRIPTION
Elastomer mixing and molding physical and environmental testing facilities. Adhesive development and chemical analytical capability

FT Techno of America, LLC

CONTACT INFORMATION
1750 Smith Road, Fowlerville 48836
517-223-6777
www.aisin.com

PARENT ORGANIZATION
AW Aisin World of America

PRINCIPALS
Masanori Yuasa—President

R&D ACTIVITIES
Testing

PRODUCTS
Product testing including brake systems, transmissions, drivetrain, chassis and body systems

FACILITY DESCRIPTION
Vehicle proving ground and test track
FTS Technologies

CONTACT INFORMATION
6255 Taylor Drive, Flint 48507
810-239-4209
www.ftstechnologies.com

R&D ACTIVITIES
Process development related to surface treatment

PRODUCTS
ATmaP™ (Accelerated Thermo-molecular adhesion Process)—Fast, efficient, and 100% environmentally friendly surface treatment process that completely eliminates the need for adhesion promoting primers, and alike, in all painting, bonding, laminating, printing, and decorating applications

Fujitsu Ten Corporation of America

CONTACT INFORMATION
47800 Halyard Drive, Plymouth 48170
734-414-6620
www.fujitsu.com/us

R&D ACTIVITIES
Engineering, design, product development

PRODUCTS
Automotive audio, video, navigation and control systems

Gates Automotive Technical Center (GATC)

CONTACT INFORMATION
2975 Waterview Drive, Rochester Hills 48309
248-260-2300
www.gates.com

PARENT ORGANIZATION
Tomkins PLC

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Robert Willig—VP Automotive OE
Jerzy Otremba—Research & Technology Manager

TOTAL EMPLOYMENT
130

AUTOMOTIVE R&D SPENDING
80%

PROFESSIONAL STAFF
Engineers: 20
Researchers: 6
Research Scientists: 30
Technicians: 20

R&D ACTIVITIES
Applied research in systems technology, composite science, material science, electro-mechanical drive systems and components.
Material property, fatigue and durability testing, analytical testing and engine and vehicle testing and evaluation

PRODUCTS
Power Transmission systems including accessory and synchronous belt drive systems, transmission drives (CVT), motorcycle primary and secondary drives, and other industrial belt drive systems

FACILITY DESCRIPTION
Advanced analysis exists for system modeling as well as non-linear CAE to support composite science. Testing capabilities for polymers and metals, component function, performances, and durability. Complete system testing on engines, transmissions, and vehicles

GDX Automotive

CONTACT INFORMATION
36600 Corporate Drive, Farmington Hills 48331
248-553-5300
www.gdxautomotive.com

R&D ACTIVITIES
CAE, Best-In-Class system benchmarking, noise intrusion evaluation, NVH analysis

PRODUCTS
Automotive sealing (weatherstrips, beltstrips, quarter glass, secondary seals), glass modules, vibration control products

GE Automotive Center of Excellence

CONTACT INFORMATION
Two Towne Square, Southfield 48034
248-262-2600
www.ge.com

R&D ACTIVITIES
Dedicated to providing value-added services, technologies, and solutions to the automotive industry

PRODUCTS
GE Advanced Materials, GE Infrastructure, GE Energy, GE Commercial Finance, and GE Fleet

FACILITY DESCRIPTION
Features an application technology area where GE engineers and marketing experts can collaborate on the development of applications of the future for the auto industry. The facility includes broadcast satellite and wireless network connectivity to provide communications and instant access across GE’s worldwide facilities and staff

General Dynamics Land Systems

CONTACT INFORMATION
38500 Mound Road, Sterling Heights 48310
586-825-4000
www.gdls.com

R&D ACTIVITIES
Design and development of the manned ground vehicle for the U.S. Army’s Future Combat Systems program (Warren, MI)

PRODUCTS
Full vehicle development
General Motors Technical Center

CONTACT INFORMATION
30200 Mound Road, Warren 48092
586-986-2502
www.gm.com

PARENT ORGANIZATION
General Motors

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Dr. Lawrence D. Burns—VP R&D and Planning

PROFESSIONAL STAFF
Engineers
Technicians
Research Scientists

R&D ACTIVITIES
Engineering, testing, product development and applied research

PRODUCTS
Design, prototype, and engineer products for General Motors vehicles

FACILITY DESCRIPTION
330 acre site with 25 buildings including large laboratories, offices and shop buildings. Specific divisions for chemical & environmental sciences, manufacturing systems, vehicle design, powertrain, materials and processes, and electrical/controls integration

Gentex Corporation

CONTACT INFORMATION
600 North Centennial Street, Zeeland 49464
616-772-1800
www.gentex.com

PRINCIPALS
Fred Bauer—Chairman of the Board & CEO
Dennis Alexejun—VP North American Automotive Marketing

PROFESSIONAL STAFF
Chemists, Electrical Engineers, Mechanical Engineers, Research Scientists

R&D ACTIVITIES
Basic and applied research, engineering, product development

PRODUCTS
Electro-optical products (products that employ sophisticated optical sensing devices and related electronic circuitry)

George R. Ryder & Associates, Inc

CONTACT INFORMATION
17370 Fairway Drive, Detroit 48221
248-330-9693
www.georgeryder.com

PRINCIPALS
George R. Ryder Jr.—President

OTHER SERVICES
Consulting: Consulting services include styling, product engineering, testing and test management, vehicle dynamics and handling

OTHER VEHICLE SPECIALTIES
Body Engineering

GKN Automotive

CONTACT INFORMATION
3250 University Drive, Suite 100, Auburn Hills 48326
248-276-6430
www.gknplc.com

PARENT ORGANIZATION
GKN PLC

PARENT COUNTRY OF INCORPORATION
United Kingdom

R&D ACTIVITIES
Engineering

PRODUCTS
Velocity jointed half shafts and catalytic metal substrates

General Purpose Vehicles LLC

CONTACT INFORMATION
31291 Comcast Drive, New Haven 48048
586-749-0600
www.gpv.com

PRINCIPALS
James C. LeBlanc Sr.—President
James C. LeBlanc Jr.—VP

TOTAL EMPLOYMENT
60

PROFESSIONAL STAFF
Engineers
Designers

R&D ACTIVITIES
Work with the U.S. military to survey, evaluate, and develop improvements to vehicle seating, overhead protection, additional ballistic protection, as well as new vehicles that satisfy the military's need for a future tactical truck

PRODUCTS
Designed and developed a new system of national defense and security vehicles to be used for homeland security, first responder and national security needs

FACILITY DESCRIPTION
Vehicle and component design, manufacturing, and assembly facility
Global Embedded Technologies, Inc

CONTACT INFORMATION
23900 Freeway Park Drive, Farmington Hills 48335
248-888-9696
www.globalet.com

PRINCIPALS
Mark Stanczak—President
David Backus—CEO

PROFESSIONAL STAFF
Engineers: 8
Technicians: 2
Sales: 1
Support Staff: 2

R&D ACTIVITIES
Power Management—Advanced software and hardware solutions for power management, control, and integration In-Vehicle, Distributed Generation / MicroGrid, and Vehicle-Grid

PRODUCTS
Power Control Units (PCU)—a solid-state smart switch that provides point-of-load and/or circuit level distributed monitoring, control, and protection of vehicle electrical resources and loads. The PCU features +100 A switching, PWM, waveform generation, voltage/current fault detection, software programmability, reverse battery protection, fail safe operation, data logging, and CAN communication interface in a small 6 x 3 x 8 cm package
Power Management Application (PMA)—System Level Monitoring, Control, Integration, and Data Collection

FACILITY DESCRIPTION
7,500 sq. ft. engineering and development facility

OTHER SERVICES
Product Testing: VEH/HEV/EV electrical system resources, load, and controls
Product Validation: VEH/HEV/EV electrical system resources, load, and controls
Avail Equip/Facility: VEH/HEV/EV electrical system resources, load, and controls
Consulting: Electronic Modules / Data Acquisition and Testing / Data Management

OTHER VEHICLE SPECIALTIES
Development, Testing, Validation

GM, DaimlerChrysler and BMW Hybrid Development Center

CONTACT INFORMATION
1960 Technology Drive, Troy 48083
248-680-5315
www.gm.com

R&D ACTIVITIES
Hybrid transmission research, engineering, design, testing

PRODUCTS
Development of next generation front- and rear-wheel drive hybrid transmissions

Gonzalez Design Engineering

CONTACT INFORMATION
32200 North Avis, Madison Heights 48340
248-548-6010
www.gonzalez-group.com

TOTAL EMPLOYMENT
900

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 400
Technicians: 200

R&D ACTIVITIES
Basic and applied research, testing, engineering and product development

PRODUCTS
Welding assembly systems and robotics. Research in welding and joining body panels

FACILITY DESCRIPTION
Mechanical and electronics labs

Grammer Industries, Inc

CONTACT INFORMATION
1550 West Maple Road, Troy 48084
248-786-0440
www.grammer.com

PARENT ORGANIZATION
Grammer AG

PARENT COUNTRY OF INCORPORATION
Germany

R&D ACTIVITIES
Design, engineering, product development, testing

PRODUCTS
Seating systems, including integrated child booster seats and active head restraints
Grand Haven Stamped Products (GHSP)

CONTACT INFORMATION
1250 South Beechtree Street, Grand Haven 49417
616-842-5500
www.ghsp.com

PARENT ORGANIZATION
JSJ Corporation

PRINCIPALS
Jerry Scott—President
Dan Fisher—Engineering VP

TOTAL EMPLOYMENT
750

AUTOMOTIVE R&D SPENDING
95%

PROFESSIONAL STAFF
Engineers: 82
Technicians: 25
CAD Designers: 20

R&D ACTIVITIES
Product development, testing

PRODUCTS
Driver controls

FACILITY DESCRIPTION
Mechanical lab, electronics lab, model shop, and finite element lab

Greening Testing Laboratories, Inc

CONTACT INFORMATION
19465 Mount Elliott Avenue, Detroit 48234
313-366-7160
www.greeninginc.com

PARENT ORGANIZATION
Greening, Inc

PROFESSIONAL STAFF
Electronics Engineers

R&D ACTIVITIES
Applied research, engineering, testing, product development

PRODUCTS
Test development, data analysis, and other methodologies for the transportation industries. Design and manufacturing of special instrumentation including analog, digital and computer based control systems

FACILITY DESCRIPTION
Capabilities to simulate in service environments in the laboratory

Grupo Antolin-North America, Inc

CONTACT INFORMATION
1700 Atlantic Boulevard, Auburn Hills 48326
248-373-1749
www.grupoantolin.com

PARENT ORGANIZATION
Grupo-Antolin

PARENT COUNTRY OF INCORPORATION
Spain

R&D ACTIVITIES
Simulation (CAD), acoustics & vibration, materials, safety, design, logistics

PRODUCTS
Modular headliner systems, door panels, mechanical devices, and seats, including metal frames, upholstery and foam padding

Guardian Automotive Products

CONTACT INFORMATION
23751 Amber Avenue, Warren 48089
586-757-7800
www.guardian.com

PARENT ORGANIZATION
Guardian Industries

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Applied research, testing, engineering and product development

PRODUCTS
Automotive glass and plastic exterior trim components

Harada Industry of America, Inc

CONTACT INFORMATION
22925 Venture Drive, Novi 48375
248-374-9000
www.harada.com

PARENT ORGANIZATION
Harada Industry Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Applied research, engineering, design, product development

PRODUCTS
Mobile communications antennas for multimedia car applications, as well as telephone and wireless LAN
Harita TVS Technologies Incorporated

CONTACT INFORMATION
165 Kirts Boulevard, Suite 600, Troy 48084
248-269-0600
www.harita.com

R&D ACTIVITIES
Testing, engineering, design, prototyping

PRODUCTS
Designs end-to-end solutions from conceptualization to prototyping & testing. These services encompass Product Design, Simulation & Predictive Engineering, Multi-Body Dynamics, NVH, Crash, and testing services covering interiors, powertrain and chassis, body and exteriors, and electronics

Hayes Lemmerz International, Inc
Technical Services

CONTACT INFORMATION
1600 West Eight Mile Road, Ferndale 48220
248-399-9600
www.hayes-lemmerz.com

PARENT ORGANIZATION
Hayes Lemmerz International

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Greg Guilliams—Facility Manager

PROFESSIONAL STAFF
Engineers
Technicians

R&D ACTIVITIES
Applied research, engineering, testing, rapid prototyping, product development

PRODUCTS
Wheels, brake components, powertrain components, and structural components for passenger cars, minivans, sport utility vehicles and light trucks

FACILITY DESCRIPTION
Testing laboratory services. Computer aided engineering (CAE) and process modeling, CAD and CAM

Hi-Lex Automotive Center

CONTACT INFORMATION
1055 West Square Lake Road, Troy 48098
248-813-8317
www.hi-lex.com

R&D ACTIVITIES
Applied research, engineering, environmental testing, noise testing in anechoic room, and product development

PRODUCTS
Automotive and recreational electromechanical devices, control cables, window regulators, sunroof sub-assemblies, and prototypes

Hillsdale Automotive

CONTACT INFORMATION
2424 John Daly Road, Inkster 48141
313-278-5956
www.epcorp.com

PARENT ORGANIZATION
EaglePicher

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
John Hrit—President
Bruce Christenson—Director of Technology
Glen DesJardins—Director of Sales
Suhale Manzoor—Chief Engineer

TOTAL EMPLOYMENT
1,000

R&D ACTIVITIES
Development of NVH solutions for powertrain applications. Capabilities include problem/system analysis, simulation, product design, prototyping, and testing. Applications include automotive, truck, and heavy duty/off road

PRODUCTS
Typical products include tuned vibration absorbers such as crankshaft and driveline dampers and isolators

FACILITY DESCRIPTION
The John Daly facility supports all product development activities including engineering, design, prototyping and testing

Hella North America, Inc

CONTACT INFORMATION
43811 Plymouth Oaks Boulevard, Plymouth Township 48170
734-414-0900
www.hellausa.com

PARENT ORGANIZATION
Hella KG Hueck & Company

PARENT COUNTRY OF INCORPORATION
Germany

R&D ACTIVITIES
Engineering, product development

PRODUCTS
Head and rear lamps and interior lighting

Hitachi Automotive Products (USA), Inc

CONTACT INFORMATION
34500 Grand River Avenue, Farmington Hills 48335
248-426-0662
www.hitachi.co.jp

PARENT ORGANIZATION
Hitachi Ltd

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Ken Funasaki—President

AUTOMOTIVE R&D SPENDING
100%

R&D ACTIVITIES
Materials research, prototyping, testing, product development

PRODUCTS
Automotive electronic devices and sub-components. Sensors, vision systems, and friction stir welding
Honda R&D Americas, Inc

CONTACT INFORMATION
1000 Town Center, Suite 2400, Southfield 48075
248-304-4880
www.hondaresearch.com

PARENT ORGANIZATION
Honda Motor Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
James Keller—Manager

R&D ACTIVITIES
Automobile Technology Research

PRODUCTS
Technology research for Honda/Acura vehicles

HP Pelzer Automotive Systems

CONTACT INFORMATION
1175 Crooks Road, Troy 48084
248-280-2500
www.hppelzer.com

PARENT ORGANIZATION
HP Chemie Pelzer GmbH

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Mark Confroy—President & CEO
Clarence Peoples—VP R&D

TOTAL EMPLOYMENT
65

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Acoustic Engineers: 5
Materials Engineers: 4
Product Design Engineers: 10
Process Engineers: 10
Test Engineers: 4

R&D ACTIVITIES
Develop acoustic treatments for automobiles. Components using urethane foam, EVA, resonated fiber, tufted and needled carpet and other miscellaneous materials

PRODUCTS
Floor carpet, trunk trim, inner dash insulator, engine compartment insulators, wheel well insulators, various dampers, deadeners and absorbers

FACILITY DESCRIPTION
Acoustic test facility (4-wheel dynamometer and reverberation rooms) for evaluating designs

Husky Injection Molding Systems Inc

CONTACT INFORMATION
45145 West Twelve Mile Road, Novi 48377
248-735-6300
www.husky.ca

PRINCIPALS
Richard Sieradzki—VP North America, Service & Sales
Sam Michael—General Manager

AUTOMOTIVE R&D SPENDING
$1 Million to $3 Million

R&D ACTIVITIES
Engineering consulting, plant audits, feasibility studies, factory planning studies, process mechanical design and integrated work cell design

PRODUCTS
Injection molding systems

FACILITY DESCRIPTION
125,000 sq. ft.

OTHER SERVICES
Hot Runner Design
Plastic Machinery

Hutchinson FTS

CONTACT INFORMATION
1835 Technology Drive, Troy 48083
248-589-7710
www.hutchinsonrubber.com

PRINCIPALS
Bruno Petit—President & COO
Daniel F. Kiblawi—VP Engineering

TOTAL EMPLOYMENT
54

PROFESSIONAL STAFF
Design/Development/R&D Engineers: 42

R&D ACTIVITIES
Applied research, product development, testing

PRODUCTS
Air conditioning fluid transfer components and assemblies

FACILITY DESCRIPTION
Mechanical lab, thermal lab, fluid mechanics lab and prototype fabrication lab

Hyundai America Technical Center, Inc

CONTACT INFORMATION
6800 Geddes Road, Superior Township 48198
734-747-6600
www.hatci.com

PARENT ORGANIZATION
Hyundai Motor Company / Kia Motors Corporation

PARENT COUNTRY OF INCORPORATION
South Korea

PRINCIPALS
Dr. Won Suk Cho—President
Robert Babcock—Manager, Corporate Affairs
Eva Schmidt—Manager, Human Resources

TOTAL EMPLOYMENT
264

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 240
Technicians: 10

R&D ACTIVITIES
Applied research, engineering/design, product development

PRODUCTS
Wide variety of components and complete vehicles

FACILITY DESCRIPTION
Office, design center, and testing laboratory
**IAV Automotive Engineering, Inc**

**CONTACT INFORMATION**
4110 Varsity Drive, Ann Arbor 48108
734-971-1070
www.iav-usa.com

**PARENT ORGANIZATION**
IAV Group

**R&D ACTIVITIES**
Engineering, design, prototyping, testing, simulation

**PRODUCTS**
Comprehensive development expertise for the entire vehicle with primary emphasis in the areas of advanced powertrain and hybrid engine design and testing, and emissions reduction technologies

**OTHER SERVICES**
Product Testing: Powertrain, emissions, NVH, heating and cooling
Consulting: Engineering and design for all vehicle systems

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**IEE Automotive USA, Inc**

**CONTACT INFORMATION**
1121 Center Road, Auburn Hills 48326
248-373-9700
www.iee.lu

**PARENT ORGANIZATION**
IEE S.A

**R&D ACTIVITIES**
Testing and product development

**PRODUCTS**
Occupant safety sensor systems

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**Ilmor Engineering, Inc**

**CONTACT INFORMATION**
43939 Plymouth Oaks Boulevard, Plymouth 48116
734-456-3600
www.ilmor.com

**PRINCIPALS**
Paul W. Ray—President
Julie Bernard—VP

**TOTAL EMPLOYMENT**
70

**AUTOMOTIVE R&D SPENDING**
$10 Million

**PROFESSIONAL STAFF**
Engineering & Design: 15
High Performance Marine Application: 10
Production & Assembly Technician: 20

**R&D ACTIVITIES**
Complete engine design capability utilizing FEA, CFD, modeling. Manufacturing of total engine package. Engine assembly and analysis through dyno test and various dynamic simulations

**PRODUCTS**
Indy car race engines, NASCAR engines, high performance gasoline marine engines. High performance road car engines and engineering. High performance I.C.E. pistons and other low volume, high grade components

**FACILITY DESCRIPTION**
40,000 sq. ft. high security custom built facility. Including: 8,000 sq. ft. prototype & production machine shop, multi engine dyno test area, 6,000 sq. ft. assembly area

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**IMRA America, Inc**

**CONTACT INFORMATION**
1044 Woodridge Avenue, Ann Arbor 48105
734-930-2560
www.imra.com

**PARENT ORGANIZATION**
Aisin Seiki Co, Ltd

**PARENT COUNTRY OF INCORPORATION**
Japan

**R&D ACTIVITIES**
Research, development, prototyping and application engineering for ultrafast fiber lasers

**PRODUCTS**
Application examples include fuel injector nozzles, honing, plastic marking, micromarking

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**INA USA Corporation**

**CONTACT INFORMATION**
1750 East Big Beaver Road, Troy 48083
248-528-4800
www.us.ina.com

**PARENT ORGANIZATION**
INA-Schaeffler KG

**PARENT COUNTRY OF INCORPORATION**
Germany

**R&D ACTIVITIES**
Research, testing, application, engineering

**PRODUCTS**
Engine components, linear bearings, plain bearings

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**Inergy Automotive Technical Center**

**CONTACT INFORMATION**
2585 West Maple Road, Troy 48083
248-655-4500
www.inergyautomotive.com

**PROFESSIONAL STAFF**
Development Engineers

**R&D ACTIVITIES**
Basic and applied research, testing, engineering, product development

**PRODUCTS**
Integrated fuel systems to interface the performance of the fuel system with the vehicle engine management, diagnostics, chassis and exhaust systems
InSyS Corp
CONTACT INFORMATION
180 Engelwood Drive, Suite F, Orion Township 48359
877-467-9787
www.insyscorp.com

PRINCIPALS
Thomas Rizzo—President & CEO
Rachel Herr—VP Operations
Marc Chabot—VP Technology

PROFESSIONAL STAFF
Software Developer: 2
Technician: 1
Office Manager: 1
Business Manager: 1
Sales, Test & Application Engineer: 1

R&D ACTIVITIES
Fatigue, material, and structural testing systems

PRODUCTS
Lynx Servo-controllers, G1F torque sensors, system integration, data acquisition systems and custom solutions

FACILITY DESCRIPTION
General company, 1800 sq. ft. with a small shop floor

OTHER SERVICES
Solution providers in the testing industry
Fatigue Testing

Integrated Sensing Systems
CONTACT INFORMATION
391 Airport Industrial Drive, Ypsilanti 48198
734-547-9896
www.mems-issys.com

R&D ACTIVITIES
MEMS / micromachining, sensors, flow, viscosity and density meters

PRODUCTS
Density, viscosity and chemical concentration sensors

FACILITY DESCRIPTION
Class 100 clean room for silicon wafer processing and microsystems packaging

Intemet Corporation
CONTACT INFORMATION
5445 Corporate Drive, Suite 200, Troy 48098
248-952-2500
www.intermet.com

R&D ACTIVITIES
Engineering, design, product development, testing

PRODUCTS
Cast-metal components for automotive and commercial vehicle manufacturers in powertrain/drivetrain, chassis/structural, and interior/electronics

International Catalyst Technology
CONTACT INFORMATION
2347 Commercial Drive, Auburn Hills 48326
248-340-1040
www.ictcatalyst.com

PARENT ORGANIZATION
Umicore and Nippon Shokubai Co. Ltd.

PARENT COUNTRY OF INCORPORATION
Germany/Japan

R&D ACTIVITIES
Basic research, applied research, testing, engineering, design

PRODUCTS
Development of diesel and gasoline engine catalysts for emission control management

Intertek ETL Entela
CONTACT INFORMATION
3033 Madison Avenue, Grand Rapids 49458
616-247-0515
www.entela.com

PRINCIPALS
Kim Phillipi—President & CEO
Tom Kladder—CFO & VP Finance
Sam DeMarco—VP Marketing

TOTAL EMPLOYMENT
215

AUTOMOTIVE R&D SPENDING
70%

PROFESSIONAL STAFF
Project & Program Managers: 20
Engineers: 38
Technicians: 15

R&D ACTIVITIES
Product development, engineering, design candidate evaluation, testing, accelerated testing, materials evaluation and failure analysis

PRODUCTS
Materials, interior components and systems, electronics, in-vehicle entertainment, HVAC, power distribution, batteries, lighting, glass and numerous other components and systems

FACILITY DESCRIPTION
Automotive R&D and testing takes place in Grand Rapids and Livonia. Laboratories are extensive and organized by discipline including materials lab, product test lab, electronics lab, EMC lab, test fixture lab, and performance test lab

Intier Automotive Technical Center
CONTACT INFORMATION
39600 Lewis Drive, Novi 48377
248-567-4000
www.intier.com

R&D ACTIVITIES
Concept development, engineering, design, feasibility studies, advanced research and development

PRODUCTS
Supplier-integrator of automotive interior and closure systems

Isuzu-DMAX Technical Center
CONTACT INFORMATION
46401 Commerce Center Drive, Plymouth 48170
734-455-7557
www.isuzu.co.jp

PARENT ORGANIZATION
DMAX Ltd

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Engineering, design

PRODUCTS
Diesel engine development
Johnson Controls Inc
Automotive Systems Group

CONTACT INFORMATION
49200 Halyard Drive, Plymouth 48170
734-254-5000
www.johnsoncontrols.com

R&D ACTIVITIES
Design, engineering, validation, systems integration

PRODUCTS
Automotive interiors and batteries

Johnson Matthey Testing

CONTACT INFORMATION
12600 Universal Drive, Taylor 48180
734-946-9856
www.jmtesting.com

PROFESSIONAL STAFF
Emissions Engineers

R&D ACTIVITIES
Basic and applied research, testing, engineering

PRODUCTS
Catalysts for vehicle exhaust emission control. Pioneered the application of catalysis in controlling emissions from both petrol and diesel engine vehicles

FACILITY DESCRIPTION
Emissions testing and design center

JTEKT North America, Inc

CONTACT INFORMATION
4771 Halyard Drive, Plymouth 48170
734-454-7067
www.jtekt.co.jp

PRINCIPALS
Hitoshi Moriya—President

TOTAL EMPLOYMENT
90

R&D ACTIVITIES
Applied research, prototyping, product development

PRODUCTS
Steering systems and bearings

Kaiser Aluminum

CONTACT INFORMATION
28913 Northwestern Highway, Southfield 48034
248-352-4630
www.kaiseral.com

R&D ACTIVITIES
Material and alloy development and process development

PRODUCTS
Aluminum control arms, drive shafts and structural products for chassis, suspension, braking and driveline systems

Karmann USA, Inc

CONTACT INFORMATION
14967 Pilot Drive, Plymouth 48152
734-582-5900
www.karmann.com

PARENT ORGANIZATION
Wilhelm Karmann GmbH

PRINCIPALS
Hans-Joachim Emmelmann—President & CEO
Timothy J. Olind—Senior VP & COO
Oliver Wehage—VP & Director of Technical Development
Stephen P. Chesna—VP & CFO

TOTAL EMPLOYMENT
104

PROFESSIONAL STAFF
Engineers
Designers
Technicians

R&D ACTIVITIES
Applied research, testing, engineering, product development

PRODUCTS
Body and convertible top design, engineering, testing and development

FACILITY DESCRIPTION
40,000 sq. ft. facility with design, engineering, testing and prototype facilities

Keweenaw Research Center

CONTACT INFORMATION
1400 Townsend Drive, Houghton 49931
906-487-3178
www.mtukrc.org

PARENT ORGANIZATION
Michigan Technological University

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Jay Meldrum—Director
Scott Bradley—Program Leader, Analysis
Mark Osborne—Program Leader, Test
Russ Alger—Program Leader, Snow-related research

TOTAL EMPLOYMENT
30

AUTOMOTIVE R&D SPENDING
$3 Million

PROFESSIONAL STAFF
Engineers: 13
Technicians: 10
Designers: 5

R&D ACTIVITIES
Vehicle mobility testing on 500 acre winter test track, fuel cell vehicle development, design analysis, anti-icing chemical testing, prototype vehicle development, elastomer testing for stiffness and damping (material coupons or parts)

PRODUCTS
Test track, vehicle harshness and vibration testing, anti-icing pavement technology

FACILITY DESCRIPTION
Test course leasing, consulting, project management, garage facility lease, design and analysis services

OTHER SERVICES
Product Testing: vehicle mobility in snow, ice, or rough terrain
Avail Equip/Facility: MTS 831 Elastomer test system, various military track test equipment
Consulting: vehicle mobility, noise and vibration, anti-icing

OTHER VEHICLE SPECIALTIES
Vehicle mobility testing
**Key Plastics LLC**

**CONTACT INFORMATION**
21700 Haggerty Road, Northville 48167
248-449-6100
www.keyplastics.com

**PARENT ORGANIZATION**
Key Automotive Group

**PRINCIPALS**
Richard Pudney—Director of Advanced Product Development

**TOTAL EMPLOYMENT**
6,400 (globally)

**R&D ACTIVITIES**
Focus on injection-molded new product and process applications

**PRODUCTS**
100-2,500 ton range of interior, exterior and under hood automotive components and assemblies. Focus on painted and decorated product applications

**FACILITY DESCRIPTION**
15,000 sq. ft. technical center and R&D facility

**Key Safety Systems, Inc**

**CONTACT INFORMATION**
7000 Nineteen Mile Road, Sterling Heights 48314
586-726-3800
www.keysafetyinc.com

**R&D ACTIVITIES**
Engineering, testing, product development

**PRODUCTS**
Safety-critical components and systems including airbags, seat belts and steering wheels, as well as vehicle electronics and shift knobs

**Keykert**

**CONTACT INFORMATION**
46941 Liberty Drive, Wixom 48393
248-960-4100
www.keykertusa.com

**PARENT ORGANIZATION**
Kiekert AG

**PARENT COUNTRY OF INCORPORATION**
Germany

**R&D ACTIVITIES**
Product engineering, design, development

**PRODUCTS**
Steering column modules, door modules, roof modules, seat electronics, rain sensors, power windows, and numerous electro-mechanical switches

**Koyo North American Engineering & Technical Center**

**CONTACT INFORMATION**
47771 Halyard Drive, Plymouth 48170
734-454-1500
www.koyousa.com

**PARENT ORGANIZATION**
Koyo Seiko

**PARENT COUNTRY OF INCORPORATION**
Japan

**PRINCIPALS**
Graham Fullerton—Director of Engineering

**TOTAL EMPLOYMENT**
35

**PROFESSIONAL STAFF**
Mechanical Engineers

**R&D ACTIVITIES**
Applied research and engineering on all aspects of automotive bearings

**PRODUCTS**
Various bearing and ball applications

**KUKA Robotics Corporation**

**CONTACT INFORMATION**
22500 Key Drive, Clinton Township 48036
586-569-2082
www.kukarobotics.com

**PARENT ORGANIZATION**
KUKA Roboter GmbH

**PARENT COUNTRY OF INCORPORATION**
Germany

**PRINCIPALS**
Fred Robinson—VP
Kevin Kozuszek—Marketing Manager

**R&D ACTIVITIES**
Product development, engineering

**PRODUCTS**
Robotics and automation
L3 Communications

CONTACT INFORMATION
76 Getty Street, Muskegon 49442
231-724-2151
www.l-3com.com

R&D ACTIVITIES
Engineering, design and manufacture of engines, transmissions, suspension and turret drive systems for combat vehicles, including both tracked and wheeled vehicles

PRODUCTS
Military vehicles

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Lacks Enterprises, Inc

CONTACT INFORMATION
5460 Cascade Road SE, Grand Rapids 49546
616-949-6570
www.LacksEnterprises.com

PRINCIPALS
Roger Andrzejewski—Director of Human Resources

TOTAL EMPLOYMENT
2,000

R&D ACTIVITIES
Product and process innovation and testing

PRODUCTS
Automotive wheel components and systems, trim systems and plastic molding, plating, painting and shielding

FACILITY DESCRIPTION
Dedicated research & testing facility offers comprehensive capabilities of an independent lab that meets the stringent, globally recognized standards necessary to be ISO/IEC-17025 accredited. The facility offers an extensive range of testing and validation procedures including raw materials analysis and plated/painted/assembled exterior and interior component parts on thermoplastic polymers

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Lear Corporation Technical Division

CONTACT INFORMATION
21557 Telegraph Road, Southfield 48034
248-447-1680
www.lear.com

PARENT ORGANIZATION
Lear Corporation

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Applied research, prototyping, product development

PRODUCTS
Total vehicle interior systems

FACILITY DESCRIPTION
Test labs and fabrication for electronics, mechanical, plastics, fabric and total interior prototyping

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Lectronix Corporation

CONTACT INFORMATION
5858 Enterprise Drive, Lansing 48901
517-492-1900
www.lectronix.biz

PRINCIPALS
Allen Dale—CEO
Earl Goodrich—CTO
Tom Bayerl—VP Product Development
Rick Roth—VP Operations

TOTAL EMPLOYMENT
46

AUTOMOTIVE R&D SPENDING
$2 Million

PROFESSIONAL STAFF
Hardware and Software Developers: 19

R&D ACTIVITIES
Hardware and software design to deliver advanced electronic solutions for complex vehicle control, infotainment and entertainment systems

PRODUCTS
Turnkey hardware and software technology for automotive, telecommunications, networking, and robotics industries

FACILITY DESCRIPTION
Corporate offices and 80,000 sq. ft. manufacturing facility in Lansing, MI. Product Development and Engineering offices in Ann Arbor, MI

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Link Engineering Company

CONTACT INFORMATION
43855 Plymouth Oaks Boulevard, Plymouth 48170
734-453-0800
www.linkeng.com

TOTAL EMPLOYMENT
250

R&D ACTIVITIES
Testing

PRODUCTS
Development of unique test systems for automotive, truck and aerospace industries covering products such as brakes, transmissions, clutches, axles, friction materials, steering systems, springs, tires, wheels, and other driveline components

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LLamasoft, Inc

CONTACT INFORMATION
204 East Washington Street, Ann Arbor 48104
734-418-3119
www.llamasoft.com

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Donald Hicks—President

PROFESSIONAL STAFF
Software Developers & Technical Support: 10
Supply Chain Consultants: 8

R&D ACTIVITIES
Supply chain network optimization, supply chain simulation, transportation modeling, distribution optimization, strategic sourcing analysis, new product/platform simulation planning

PRODUCTS
Supply Chain Guru—Software application used for supply chain modeling, optimization, simulation. Uses optimization technology to identify ‘lowest cost’ or ‘highest profit’ supply chain structures from the thousands of alternative scenarios, based on user-defined constraints. Uses simulation technology to predict the operational and financial outcome of changes to the supply chain, or to test ‘what if’ scenarios

OTHER SERVICES
Consulting: Supply chain strategic analysis—modeling, optimization, simulation
Loctite Corporation Automotive Technology Center

CONTACT INFORMATION
2455 Featherstone Road, Auburn Hills 48326
248-364-4700
www.loctite.com

PARENT ORGANIZATION
Henkel

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Charles J. Evans—VP & General Manager
Allen D. Forgach—Director of Engineering

TOTAL EMPLOYMENT
20

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 6
Technicians: 4

R&D ACTIVITIES
Application engineering and technical service

PRODUCTS
Adhesive and sealant applications

FACILITY DESCRIPTION
Application and testing labs

OTHER VEHICLE SPECIALTIES
Adhesives

Lotus Engineering—Powertrain

CONTACT INFORMATION
1254 North Main Street, Ann Arbor 48104
734-995-2544
www.lotusengineeringinc.com

PARENT ORGANIZATION
Group Lotus, PLC

PARENT COUNTRY OF INCORPORATION
United Kingdom

PRINCIPALS
John Briggs—VP
Tim Holland—VP
Sumax Cobb—VP

TOTAL EMPLOYMENT
60

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 20
Technicians: 26

R&D ACTIVITIES
Applied research, testing, product development

PRODUCTS
Produce specialty automobiles (Tier .5 supplier)

FACILITY DESCRIPTION
Mechanical lab with design area and testing facility

OTHER VEHICLE SPECIALTIES
Specialty vehicles

Magna Automotive Testing

CONTACT INFORMATION
19868 Haggerty Road, Livonia 48152
734-432-4256
www.magnautomotivetesting.com

PARENT ORGANIZATION
Intier Automotive Seating of America, Inc

PARENT COUNTRY OF INCORPORATION
USA

PROFESSIONAL STAFF
Quality Control Engineers

R&D ACTIVITIES
Testing and engineering

PRODUCTS
Safety testing, environmental for-post road simulation, structural testing, instrumentation, and FEA fatigue simulation

FACILITY DESCRIPTION
Contract test facility specializing in complete interior and body testing for vehicle manufacturers and Tier 1 suppliers

OTHER VEHICLE SPECIALTIES
Vehicle testing

Magneti Marelli North America

CONTACT INFORMATION
1389 Wheaton Avenue, Suite 800, Troy 48083
888-297-1855
www.cofap.net

PARENT ORGANIZATION
Magneti Marelli SPA

PARENT COUNTRY OF INCORPORATION
Italy

TOTAL EMPLOYMENT
30

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Product Engineers: 3
Ride Development Engineers: 4
Design Engineers: 2
Quality Engineers: 5

R&D ACTIVITIES
Product development of springs, shocks and modules

PRODUCTS
Shock absorbers

FACILITY DESCRIPTION
Dynamic, prototype and mechanical labs

Magna Donnelly Corporation

CONTACT INFORMATION
600 Wilshire Drive, Troy 48084
616-786-7000
www.magnadon.com

PARENT ORGANIZATION
Magna International

PARENT COUNTRY OF INCORPORATION
Canada

R&D ACTIVITIES
Applied research, engineering/design, product development

PRODUCTS
Automotive mirrors, vision optics/imaging, thin film coating/electrochromics, precision glass fabrication, injection molding, encapsulation, adhesion and packaging technologies

OTHER VEHICLE SPECIALTIES
Exterior mirrors, windows

AUTOMOTIVE RESEARCH AND DEVELOPMENT FACILITIES DIRECTORY  THIRD EDITION
MAHLE Powertrain, LLC

CONTACT INFORMATION
41000 Vincenti Court, Novi 48035
248-471-5000
www.mahle-powertrain.com

PARENT ORGANIZATION
MAHLE GmbH

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Chuck Heine—Managing Director, MAHLE Powertrain LLC
Alan McEwan—Director, Powertrain Business Development
Ben Shirey—Director, Test Systems
Kathy Kedzior—Manager, Test Systems Business Development

TOTAL EMPLOYMENT
200

AUTOMOTIVE R&D SPENDING
5% of sales

PROFESSIONAL STAFF
Software Engineers
Calibration Engineers
Diagnostic Engineers
Technicians
Program Managers
Powertrain Engineers
Powertrain Designers

R&D ACTIVITIES
Advanced powertrain concepts, electronic controls modeling and hardware, advanced process testing, advanced vehicle diagnostic tools, fleet management. All—simulation and prototyping

PRODUCTS
Test systems—Vehicle component/system testers, end of line test, modular portable testers, in process testers, leak testers, ECOS (current measurement) testers, data recorders, vehicle communication interface (VCI’s), web reporting, remote diagnosis and updates software

FACILITY DESCRIPTION
US Headquarters for MAHLE Powertrain. Located in Novi and Farmington Hills. Full powertrain test capability (10 engine dynamometers for gasoline, diesel and alternative fuels, AWD SULEV emissions lab, SHED test), vehicle workshop with prototyping, instrumentation capability

OTHER SERVICES
Product Testing: Engine testing, electronic controls, emissions, vehicle diagnostics
Product Validation: Engine testing, electronic controls, emissions, vehicle diagnostics
Avail Equip/Facility: Emissions, SHED, Engine dynos (transient), AWD chassis dyno
Consulting: Powertrain design and development, electronic controls, diagnostics
Other: Engineering services based upon above; customer site, short or long term

OTHER SERVICES
Powertrain—engineering/design, vehicle calibration, testing, product development, consulting, available test facility/equipment.
Test Systems—vehicle diagnostic service tools, end of line test systems, component based testing, web reporting, data recorders, customer on-site test services/consulting

MANN+HUMMEL Automotive

CONTACT INFORMATION
6400 Sprinkle Road, Portage 49002
269-329-3900
www.mann-hummel.com

PARENT ORGANIZATION
Filterwerk Mann + Hummel GmbH

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Claude Mathieu—CEO & President
Charles Vaillant—Director of Engineering

TOTAL EMPLOYMENT
280

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 13
Release Engineers: 3
Testing Engineers: 2
FEA-CAE Engineers: 2

R&D ACTIVITIES
Product design, development (FEA/CAE) and testing

PRODUCTS
Plastic intake manifold, air filter systems, fluid filter systems

FACILITY DESCRIPTION
Design and development office, testing lab and prototype shop

Mark IV

CONTACT INFORMATION
1955 Enterprise Drive, Rochester Hills 48309
248-853-8300
www.markivauto.com

R&D ACTIVITIES
Product and application engineering

PRODUCTS
Power transmission, air admission & engine cooling, fluid handling and fuel systems

Martinrea

CONTACT INFORMATION
2319 Bishop Circle East, Dexter 48130
734-426-4376
www.martinrea.com

R&D ACTIVITIES
Engineering and design, prototyping, manufacturing processes

PRODUCTS
Wide variety of automotive components in the categories of engine and transmission, power steering and brakes, fuel handling, exhaust, structural/occupant safety, and HVAC

Material Sciences Corporation

CONTACT INFORMATION
39303 Country Club Drive, Suite A-11, Farmington Hills 48331
734-207-4444
www.matsci.com

R&D ACTIVITIES
Materials research, basic and applied research, engineering

PRODUCTS
Leading provider of metallic-based composites for managing acoustical energy
MB-technology NA LLC

CONTACT INFORMATION
400 East Big Beaver, Troy 48083
248-312-0277
www.mbtech-group.com

PARENT ORGANIZATION
MB-technology GmbH

PARENT COUNTRY OF INCORPORATION
Germany

R&D ACTIVITIES
Testing, inspection, integration, prototyping

PRODUCTS
Develop, integrate, and test components, systems, modules and vehicles worldwide, specializing in vehicle engineering, powertrain solutions, electronics

McGilvra Engineering

CONTACT INFORMATION
3155 Robinson Road, Jackson 49203
517-783-2623
www.mcgilvra.com

PRINCIPALS
Albert McGilvra—President

AUTOMOTIVE R&D SPENDING
80%

R&D ACTIVITIES
General circuit design, sensor interfacing, embedded control, PCB layout, prototype assembly

FACILITY DESCRIPTION
Electronic engineering services providing consulting, design, prototyping, testing, and manufacturing

McLaren Performance Technologies

CONTACT INFORMATION
32233 West Eight Mile Road, Livonia 48152
248-477-6240
www.mclarensperformance.com

PARENT ORGANIZATION
Linamar Corporation

PARENT COUNTRY OF INCORPORATION
Canada

PRINCIPALS
Wiley McCoy—President
Scott Maxwell—Sales

TOTAL EMPLOYMENT
85

R&D ACTIVITIES
Engineering services and product development

PRODUCTS
Engine technology development, prototypes, powertrain/drivetrain engineering, and development

OTHER SERVICES
Product Testing: Powertrain / Drivetrain
Product Validation: Powertrain / Drivetrain
Consulting: Engineering Services

MDE International, Inc

CONTACT INFORMATION
G-4033 South Center Road, Burton 48519
810-743-5980
www.mdeintl.com

PRINCIPALS
Jeffrey B. Koch—President
Richard F. Benoit—Director New Business Development
Scott Koch—Manager Sales & Marketing
Mark Gallagher—Manager MDE Staffing

TOTAL EMPLOYMENT
80

R&D ACTIVITIES
Reliability, durability and OBDII testing of vehicles and components

PRODUCTS
Vehicle information from reliability, durability, OBDII and any special testing acquired from test programs conducted at one of our six test sites located across the country

FACILITY DESCRIPTION
Testing services for the transportation industry. Our facilities are available for the use by others

OTHER SERVICES
Consulting: Program & Work statement development
Other: Specifically designed database for vehicle testing

Mechanical Simulation Corporation

CONTACT INFORMATION
912 North Main Street, Suite 210, Ann Arbor 48103
734-668-2930
www.carsim.com

R&D ACTIVITIES
Applied research and product development

PRODUCTS
Vehicle dynamics simulation software, active safety electronic control systems—vehicle stability/rollover, ABS, TCS, four-wheel steering, and active suspensions

Medallion Instrumentation Systems

CONTACT INFORMATION
17150 Hickory Street, Spring Lake 49456
616-847-3700
www.medallionis.com

R&D ACTIVITIES
Engineering, design, product development

PRODUCTS
Precision instrumentation, controllers, display systems and sensors
Meiden Technical Center
North America, LLC

CONTACT INFORMATION
15810 Centennial Drive, Northville Township 48167
248-305-9903
www.meidensha.co.jp

PARENT ORGANIZATION
Meidensha Corporation

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Rodd Yamashita—Advisor

TOTAL EMPLOYMENT
20

PROFESSIONAL STAFF
Engineers
Technicians

R&D ACTIVITIES
Engineering, testing

PRODUCTS
Contract testing and engineering services for the development of advanced gasoline and diesel combustion engines

FACILITY DESCRIPTION
78,000 sq. ft. of labs and test cells planned to open Spring 2008

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Meridian Automotive Systems

CONTACT INFORMATION
550 Town Center Drive, Suite 475, Dearborn 48126
313-336-4182
www.meridianautosystems.com

R&D ACTIVITIES
Product development, engineering

PRODUCTS
Front and rear end modules, lighting, exterior composites, console modules, instrument panels, and other interior systems

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Metalase Technologies, LLC

CONTACT INFORMATION
18901 Fifteen Mile Road, Clinton Township 48035
586-723-1909
www.metalase.com

PARENT ORGANIZATION
Auto/Con Corp

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Terry S. Givens—CEO
Jo Ann M. Clarke, PhD—Director of Advanced Laser Applications
T.S. Givens—Laser Safety Officer
Ronald R. Matheson—Director, Systems Integration
Daniel E. Hucul—Director Engineering
Auto/Con Engineering & Integration Staff

AUTOMOTIVE R&D SPENDING
90%

R&D ACTIVITIES
Development of fully integrated and stand-alone laser material processing systems and applications for the automotive industry and the EPA including shaped micro-hole drilling for fuel injection systems, welding of specialty materials such as thin-gauge aluminum, stainless steel and holographic nickel and laser surface texturing of metals and specialty auto interior materials. Confidential development of other laser manufacturing applications for automotive customers and laser OEMs

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MGA Research Corp

CONTACT INFORMATION
446 Executive Drive, Troy 48083
248-577-5001
www.mgaresearch.com

PROFESSIONAL STAFF
Electrical Engineers
Mechanical Engineers
Software Engineers

R&D ACTIVITIES
Safety related testing

PRODUCTS
Component, safety and durability testing services

FACILITY DESCRIPTION
Component-level, bench-top systems through full scale crash and accelerator sled facilities
**Michigan Rubber Products, Inc**

**CONTACT INFORMATION**
1200 Eighth Avenue, Cadillac 49601
231-775-1316
www.Michigan-Rubber.com

**R&D ACTIVITIES**
Design and engineering, CAD/CAM, prototyping, thermal cycling testing, rubber material development and validation, product life environmental testing, cryogenic tumbling and shotblasting, component assembly

**PRODUCTS**
Rubber molding, rubber extrusion, and plastic blow molding products covering air induction, NVH, and sealants for air, water and fuel

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**Michigan Scientific Corp (MSC)**

**CONTACT INFORMATION**
321 East Huron Street, Milford 48381
248-685-3939
www.michsci.com

**PRINCIPALS**
Hugh W. Larsen—President/Owner

**TOTAL EMPLOYMENT**
75

**AUTOMOTIVE R&D SPENDING**
75%

**PROFESSIONAL STAFF**
50+ Project Engineers (ME, EE, CS, CAD, Tech)

**R&D ACTIVITIES**
Engines, chassis, axles/shafts, brakes, transmissions-engineering measurements

**PRODUCTS**
Custom engineering services focusing on electronics and mechanical design, CAD, FEA, and instrumentation support. Design and manufacturing of instrumentation equipment to measure forces, temperature, pressure, acceleration, electrical measurements

**FACILITY DESCRIPTION**
15,000 sq. ft. facility in Charlevoix, MI and a 10,000 sq. ft. facility in Milford, MI

**OTHER SERVICES**
Data Acquisition Systems

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**MicroHeat**

**CONTACT INFORMATION**
27611 Halsted Road, Farmington Hills 48331
248-489-2400
www.microheat.com

**R&D ACTIVITIES**
State-of-the-art systems that lead the automotive industry in developing, manufacturing, and marketing unique heating methods for flowing fluids

**PRODUCTS**
HotShot systems—Clear and clean rear windows, headlights and radar sensors

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**Mitsubishi Electric Automotive America**

**CONTACT INFORMATION**
15603 Centennial Drive, Northville 48167
734-453-6200
www.meaa-mea.com

**PARENT ORGANIZATION**
Mitsubishi Electric Corporation

**PARENT COUNTRY OF INCORPORATION**
Japan

**PRINCIPALS**
Mickey Kurisaki—President

**PROFESSIONAL STAFF**
Application Engineers
Electronics Engineers

**R&D ACTIVITIES**
Engineering and product development

**PRODUCTS**
Powertrain products, body and chassis products, and in-vehicle entertainment systems

**FACILITY DESCRIPTION**
117,000 sq. ft. of operational space

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**Mitsubishi Motor Research & Development of America, Inc**

**CONTACT INFORMATION**
4300 Varsity Drive, Ann Arbor 48108
734-973-4441
www.mitsubishi-motors.com

**PARENT ORGANIZATION**
Mitsubishi Motor Corporation

**PARENT COUNTRY OF INCORPORATION**
Japan

**PRINCIPALS**
Leonitta Turner—Director

**R&D ACTIVITIES**
Testing, engineering, product development

**PRODUCTS**
Fuel emissions, safety, HVAC and whole vehicle evaluation

**FACILITY DESCRIPTION**
Testing and design engineering center

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**Modern Engineering**

**CONTACT INFORMATION**
633 South Boulevard, Suite 200, Rochester Hills 48307
248-606-6100
www.modernengineering.com

**TOTAL EMPLOYMENT**
1,100

**R&D ACTIVITIES**
Engineering, design, project management, testing

**PRODUCTS**
Diverse technical services through integrating a highly qualified technical staff, advanced technologies and robust processes. A lean systems approach benefits clients by optimizing product to market lead times, increasing manufacturing throughput and reducing supply chain costs

**OTHER SERVICES**
Consulting: Project management, design and engineering in a number of vehicle areas
Molex Automotive

CONTACT INFORMATION
2025 Taylor Road, Auburn Hills 48236
248-371-9700
www.molex.com

PARENT ORGANIZATION
Molex, Inc

PARENT COUNTRY OF INCORPORATION
USA

AUTOMOTIVE R&D SPENDING
100%

R&D ACTIVITIES
Engineering, product development, testing, validation

PRODUCTS
Automotive electrical and fiber optic connectors, value added modules, cables, terminals, switches, control panels, and printed circuit board assemblies

FACILITY DESCRIPTION
80,000 sq. ft. housing division management, engineering, development, and sales

MSX International

CONTACT INFORMATION
1950 Concept Drive, Warren 48091
248-829-6300
www.msxi.com

PRINCIPALS
Bruce Chidsey—Director, Retail Solutions Group
Xavier Vandame—Director, Warranty Solutions
Peter Daniels—Manager, Call Center Operations
Peter Leger—President & CEO
Craig Schmelzer—VP, Human Capital Solutions
Bruce Culver—VP, Business Outsourced Services
Fred Minturn—EVP & CFO

TOTAL EMPLOYMENT
200

AUTOMOTIVE R&D SPENDING
100%

R&D ACTIVITIES
Full vehicle product development from concepts through prototype

PRODUCTS
Vehicle body and chassis development services (engineering, supporting system and vehicle performance validation)

FACILITY DESCRIPTION
Vehicle development center includes model and tool shop, prototype, build and fabrication facilities; Consultation and process improvements

Munro & Associates, Inc

CONTACT INFORMATION
1749 Northwood Drive, Troy 48084
248-362-5110
www.leandesign.com

PRINCIPALS
Sandy Munro—CEO
Joe Feord—Director Sales & Marketing

R&D ACTIVITIES
Product redesign, engineering, manufacturing and process improvements

PRODUCTS
Design profit software allows manufacturers to map product assembly and predict total accounted costs associated production, including hidden factory costs like cost of conformance to produce a level of quality

Nachi Robotic Systems Inc

CONTACT INFORMATION
22285 Roethel Drive, Novi 48375
248-305-6545
www.nachirobotics.com

PARENT ORGANIZATION
Nachi-Fujikoshi

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Product and application engineering

PRODUCTS
Engineering of robotic systems for welding, laser cutting, material handling, painting

National Automotive Center (NAC),
US ARMY Tank—Automotive R&D&E Center (TARDEC)

CONTACT INFORMATION
6501 East Eleven Mile Road, Warren 48397
586-574-6387
www.tardec.army.mil

PARENT ORGANIZATION
Department of the Army

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Dr. Grace Bochenek—Director, TARDEC
Paul Skalny—Executive Director, NAC

TOTAL EMPLOYMENT
1,100

AUTOMOTIVE R&D SPENDING
75%

R&D ACTIVITIES
Basic, applied and advanced research, testing, engineering, product development

PRODUCTS
Dual-use automotive technologies which include component, subsystem and systems for combat and tactical vehicles; mobility, survivability and intelligent systems; fuels and lubricants; fuel storage, distribution and quality; water generation, purification, distribution, and quality; and logistics equipment

FACILITY DESCRIPTION
Labs for advanced collaborative environments (ACE), advanced concepts, material and manufacturing, bridging simulation, crew station systems integration, ground vehicle simulation, high performance computing, intelligent mobility research, laser protection, next generation software, propulsion test, robotic systems integration, survivability technology, track and suspension, visual perception, and water
NetShape International

CONTACT INFORMATION
39625 Lewis Drive, Suite 600, Novi 48377
248-788-8500
www.netshapecorp.com

R&D ACTIVITIES
Design/development, project management, prototyping, testing, innovations, CAD, FEA analysis

PRODUCTS
Impact energy management systems

New Dimension Laser, Inc

CONTACT INFORMATION
34378 Doreka, Fraser 48026
586-296-7580
www.nd-laser.com

PRINCIPALS
James Kenney—VP
Bert Steinman—President
Matt Graca—Treasurer

PROFESSIONAL STAFF
Laser Programmers/Technicians: 3
Laser Operators: 2

R&D ACTIVITIES
Laser cutting of various types of materials

PRODUCTS
New Dimension Laser provides laser cutting services for all markets. This includes automotive, power plant, safety, prototype and experimental

FACILITY DESCRIPTION
Industrial Facility 10,000 sq. ft.

OTHER SERVICES
Laser Cutting (Prototype, Experimental, and Production)

NextEnergy

CONTACT INFORMATION
461 Burroughs, Detroit 48202
313-833-0100
www.nextenergy.org

PRINCIPALS
Jim Saber—Director of Technology Development

TOTAL EMPLOYMENT
20

AUTOMOTIVE R&D SPENDING
$10 Million

R&D ACTIVITIES
Biodiesel (B20) standards, hybrid vehicle testing facilities, MicroGrid stationary power testing station, alternative fuels platform

PRODUCTS
National biofuel energy lab, southwest research institute hybrid vehicle powertrain testing aab, MicroGrid testing facility, alternative fuels platform

FACILITY DESCRIPTION
National biofuels energy lab and SwRI hybrid powertrain lab are 2 fully equipped labs, both 2,000 sq. ft., state of the art testing facilities. The NextEnergy Center also features a MicroGrid and alternative fuels platform that allow for testing and validation of products/technologies

OTHER VEHICLE SPECIALTIES
Biofuels

NHK International Corporation

CONTACT INFORMATION
50706 Varsity Court, Wixom 48393
248-926-0111
www.nhkspg.co.jp

PARENT ORGANIZATION
NHK Spring Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Akihiko Nishikawa—Senior VP & Chief Engineer
Shane Nishizawa—Senior Manager, Engineering
Kaz Uemura—General Manager, Sales

TOTAL EMPLOYMENT
30

PROFESSIONAL STAFF
Design Engineer: 10
Test Engineer: 2
Material Engineer: 2
Technician/Operator: 4

R&D ACTIVITIES
Research and Development of suspension spring products such as stabilizer bar and coil spring

PRODUCTS
Coil spring (L-shape springs, high strength coil springs), stabilizer bar (tubular stabilizer bars, solid stabilizer bars)

FACILITY DESCRIPTION
Wixom Facility is the headquarters of North American operations

Nippon Antenna America, Inc

CONTACT INFORMATION
27280 Haggerty Road, Suite C-9, Farmington Hills 48331
248-553-9100
www.nipponantenna.co.jp

PARENT ORGANIZATION
Nippon Antenna Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

PROFESSIONAL STAFF
Engineers
Technicians

R&D ACTIVITIES
Engineering, design, applied research, testing, product development

PRODUCTS
Automotive and specialty communications antennas
Nissan Technical Center North America

CONTACT INFORMATION
39001 Sunrise Drive, Farmington Hills 48331
248-488-4123
www.nissandriven.com

PARENT ORGANIZATION
Nissan Motor Company

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Tsuyoshi Yamaguchi—President

TOTAL EMPLOYMENT
1,080

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers
CAD/Technicians
Designers

R&D ACTIVITIES
Basic and applied research, testing, engineering, product development, and styling

PRODUCTS
Wide variety of components and complete vehicles

FACILITY DESCRIPTION
Automotive research, development and testing facility

Nisshinbo Automotive Corporation

CONTACT INFORMATION
42355 Merrill Road, Sterling Heights 48314
586-997-1000
www.nisshinboauto.com

PARENT ORGANIZATION
Nisshinbo Group

PARENT COUNTRY OF INCORPORATION
Japan

TOTAL EMPLOYMENT
85

R&D ACTIVITIES
Engineering, design, testing, product development

PRODUCTS
Premium brake friction materials

FACILITY DESCRIPTION
54,000 sq. ft.

NK Designs, Inc

CONTACT INFORMATION
3725 Commerce Street, Jackson 49203
517-764-4718
www.nk-designs.com

PRINCIPALS
Patrick Kimlin—President

AUTOMOTIVE R&D SPENDING
80%

R&D ACTIVITIES
Design, tool path generation and process development

FACILITY DESCRIPTION
Model shop, CAD/CAM, CNC milling and turning, MIG/TIG welding, powder coating

Noble Polymers

CONTACT INFORMATION
4855 Thirty-Seventh Street SE, Grand Rapids 49512
616-975-4987
www.noblepolymers.com

PARENT ORGANIZATION
Cascade Engineering

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Tim Patterson—Business Unit Leader

R&D ACTIVITIES
Compounds and materials basic and applied research, testing, engineering and development

PRODUCTS
Nanocomposites, acoustic deadening materials, and high strength thermoplastics for applications such as seats, instrument panels, bumper fascias and step pads

North American Lighting, Inc

CONTACT INFORMATION
38900 Hills Tech Drive, Farmington Hills 48334
248-553-6408
www.nal.com

PARENT ORGANIZATION
Koito Manufacturing Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

PROFESSIONAL STAFF
Design Engineers

R&D ACTIVITIES
Engineering

PRODUCTS
Automotive lighting products

FACILITY DESCRIPTION
Technical center with design engineering, program management, R&D and a model shop

NSK Americas, Inc

CONTACT INFORMATION
4200 Goss Road, Ann Arbor 48105
734-913-7500
www.us.nsk.com

PARENT ORGANIZATION
NSK Ltd

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Materials/lubrication research, tribology, bearing analysis, testing, product development

PRODUCTS
Electric power steering, hub unit bearings, differential gears, various components for chassis, powertrain and drivetrain systems
NTN Automotive Center

CONTACT INFORMATION
39255 West Twelve Mile Road, Farmington Hills 48331
248-324-4700
www.ntnamerica.com

PARENT ORGANIZATION
NTN Corporation

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Engineering, testing, product development

PRODUCTS
Bearings, constant velocity joints and other precision industrial equipment

Panasonic Automotive Systems

Company of America (PASA)

CONTACT INFORMATION
26455 American Drive, Southfield 48034
248-447-7000
www.pasa.panasonic.com

PARENT ORGANIZATION
Panasonic Corporation of North America

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Engineering, product development

PRODUCTS
Numerous automotive electronics products

OC Automotive Solutions Center

CONTACT INFORMATION
Beck West Corporate Park, 46500 Humboldt Drive, Novi 48377
248-668-7500
www.owenscorning.com/automotive

PARENT ORGANIZATION
Owens Corning

PARENT COUNTRY OF INCORPORATION
USA

R&D ACTIVITIES
Prototyping, materials research, application development

PRODUCTS
Composite materials application development in structures, closures, interior and exterior acoustic systems

FACILITY DESCRIPTION
50,000 sq. ft. building for prototyping, application development and conference rooms for technology demonstrations

Paragon Laboratories, Inc

CONTACT INFORMATION
12649 Richfield Court, Livonia 48150
734-462-3900
www.paragonlaboratories.com

PRINCIPALS
Jerry Parmentier—President
Thomas J. Jonaitis—Petroleum Laboratory Manager
John Parmentier—VP Sales & Marketing

TOTAL EMPLOYMENT
12

AUTOMOTIVE R&D SPENDING
50%

R&D ACTIVITIES
Analysis of fuels and lubricants

PRODUCTS
Testing/analysis of gasoline, diesels, alcohol-based fuels, bio-diesels and oils

FACILITY DESCRIPTION
Analytical chemistry laboratory for environmental and biological analysis

Ogihara America Corporation

CONTACT INFORMATION
1480 West McPherson Park Drive, Howell 48843
517-548-4900
www.ogihara.com

PARENT ORGANIZATION
Ogihara Corporation

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Product design, clay feasibility, surface analysis, structure feasibility, CAE form analysis and draw simulation, prototyping, tool design and build

PRODUCTS
Class A and interior sheet metal stampings, body-in-white modular assemblies

Parker Hannifan—Pneumatic Division

CONTACT INFORMATION
8678 East M-89, Richland 49083
269-629-5000
www.parker.com

R&D ACTIVITIES
Engineering, design, product development

PRODUCTS
Hydraulic components, industrial hoses, filtration products, seals
Patel Industries Ltd, Inc

CONTACT INFORMATION
4872 Cogswell Road, Wayne 48184
734-728-2370
www.patelindustries.com

PRINCIPALS
Atul Patel—President

AUTOMOTIVE R&D SPENDING
80%

PROFESSIONAL STAFF
Chemical Engineer: 1
MS Mechanical Engineering: 1
Quality Control technician: 1

R&D ACTIVITIES
Engineering and process development

PRODUCTS
Development of Anti-Flutter, expandable, body-shop, bulk pumpable sealers. Development of waterborne Liquid Applied Sound Dampers (LASD). One & Two component adhesives for use as hem flange adhesives. Prototyping and scale up of automated processing methods for manufacturing sealers, coatings (LASD), and adhesives

FACILITY DESCRIPTION
15,000 sq. ft.

OTHER SERVICES
Product Testing: viscosity, density, expansion, adhesion, corrosion, humidity, gravel impingement
Product Validation: DFMEA, PFMEA, PPAP, BMAP
Avail Equip/Facility: Cold box, gravimeter, environmental chambers, air-circulating ovens, press-flow viscometers, brookfield, density cup, expansion boat

Pioneer Automotive Technologies

CONTACT INFORMATION
22630 Haggerty Road, Farmington Hills 48335
248-449-6799
www.pioneerelectronics.com

PARENT ORGANIZATION
Pioneer Corporation

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Detailed development, validation, testing, reporting

PRODUCTS
In-car entertainment/navigation, including DVD, CD, satellite radio, speakers, subwoofers, amplifiers, GPS navigation

Plastech Engineered Products, Inc

CONTACT INFORMATION
835 Mason Avenue, Dearborn 48214
313-791-3001
www.plastecheng.com

PRINCIPALS
Thien-Di Do—Director, Marketing & Communications

R&D ACTIVITIES
Advanced product development and industrial design. Testing capabilities (life cycle, in-process, air flow etc.), material certification, dimensional validation, SPC testing, drop test, Belgian block, gravimeter CS1/CS2 pre-design verification test plan and testing (pre-DVP), process failure mode effects analysis (PFMEA), process simulation, and mold flow analysis

PRODUCTS
Plastic injection molded interior, exterior and underhood automotive components

FACILITY DESCRIPTION
Industrial design concept studios with clay modeling and mock-up capabilities. Thermal and humidity testing chamber, sun loading testing chamber, network of testing facilities, crash simulation

Plastic Flow, LLC

CONTACT INFORMATION
1206 Birch Street, Houghton 49931
906-483-0691
www.plasticflow.com

PRINCIPALS
Mahesh Gupta—President

R&D ACTIVITIES
Software development for flow simulation in polymer extrusion and injection molding

PRODUCTS
Vehicle interior and under-the-hood plastic components

POM Group

CONTACT INFORMATION
2350 Pontiac Road, Auburn Hills 48236
248-409-7900
www.pomgroup.com

R&D ACTIVITIES
Engineering, in-house mold design, thermal finite analysis, CAD

PRODUCTS
High precision Advanced Thermal Management tooling systems for injection molding, die casting, hydro-forming, forging and stamping processes

FACILITY DESCRIPTION
35,000 sq. ft. corporate headquarters housing management, engineering, manufacturing and machine development

Perceptron, Inc

CONTACT INFORMATION
47827 Halyard Drive, Plymouth 48170
734-414-6100
www.perceptron.com

PRINCIPALS
Al Pease—President, CEO & Chairman
Bill Corriveau—Senior VP, Automotive Business Unit
Mark S. Hoefing—VP, Sales & Marketing
Michael Blood—Corporate Communications Director

TOTAL EMPLOYMENT
250

R&D ACTIVITIES
Automated quality measurement systems

PRODUCTS
Produces information-based process improvement solutions for non-contact measurement and inspection applications. Applications include dimensional gauging, robot guidance, gap and flush, and 3D scanning

Petrocian Spring

CONTACT INFORMATION
21200 Telegraph Road, Southfield 48034
248-799-5400
www.pspring.com

R&D ACTIVITIES
Engineering and design, product testing, solid modeling, finite element analysis, material testing, prototyping

PRODUCTS
Springs, snap-rings, wire forms, clips, clamps, stampings, and a variety of sub-assemblies
### PPG Kansai Automotive Finishes U.S., LLC Troy—Automotive Technical Center

**CONTACT INFORMATION**
5875 New King Court, Troy 48098  
248-641-2010  
www.kansai.co.jp

**R&D ACTIVITIES**
Engineering, design, testing, product development

**PRODUCTS**
Automotive paints and coatings

### Preh, Inc

**CONTACT INFORMATION**
28850 Cabot Drive, Novi 48377  
248-381-3800  
www.preh.com

**PARENT ORGANIZATION**
Preh GmbH

**PARENT COUNTRY OF INCORPORATION**
Germany

**PRINCIPALS**
Christoph R. Hummel—President & CEO  
Nick Lontscharitsch—Senior VP Sales North America  
Graham Tompson—VP Engineering, Purchasing & Quality  
Robert Eckhardt—CFO & HR

**TOTAL EMPLOYMENT**
30

**AUTOMOTIVE R&D SPENDING**
9.8%

**PROFESSIONAL STAFF**
Engineers: 15%

**R&D ACTIVITIES**
In-house capabilities include mechanical construction, electronics hardware and software, tooling shop, multi-component molding, plastics technology, PVD (Physical Vapor Deposition), thick-film technology for sensors, surface finishing, laser etching, electronics manufacturing, assembly, simulation, testing

**PRODUCTS**
Driver Control Systems: Intelligent switches for steering wheel and cockpit, HMI control systems for center stack, special instrument clusters, HVAC interface controls; ECUs: chassis, HVAC, fuel system; position and comfort sensors: defogging, rain, light, sun, throttle valve, exhaust gas management, shifter position, fuel level, brake wear, traction control, accelerator pedal

**FACILITY DESCRIPTION**
Office in Novi, MI with 15,000 sq. ft.; assembly plant in Monterrey with 60,000 sq. ft.

### Pro-Tech Industries

**CONTACT INFORMATION**
6079 Birch Road, Flint 48507  
810-238-1030  
www.protechind.com

**PRINCIPALS**
John Tomczak—President  
Gerald Tomczak—VP

**TOTAL EMPLOYMENT**
40

**AUTOMOTIVE R&D SPENDING**
95%

**PROFESSIONAL STAFF**
Mechanical Design Engineers: 15  
Controls Design Engineers: 2  
Machinists: 4  
Draftsmen: 5  
Machine Assemblers: 5

**R&D ACTIVITIES**
Manufacturing design and build services. Testing advanced product design engineering services and product development

**PRODUCTS**
Powertrain, fuel systems, instrumentation and chassis development both in the product development and manufacturing design/build

**OTHER SERVICES**
Mechanical and electrical design and build services

### QMP America

**CONTACT INFORMATION**
17197 North Laurel Park, Suite 519, Livonia 48152  
734-953-0077  
www.qmp-powders.com

**R&D ACTIVITIES**
Basic and applied research

**PRODUCTS**
Ferrous powder producer; iron and steel powders

### QQC, Inc

**CONTACT INFORMATION**
12825 Ford Road, Dearborn 48126  
313-581-0043  
www.turchan.com

**PRINCIPALS**
J. Turchan—President  
P. Mistry—Director

**TOTAL EMPLOYMENT**
20

**AUTOMOTIVE R&D SPENDING**
75%

**PROFESSIONAL STAFF**
Scientists: 2  
Engineers: 2  
Technicians: 2

**R&D ACTIVITIES**
Applied research of thin film coatings

**PRODUCTS**
Engine and chassis components

**FACILITY DESCRIPTION**
Laser lab and metallurgical lab
Quality Verification Enterprises, Inc

CONTACT INFORMATION
18011 East Fourteen Mile Road, Fraser 48026
586-285-9800
www.qveinc.com

R&D ACTIVITIES
Engineering, design, reverse engineering, prototype/production layout, digitizing, testing

RECARO North America, Inc

CONTACT INFORMATION
3275 Lapeer Road West, Auburn Hills 48236
800-8RECARO
www.recaro-nao.com

R&D ACTIVITIES
Engineering and product development

PRODUCTS
Specialty seat manufacturing, including child safety seats

RedCedar Technology

CONTACT INFORMATION
4572 South Hagadorn Road, Suite 3-A, East Lansing 48823
517-664-1137
www.redcedartech.com

R&D ACTIVITIES
Software development for engineering analysis and design optimization

PRODUCTS
Hierarchical evolutionary engineering design system (HEEDS)

FACILITY DESCRIPTION
Software engineering offices

Renosol Corporation

CONTACT INFORMATION
1512 Woodland Drive, Saline 48176
734-429-5418
www.renosol.com

PRINCIPALS
Douglas Peck—Chairman and CEO
Larry Adkisson—President, Renosol Seating LLC
Thomas Jones—President, Renosol Systems LLC
Daniel Busch—Treasurer & CFO

R&D ACTIVITIES
Molded polyurethane foam seating and interior trim products; Polyurethane chemical systems and technology

PRODUCTS
Molded automotive seating, headrests and armrests, polyurethane material systems for instrument panels, door panels, NVH, integral skin, HR and other applications, molded automotive dunnage and other custom molded products, and rotomolded PVC and polyethylene products

Revolutionary Engineering, Inc

CONTACT INFORMATION
36865 Schoolcraft Road, Suite 1, Livonia 48150
734-432-9334
www.revoleng.com

PRINCIPALS
Michael Czubaj—Director of Sales
Deanna Holuk—Marketing & Sales
Dan Anderson—Sales
Allen White—Systems Engineer
Daniel White—Controls Engineer
Mathew Engle—Systems Engineer
Claudio Guzman—Controls Engineer

TOTAL EMPLOYMENT
20

R&D ACTIVITIES
Conduct testing on components ranging from small auxiliary parts to complete driveline systems. For Transient and durability testing, testing engineers work with the customer to ensure the most demanding testing protocols and properly conducted and documented

PRODUCTS
Full dynamometer systems, in-house testing, and onsite services

FACILITY DESCRIPTION
32,000 sq. ft

OTHER SERVICES
Product Testing: Electric Motors, PTU's, differentials, basically anything consisting of driveline components

Avail Equip/Facility: 3 test cells, variety of motors and dyno's, each can be arranged to fit the customer's specific needs

Ricardo Inc

CONTACT INFORMATION
40000 Ricardo Drive, Van Buren Township 48111
734-397-6666
www.ricardo.com

PARENT ORGANIZATION
Ricardo, PLC

PRINCIPALS
Jeremy Holt—President
John VanAlstyne—VP Business Development & Marketing

TOTAL EMPLOYMENT
300

AUTOMOTIVE R&D SPENDING
80%

R&D ACTIVITIES
Engineering programs and advanced engineering projects relating to powertrain, driveline and vehicle engineering

PRODUCTS
Design and analysis work stations, engine and transmission test beds, fully equipped and semi-anechoic, test track, chemistry laboratory, vehicle calibration and emissions facility, engine and transmission test rigs, metallurgy and metrology laboratory, PCB design, population and test facility, heat treatment facilities and rapid prototyping stations

FACILITY DESCRIPTION
Consulting work, project work at client facilities, as well as project work for clients at Ricardo facilities
Rieter Automotive North America, Inc

CONTACT INFORMATION
38555 Hills Tech Drive, Farmington Hills 48331
248-848-0100
www.rieter.com

PARENT ORGANIZATION
Rieter

PARENT COUNTRY OF INCORPORATION
Switzerland

R&D ACTIVITIES
Engineering, design, testing, product development

PRODUCTS
Develops and produces components, modules and integrated systems on the basis of fibers, plastics and metals in order to provide acoustic comfort and thermal insulation in motor vehicles

OTHER VEHICLE SPECIALTIES
Acoustics

Robert Bosch Corporation

CONTACT INFORMATION
38000 Hills Tech Drive, Farmington Hills 48331
248-553-1318
www.robertbosch.com

PARENT ORGANIZATION
Robert Bosch Corp GmbH

PARENT COUNTRY OF INCORPORATION
Germany

PRINCIPALS
Dr. Kurt Liedtke—Chairman & CEO
John Moulton—President, Powertrain Division
Dave Robinson—President, Electronic Division
Hans Weckerle—President, Chassis Division

TOTAL EMPLOYMENT
1,300

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 600
Finance and Controlling: 100
Technical Sales Engineers: 400

R&D ACTIVITIES
Testing, application development and some primary product development

PRODUCTS
Brakes, engine management, transmission controls, safety restraints, closure systems and others

FACILITY DESCRIPTION
North American automotive administrative and technical headquarters

Roush

CONTACT INFORMATION
12445 Levan, Livonia 48150
734-779-7006
www.roushind.com

PARENT ORGANIZATION
Roush Enterprises, Inc

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Evan Lyall—CEO
Doug Smith—President
Andy Wozniacki—CFO
Dean Massab—VP, Sales & Marketing
Maureen Crowley—Manager, Corporate Communications

TOTAL EMPLOYMENT
2,600

R&D ACTIVITIES
Prototyping, including modeling, rapid prototyping, advanced composites, metal fabrication, tooling design/build, and machining; advanced engine development; engineering, including body, chassis, powertrain, and NVH; dynamometer testing; powertrain development and emissions testing; alternate fuel development

PRODUCTS
Injection molded performance and appearance components; NVH products (e.g., laminated metals); specialty vehicles, performance parts, and crate engines

FACILITY DESCRIPTION
Over 50 high tech development centers throughout North America and England, with over 2 million sq. ft. of combined office/shop space and testing facilities

OTHER SERVICES
Prototyping and Specialty Manufacturing

Robotic Production Technology

CONTACT INFORMATION
1255 Harmon Road, Auburn Hills 48326
248-829-2800
www.rpt.net

PARENT ORGANIZATION
Karolin Machine Tool AB

PARENT COUNTRY OF INCORPORATION
Sweden

R&D ACTIVITIES
Engineering, process design, automated robot design, simulation

Saginaw Machine Systems, Inc

CONTACT INFORMATION
800 North Hamilton Street, Saginaw 48602
989-753-8464
www.saginawmachine.com

PRINCIPALS
Dave Albert—VP & General Manager

TOTAL EMPLOYMENT
58

AUTOMOTIVE R&D SPENDING
95%

R&D ACTIVITIES
Process validation for powertrain parts. Simulations and testing of processes

PRODUCTS
Machine tool manufacturing and systems integrating facility

FACILITY DESCRIPTION
Engineering and technical consultation available. Facility has 100,000 sq. ft. for usage

OTHER SERVICES
Process validation
Sanluis Rassini
CONTACT INFORMATION
14500 Beck Road, Plymouth 48170
734-454-4904
www.sanluisrassini.com
R&D ACTIVITIES
Engineering, design, product development
PRODUCTS
Leaf springs, suspension components and brakes

Saturn Electronics and Engineering, Inc
CONTACT INFORMATION
255 Rex Boulevard, Auburn Hills 48326
248-853-5724
www.saturnee.com
R&D ACTIVITIES
Technology and product development, engineering and prototyping
PRODUCTS
Electronics, solenoids, fuel components, wiring

Sayora International
CONTACT INFORMATION
1757 Killarney Drive, Holt 48842
517-256-8058
www.muradismailov.com
R&D ACTIVITIES
Basic and applied research
PRODUCTS
Advanced diesel and alternative fuel injection

Sealant Equipment and Engineering, Inc
CONTACT INFORMATION
45677 Helm Street, Plymouth 48170
734-459-8600
www.sealantequipment.com
R&D ACTIVITIES
Testing
PRODUCTS
Meter, mix and dispensing equipment and fluid control valves

SenSound
CONTACT INFORMATION
221 Lewinston Road, Grosse Pointe Farms 48326
313-882-1065
www.sensound.com
PRINCIPALS
Sergio Mazza—President & CEO
Ravi Beniwal—Senior Application Engineer
Sueann Wickstrom—NVH Test Engineer
Mary Hoskins—Marketing Associate
Sean F. Wu—Chief Technology Officer
Gary Kendra—General Counsel
R&D ACTIVITIES
Development of new noise and vibration diagnostic and modeling methodologies

PRODUCTS
Services, software, and integrated data acquisition systems for noise diagnostics utilizing 3 dimensional nearfield acoustic holography

FACILITY DESCRIPTION
Acoustics, vibration & noise control laboratory with 2 walk-in size fully anechoic chambers, 3 vibration tables, 3 multi-channel signal analyzers, 2 microphone arrays (64&32 microphones), vibration controller, vibration shakers (<100lb force), power & charge amplifiers, power supplies, microphones and accelerometers, intensity probe, precision integrating sound pressure level meters, digital scopes, filters, programmable function generators, & ultrasonic positioning digitizer

OTHER SERVICES
Product Testing: Noise source locations
Product Validation: Identifying why products fail noise limits
Avail Equip/Facility: Acoustic test equipment and anechoic chamber
Consulting: Noise source identification

OTHER VEHICLE SPECIALTIES
NVH Noise diagnostic systems

Sentisco, Inc
CONTACT INFORMATION
2646 Wayside Drive, Ann Arbor 48103
734-276-3010
www.sentisco-inc.com
R&D ACTIVITIES
Engineering, product development
PRODUCTS
Software for the design, packaging, and automatic routing of hydraulic control, and a one-way clutch for automatic transmissions

SEWS-DTC, Inc
CONTACT INFORMATION
22300 Haggerty Road, Northville 48167
248-319-2200
www.sws.co.jp
PARENT ORGANIZATION
Sumitomo Electric Industry and Sumitomo Wiring Systems
PARENT COUNTRY OF INCORPORATION
Japan
R&D ACTIVITIES
Testing, validation, engineering
PRODUCTS
Wire harnesses, connectors, and ECU’s
FACILITY DESCRIPTION
North American technical center for testing and validation of wire harness, connectors and ECU’s, as well as sales and marketing operations
SHAFL, Inc

CONTACT INFORMATION
8060 Kensington Court, Brighton 48116
248-446-8200
www.shafiinc.com

PRINCIPALS
Adil Shafi—President
Kevin North—Director Software Innovation
John Nielson—Engineering Manager
John Lukowski—Engineering Manager
Elsie White—Director, International and Government Programs
Donna Burr—Office Manager

TOTAL EMPLOYMENT
20

AUTOMOTIVE R&D SPENDING
30%

PROFESSIONAL STAFF
Engineers: 12
Administration: 5
Computer science: 3

R&D ACTIVITIES
Software innovation for manufacturing, manufacturing efficiency, product and application engineering, applied research, product development, consulting

PRODUCTS
RELIABOT PC : 2D and 3D robot guidance; RELIABOT for Adept Robots; RELIABOT for Staubli VTRAJSIG; ELTRA: a PC-based V+ offline editor

FACILITY DESCRIPTION
SHAFL has a facility in Brighton that includes two bay areas where robot demonstration cells are maintained for the purpose of demonstrating the feasibility of solutions developed at SHAFL to address specific customer needs. In addition, SHAFL established the Houghton Innovation Center (HIC) to facilitate collaboration between Michigan Technological University faculty and SHAFL staff. Facilities are maintained in Houghton, which include a robot demonstration cell. A North Carolina facility is maintained with a robot cell containing a KUKA robot and vision system

OTHER SERVICES
Product Testing: Robots, visions systems, automotive products software innovation, solutions demonstrations, consulting and training

OTHER VEHICLE SPECIALTIES
Production manufacturing efficiency for global competitiveness

Shape Corporation

CONTACT INFORMATION
1900 Hayes Avenue, Grand Haven 49417
616-846-8700
www.shapecorp.com

R&D ACTIVITIES
Dynamic testing, static testing, weld integrity lab, CAE/FEA, design, product development

PRODUCTS
Front and rear bumper systems, power seat systems, roof bow, side sills, impact door beams

SKF North American Technical Center

CONTACT INFORMATION
46815 Port Street, Plymouth 48170
734-414-6585
www.skfusa.com

PARENT ORGANIZATION
AB SKF

PARENT COUNTRY OF INCORPORATION
Sweden

TOTAL EMPLOYMENT
38,748 (globally)

R&D ACTIVITIES
Materials research, NVH analysis, qualification testing

PRODUCTS
Automotive bearing solutions and Chicago Rawhide's sealing systems for engines, transmissions and other mechanical assemblies

FACILITY DESCRIPTION
25,650 sq. ft. testing laboratory for automotive, electrical and industrial bearing applications. Product development, qualification testing, and noise and vibration analysis are conducted at the lab by experts in engineering, scanning electron microscopy, metallurgy, and chemistry

Solid State Technologies, Inc

CONTACT INFORMATION
7891 Wiggins Road, Howell 48855
517-548-3115
www.solidstatetechnologies.com

R&D ACTIVITIES
Prototyping, applied electronics research, testing, engineering

PRODUCTS
End of line test equipment including roll test, anti-skid brake testing, wheel alignment and automated headlight aiming, as well as other automotive-related testing tools
Solidica, Inc
CONTACT INFORMATION
1194 Oak Valley Drive, Suite 80, Ann Arbor 48108
734-222-4680
www.solidica.com
PRINCIPALS
Dawn White—CEO & Founder
Robert York—COO
Ray Opie—VP Engineering
Ken Johnson—VP Strategic Marketing
Kirby Quirk—Director of North American Sales
TOTAL EMPLOYMENT
15
PROFESSIONAL STAFF
Engineers: 7
Application Engineers: 3
R&D ACTIVITIES
Advanced material and manufacturing, particularly in the area of ultrasonically joining metallic materials into finished parts
PRODUCTS
Machines, molds and parts
FACILITY DESCRIPTION
7,600 sq. ft. office, manufacturing and research facility to assemble and test commercial products prior to shipment

Solvay Engineered Polymers
Automotive Applications
Development Center
CONTACT INFORMATION
1200 Harmon Road, Auburn Hills 48236
248-391-9500
www.solvayengineeredpolymers.com
R&D ACTIVITIES
Testing, applied research, product development, materials research
PRODUCTS
Engineered polyolefins used in automotive interior trim parts and exterior applications such as grilles and running boards

Soutec Soudronic
CONTACT INFORMATION
46956 Liberty Drive, Wixom 48393
248-896-9422
www.soutec.com
PARENT ORGANIZATION
Soutec Soudronic AG
PARENT COUNTRY OF INCORPORATION
Switzerland
PRINCIPALS
Marcel van Schaik—President/CEO
Gilbert Charfauros—Manager Engineering/Service
PROFESSIONAL STAFF
Engineers: 4
R&D ACTIVITIES
Prototype manufacture of laser welded tailored blanks
PRODUCTS
Laser welding equipment for tailored blanks; laser welding equipment for tubes; welding equipment for fuel tanks and exhaust systems
FACILITY DESCRIPTION
Service facility; spare parts facility; prototype shop; 22,000 sq. ft.
OTHER SERVICES
Service, spare parts and prototyping
Laser welding equipment for tailored blanks and tubes; quality inspection systems

Southwest Research Institute
CONTACT INFORMATION
461 Burroughs, Detroit 48202
313-833-0100
www.swri.edu
R&D ACTIVITIES
Working within a lab in NextEnergy (Detroit, MI)—focused on joint programs in alternative energy, alternative fuels and in the vehicles of the future

SpaceForm, Inc
CONTACT INFORMATION
440 Burroughs Street, Suite 109, Detroit 48202
877-501-3400
www.spaceformtech.com
PRINCIPALS
Tom Anderson—Chairman
Tim Forbes—President
Alain Piette—Executive Director Business Development
Charles Albright—Technical Advisor
Jayson Pankin—Financial Advisor
PROFESSIONAL STAFF
CAD/CAM engineers: 2
Welding engineers: 12
Process & facilities design engineers: 3
R&D ACTIVITIES
Deformation Resistance Welding technology. This technology enables Lean welding of tubular components to create lighter and stronger structures. This patented technology reduces processing time by 80%, enables cost reductions of 20% and overcomes the welding of presently difficult to join metals. Partnered for R&D projects with the Edison Welding Institute
PRODUCTS
The product development focuses on structural components for the automotive, medical transportation, recreational, agricultural and aircraft market segments
FACILITY DESCRIPTION
Business and product development center in Detroit, Michigan. This facility focuses on project management and product design developments. The R&D center is part of the Edison Welding Institute in Columbus Ohio. The facility contains a 114,000 sq. ft. welding research center with over 120 advanced welding engineers and support staff
OTHER SERVICES
Contract manufacturing
OTHER VEHICLE SPECIALTIES
Advanced Welding Technology
Specialized Vehicles, Inc

CONTACT INFORMATION
2468 Industrial Row, Troy 48084
248-280-2000
www.svi-results.com

PRINCIPALS
Michael J. Koran—President

TOTAL EMPLOYMENT
20

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 2
Technicians: 7

R&D ACTIVITIES
Automotive engine concept development, design and implementation

PRODUCTS
Automotive powertrain systems and subsystems

FACILITY DESCRIPTION
Vehicle development and engine dynamometer lab

SSI Technologies, Inc

CONTACT INFORMATION
46820 Magellan Drive, Novi 48377
248-926-4088
www.ssitechnologies.com

R&D ACTIVITIES
Product development

PRODUCTS
Sensors and sensor-based monitoring systems, coil assemblies, solenoids and powdered metal parts

FACILITY DESCRIPTION
Technical center

Stabilus

CONTACT INFORMATION
36225 Mound Road, Sterling Heights 48310
586-977-2950
www.stabilus.com

R&D ACTIVITIES
Applied research and product development

PRODUCTS
Hydro-pneumatic adjustment elements (gas springs), hydraulic vibration dampers, hydraulic doorstays, and automatic opening and closing systems for doors, trunk lids and tailgates

Sturgis Molded Products

CONTACT INFORMATION
1928 Clark Street, P.O. Box 246, Sturgis 49091
269-651-9381
www.smpco.com

R&D ACTIVITIES
Prototyping, design, testing

PRODUCTS
Consolidated in-house services including tool design, production, and prototype tool building, engineering, full product launch support, and scientific molding

STM Power, Inc

CONTACT INFORMATION
275 Metty Drive, Ann Arbor 48103
734-995-1755
www.stmpower.com

R&D ACTIVITIES
Basic and applied research, testing, engineering and product development

PRODUCTS
Complete engines and generator sets

FACILITY DESCRIPTION
Engineering and test lab

Stork Climax Research Services

CONTACT INFORMATION
51229 Century Court, Wixom 48393
248-960-4900
www.storksmt.com/crs

PARENT ORGANIZATION
Stork N.V.

PARENT COUNTRY OF INCORPORATION
Netherlands

PRINCIPALS
Jim Keimig—Sales Manager
Frank van den Berge—Regional Manager
Jim Lakin—Laboratory Manager

TOTAL EMPLOYMENT
47

AUTOMOTIVE R&D SPENDING
95%

PROFESSIONAL STAFF
Engineers
Technicians
PhDs

R&D ACTIVITIES
Research and test new alloy and designer metals using a variety of comprehensive metallurgical testing techniques; materials research

PRODUCTS
Independent testing laboratory providing comprehensive and routine metals testing using chemical analysis, mechanical and physical testing, metallography, corrosion and wear testing

FACILITY DESCRIPTION
Laboratories for chemical analysis, metallurgy, corrosion, wear, fatigue testing and heat treatment. 40,000 sq. ft.

OTHER SERVICES
Product Testing: Material properties analysis
Avail Equip/Facility: SEM, ICP, OES, Tensile, corrosion cabinets, image analysis
Consulting: Metallurgical and failure analysis

Sterling Truck Corporation

CONTACT INFORMATION
12120 Telegraph Road, Redford Township 48239
313-592-4200
www.sterlingtrucks.com

R&D ACTIVITIES
Engineering, design, product development

PRODUCTS
Heavy duty, industrial trucks

OTHER VEHICLE SPECIALTIES
Complete vehicle development
Subaru Research and Development, Inc

CONTACT INFORMATION
3995 Research Park Drive, Ann Arbor 48108
734-623-0075
www.subaru.com

PARENT ORGANIZATION
Fuji Heavy Industries, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Yasuhiko Habara—President

TOTAL EMPLOYMENT
21

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 10
Professionals: 6
Technicians: 2

R&D ACTIVITIES
Emissions testing, research and design

PRODUCTS
Vehicle emissions, durability testing, government vehicle certification, vehicle design and service analysis

FACILITY DESCRIPTION
Chassis dynamometer emissions testing area, mechanical service area and design studio

Sulfo Technologies, LLC

CONTACT INFORMATION
32300 Howard Avenue, Madison Heights 48071
248-307-9150
www.sulfo.com

R&D ACTIVITIES
Prototype processing, sampling for testing and development, licensing of patented turnkey sulfonation process

PRODUCTS
Sulfonation of plastics for high performance hydrocarbon barriers

Summit Polymers Technical Center

CONTACT INFORMATION
6715 South Sprinkle Road, Portage 49002
269-323-1766
www.summitpolymers.com

TOTAL EMPLOYMENT
165

R&D ACTIVITIES
Engineering, design, testing, product development

PRODUCTS
Thermoplastic automotive components including interior trim, A/C registers, consoles, and trim panels

FACILITY DESCRIPTION
45,000 sq. ft. facility housing design, engineering, quality laboratory, fixture shop, and business-related personnel

T/J Technologies, Inc

CONTACT INFORMATION
3850 Research Park Drive, Suite A, Ann Arbor 48108
734-213-1637
www.tjtechnologies.com

PARENT ORGANIZATION
A123 Systems, Inc

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Maria Thompson—President & CEO
Les Alexander—COO
Mike Wixom—Senior VP

TOTAL EMPLOYMENT
25

AUTOMOTIVE R&D SPENDING
25%

PROFESSIONAL STAFF
Engineers: 5
Researchers: 13
Technicians: 4

R&D ACTIVITIES
Research and development of advanced materials technologies for lithium-ion batteries and fuel cells. Additional product development and advanced manufacturing of safe, high power batteries is available through our parent company, A123 Systems, Inc.

PRODUCTS
Safe, high power and long life lithium ion batteries for defense, aerospace, transportation and commercial applications

FACILITY DESCRIPTION
The facility measures 12,500 sq. ft. with 8,500 sq. ft. dedicated to laboratory space

OTHER SERVICES
Product Testing: Battery testing
Other: Research and development

OTHER VEHICLE SPECIALTIES
Lithium ion batteries

Tachi-S Engineering U.S.A., Inc

CONTACT INFORMATION
23227 Commerce Drive, Farmington Hills 48335
248-478-5050
www.tachi-s.com

PARENT ORGANIZATION
Tachi-S Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Prototyping, engineering, design, testing

PRODUCTS
Seating systems and services; engineering seating solutions

Takao America Corporation

CONTACT INFORMATION
Wixom Tech Road, Unit 8, Wixom Technology Center, Wixom 48393
248-926-8110
www.takaokinzoku.co.jp

PARENT ORGANIZATION
Takao Kinzoku Kogyo Co., Ltd.

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Engineering, design, testing

PRODUCTS
Broad range of metal body components including doors and rear panels

OTHER SERVICES
Consulting: Concept design, engineering and manufacturing
Takata, Inc

CONTACT INFORMATION
2500 Takata Drive, Auburn Hills 48326
248-373-8040
www.takata.com

PARENT ORGANIZATION
Takata Corporation

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Engineering, testing, product development

PRODUCTS
Automotive safety systems, seat belts, air bag systems and steering wheels

FACILITY DESCRIPTION
Prototype build and evaluation shop, research and test laboratory

Tellurex Corporation

CONTACT INFORMATION
1462 International Drive, Traverse City 49686
231-947-0110
www.tellurex.com

PRINCIPALS
Clyde McKenzie—CEO
Charles J. Cauchy—President
Jerry Heim—Controller
Richard Harmon—Engineering Manager
Jeff Howe—Automotive Manager

R&D ACTIVITIES
Semiconductor materials R&D, both self funded and funded by the Office of Naval Research for the development of new, high performance direct heat to electrical energy conversion. Materials research and development capabilities. Semiconductor testing expertise. Automotive power generation and interior heating/cooling research, development and testing capability. In-house prototyping and thermal testing expertise and equipment. Medical cooling/heating apparatus development

PRODUCTS
Thermoelectric cooling/heating modules. Thermoelectric power generation modules. Automotive hot & cold cupholders. Medical device components. Food service cooling and heating subassemblies. Thermoelectric design and engineering services

FACILITY DESCRIPTION
New, metal and brick building; 22,400 sq. ft.; air conditioned; fitted for complete building chilling, industrial gasses, high power electrical service and air; separate R&D, prototype development and new materials development areas; located in new industrial park

OTHER SERVICES
Product Testing: Semiconductor material, thermal systems, electrical, mechanical
Product Validation: Life cycle, thermal shock, thermal ramp & soak, high pot, ESD
Avail Equip/Facility: Many pieces of calibrated test equipment
Consulting: Thermoelectric advanced design

OTHER VEHICLE SPECIALTIES
Exhaust system heat harvesting for electric power generation

Tata AutoComp Systems, Ltd

CONTACT INFORMATION
2792 Alsiop Place, Suite 207, Troy 48084
248-205-7853
www.tacogroup.com

R&D ACTIVITIES
Product design and engineering services

PRODUCTS
CAD, CAE solutions, embedded services, Catia and 3D modeling

OTHER SERVICES
Consulting: Design work
Other: CAD/Product Design

Technique, Inc

CONTACT INFORMATION
2427 Research Drive, Jackson 49203
517-789-8988
www.tirps.com

PRINCIPALS
Ronnie Johncos—President

TOTAL EMPLOYMENT
24

R&D ACTIVITIES
Rapid prototype stamping and laser cutting services

PRODUCTS
Production representative parts that can be used for accurate testing and development

OTHER SERVICES
Prototypes

Teleflex Automotive, Inc

CONTACT INFORMATION
700 Stephenson Highway, Troy 48083
248-616-3800
www.teleflexautomotive.com

PARENT ORGANIZATION
Teleflex, Inc

PARENT COUNTRY OF INCORPORATION
USA

TOTAL EMPLOYMENT
20,000 (globally)
Tesla Motors, Inc

CONTACT INFORMATION
1840 Enterprise Drive, Rochester Hills 48309
248-844-9336
www.teslamotors.com

PRINCIPALS
John Thomas—Senior Program Director & General Manager
Ray VanAsshe—Senior Engineering Manager & Assistant General Manager
Ron Lloyd—VP of White Star Program (San Carlos, CA)
Ray Bzymek—Senior Engineering Manager Vehicle Electrics

TOTAL EMPLOYMENT
60

AUTOMOTIVE R&D SPENDING
Approx $30,000,000 / year

PROFESSIONAL STAFF
Engineers (Mechanical, Electrical, mainly Bachelor of science with some Master’s & PhD’s): 35
Technicians: 2
Supply Chain Management: 14
Quality Assurance: 6
Software: 3

R&D ACTIVITIES
Material research for lightweight automobile structures, Catia Software simulation for parametric modeling of variation, factory planning, crash simulation, electric automobile HVAC, steering and braking devices

PRODUCTS
Complete electric vehicle OEM

FACILITY DESCRIPTION
19,240 sq. ft. comprised of 2/3 office space and 1/3 shop space for automobile light proto fabrication

OTHER VEHICLE SPECIALTIES
Electric Vehicle Automobile Manufacturing

Textron Fastening Systems

Technical Resource Center Lab

CONTACT INFORMATION
840 West Long Lake Road, Suite 450, Troy 48098
800-544-6117
www.textronfasteningsystems.com

PARENT ORGANIZATION
Textron

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Seshu Seshasai—Executive VP Technology
Kirk Mellits—Director of Technology
Bill Turnmire—Manager of Laboratory Services

TOTAL EMPLOYMENT
100

AUTOMOTIVE R&D SPENDING
10%

PROFESSIONAL STAFF
Application Engineers

R&D ACTIVITIES
Testing, engineering and product development

PRODUCTS
Fastening systems for all automotive assemblies

FACILITY DESCRIPTION
Mechanical and performance testing laboratory for fasteners

Testing Service Group

CONTACT INFORMATION
828 Whitney Drive, Lapeer 48446
810-245-1600
www.tsglabs.com

PRINCIPALS
Mark Lockwood
Lonnie Arnold
Scott Hartel

TOTAL EMPLOYMENT
40

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers: 8
Technicians: 19

R&D ACTIVITIES
Testing and evaluation of fuel systems, sub-systems and discrete components

PRODUCTS
Independent testing center featuring environmental and vibration testing facilities

FACILITY DESCRIPTION
38,000 sq. ft. featuring a variety of Class I Division I test cells and environmental chambers

TG North America

CONTACT INFORMATION
1400 Stephenson Highway, Troy 48083
248-280-2100
www.toyoda-gosei.com

PARENT ORGANIZATION
Toyoda Gosei Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Product design, development, evaluation

PRODUCTS
Body sealing, fuel systems, safety systems and other components

TGR Technical Center, LLC

CONTACT INFORMATION
47050 Port Street, Plymouth 48170
734-451-4310
www.tg-ww.com

PARENT ORGANIZATION
Toyoda Gosei Co, Ltd

PARENT COUNTRY OF INCORPORATION
Japan

TOTAL EMPLOYMENT
10

R&D ACTIVITIES
Testing, simulation

PRODUCTS
Testing for safety systems including hydraulic sled

FACILITY DESCRIPTION
60,455 sq. ft. safety systems testing facility and technical center
The Woodbridge Group

CONTACT INFORMATION
1515 Equity Drive, Suite 100, Troy 48084
248-288-0100
www.woodbridgegroup.com

R&D ACTIVITIES
Applied research, design, engineering, product development

PRODUCTS
Urethane headliners, seats, floor systems

Thermal Dynamic Resources

CONTACT INFORMATION
P.O. Box 401525, Redford 48240
248-974-8302
www.thermaldr.com

PARENT ORGANIZATION
Thermal Dynamic Resources, LLC

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Andy Perry—Owner

TOTAL EMPLOYMENT
15

AUTOMOTIVE R&D SPENDING
$30,000 +

PROFESSIONAL STAFF
Thermographer
3D design, 3D Animator
Camera sales and training
Account Managers
Graphic Artists
Architect

R&D ACTIVITIES
Thermal IR Imaging, product testing, validations, facility verification, clean room evaluations, assembly, preventive maintenance, component failures, warranty claim disputes, energy audits, benchmarking

PRODUCTS
Thermal IR cameras, software simulations

FACILITY DESCRIPTION
Assessments conducted at the customer’s facility

OTHER SERVICES
Product Testing: Thermal IR Imaging, 3D modeling, animation
Product Validation: Product testing, validations, facility verification, clean room evaluations
Avail Equip/Facility: Assembly, preventive maintenance
Consulting: Component failures, warranty claim disputes, energy audits, benchmarking
Other: Thermal IR imaging

ThermoAnalytics

CONTACT INFORMATION
23440 Airpark Boulevard, Calumet 49913
906-482-9560
www.thermoanalytics.com

PRINCIPALS
Keith R. Johnson—President
Allen R. Curran—VP
Craig Makens—Marketing Manager
Scot Peck—Engineering Manager
Craig Cless—Detroit Operations General Manager

TOTAL EMPLOYMENT
30

AUTOMOTIVE R&D SPENDING
25%

PROFESSIONAL STAFF
Engineering Software Developers: 10
Engineers: 4
PhD Engineers: 5
Marketing and Administration: 8
Technicians: 3

R&D ACTIVITIES
Development of thermal management software and computer related engineering

FACILITY DESCRIPTION
Software development facility with engineering offices and a thermal/infrared lab

ThyssenKrupp Budd Company Automotive Center

CONTACT INFORMATION
1515 Atlantic Boulevard, Auburn Hills 48326
248-391-2880
www.buddcompany.com

PARENT ORGANIZATION
ThyssenKrupp Automotive AG

PARENT COUNTRY OF INCORPORATION
Germany

R&D ACTIVITIES
Applied research, engineering, design, product development

PRODUCTS
Sheet metal stampings and assemblies, chassis modules and frame components, and bumpers

FACILITY DESCRIPTION
Facilities for product and material testing, analytical simulation and production and process development

TI Group Automotive Systems Corporation

CONTACT INFORMATION
12345 East Nine Mile Road, Warren 48090
586-758-4511
www.tiauto.com

PARENT ORGANIZATION
TI Automotive

PARENT COUNTRY OF INCORPORATION
United Kingdom

R&D ACTIVITIES
Engineering, design, testing, product development

PRODUCTS
Multi-layer blow molded plastic fuel tanks with integrated fuel delivery module assemblies, including turbine or gerotor pumps, electronic control modules, sensor units and fill and vapor control valves, rigid and flexible fuel and brake lines, air conditioning module assemblies including steel and aluminum accumulators and unitized receiver dryers
Tokico USA, Inc

CONTACT INFORMATION
17225 Federal Drive, Suite 100, Allen Park 48101
313-336-5310
www.tokicogasshocks.com

R&D ACTIVITIES
Applied research, engineering, design, testing, product development

PRODUCTS
Shock absorbers, brake parts and other hydraulics

Tower Automotive
Technical/Customer Service Center

CONTACT INFORMATION
27175 Haggerty Road, Novi 48377
248-675-6000
www.towerautomotive.com

PARENT ORGANIZATION
Tower Automotive

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
Tom Pitser—North America Product Group Leader
Thomas Werle—North America Technology Leader

TOTAL EMPLOYMENT
400

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Program Leadership: 60
Engineering Leaders: 105
Mechanical Designers and Analysts: 35

R&D ACTIVITIES
Product development and testing

PRODUCTS
Chassis and structural products

Toyo Seat USA Corporation

CONTACT INFORMATION
2155 South Almont Avenue, Imlay City 48444
810-724-0300
www.toyoseat.co.jp

PARENT ORGANIZATION
Toyo Seat Co., Ltd.

PARENT COUNTRY OF INCORPORATION
Japan

R&D ACTIVITIES
Engineering and design

PRODUCTS
Seating systems and convertible tops

Toyoda Gosei
North America Corporation

CONTACT INFORMATION
1400 Stevenson Highway, Troy 48083
248-280-2100
www.tg-ww.com

PARENT ORGANIZATION
Toyoda Gosei Co., Ltd

PARENT COUNTRY OF INCORPORATION
Japan

TOTAL EMPLOYMENT
230

R&D ACTIVITIES
Applied research, engineering, design, product development

PRODUCTS
Automotive components for safety systems, interior/exterior systems, sealing systems, fuel systems, and optoelectronics

FACILITY DESCRIPTION
35,000 sq. ft. sales and technical operations

Toyota Boshoku America

CONTACT INFORMATION
41180 Bridge Street, Novi 48375
248-426-2300

PARENT ORGANIZATION
Toyota Boshoku Corporation

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Sunao Yamamoto—President

TOTAL EMPLOYMENT
130

R&D ACTIVITIES
Engineering, design, applied research

PRODUCTS
Produce a number of interior automotive parts including seats, doors, headliners and trim, as well as vehicle filters including oil and air

Toyota Technical Center USA, Inc

CONTACT INFORMATION
1555 Woodridge Avenue, Ann Arbor 48105
734-995-2600
www.toyota.com/about

PARENT ORGANIZATION
Toyota Motor Engineering & Manufacturing North America, Inc

PARENT COUNTRY OF INCORPORATION
Japan

PRINCIPALS
Yasuhiko Ichihashi—President

TOTAL EMPLOYMENT
775

AUTOMOTIVE R&D SPENDING
100%

PROFESSIONAL STAFF
Engineers
Technicians

R&D ACTIVITIES
Engineering, testing, product development

PRODUCTS
Vehicle design engineering, parts, materials, and vehicle evaluation, prototype vehicle development, and emissions certification

FACILITY DESCRIPTION
Engineering design building, evaluation building, administration building, emission & engine tuning lab, and prototype lab.
New 700-acre technical campus is under construction in Washtenaw County’s York Township with expected occupancy in ’08–’09

FACILITY DESCRIPTION
Engineering design building, evaluation building, administration building, emission & engine tuning lab, and prototype lab.
New 700-acre technical campus is under construction in Washtenaw County’s York Township with expected occupancy in ’08–’09
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<tr>
<td>TRAM, Inc</td>
<td>47200 Port Street, Plymouth 48170 734-254-8500 <a href="http://www.tokai-rika-usa.com">www.tokai-rika-usa.com</a></td>
<td>Eric Jacobson—VP</td>
<td>&gt;$1 Million</td>
<td>Research and development of new technologies involving electronics, simulations, materials, and ergonomics in pursuit of safety and control systems for the next generation</td>
<td>Products that link people to automobiles, such as restraint systems, key systems, shift levers and switches</td>
<td>Facility with R&amp;D, sales, and IT</td>
<td>Product Testing: Mainly servohydraulic multi-axis test facilities Avail Equip/Facility: Vehicle vibration testing, chassis dynamometer</td>
</tr>
<tr>
<td>Translume, Inc</td>
<td>655 Phoenix Drive, Ann Arbor 48108 734-528-6371 <a href="http://www.translume.com">www.translume.com</a></td>
<td>Eric Jacobson—VP</td>
<td>&gt;$1 Million</td>
<td>Research and product development for laser-based advanced glass micromachining to produce three dimensional waveguides and microfluidic channels in glass, individually or in combination, enabling the manufacture of micro-optical components and integrated sensors</td>
<td>Multiple emerging products based on innovative glass micromachining including a microfluidic oil sensor with remote monitoring and diagnostics</td>
<td>Product development and test facilities</td>
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<tr>
<td>Trelleborg Automotive</td>
<td>400 Aylworth Avenue, South Haven 49090 269-637-2116 <a href="http://www.trelleborg.com">www.trelleborg.com</a></td>
<td>Jim Law—President, Trelleborg Automotive Global AVS</td>
<td>3.3%</td>
<td>Automotive anti-vibration rubber products. Ability to complete vehicle simulation, vehicle testing, component testing, rubber materials research, and prototype component parts. Also have ability to develop products from micro-cellular urethane</td>
<td>Top mounts, cab mounts, bumpers, bushings, engine mounts, urethane, exhaust isolators, vibration absorbers, boots, hydraulic bushings, sub-frame mounts, spring isolators, stabilizer bar bushings</td>
<td>Global Headquarters for Trelleborg Automotive. Facility is strictly administrative staff, research, and product development. Approximately 60,000 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Troy Polymers, Inc</td>
<td>330 East Maple Road, Suite L, Troy 48083 248-733-1030 <a href="http://www.troypolymers.com">www.troypolymers.com</a></td>
<td>John C. Plant—President &amp; CEO</td>
<td>3.3%</td>
<td>Materials research, applied research</td>
<td>Products to clean diesel exhaust pollution</td>
<td>Contract research and development laboratory supporting innovation in polyurethanes and other polymers</td>
<td></td>
</tr>
<tr>
<td>Truck Emission Control Technologies, Inc</td>
<td>155 Factory Road, Michigan Center 49254 517-764-3800 <a href="http://www.converter-tech.com">www.converter-tech.com</a></td>
<td>John C. Plant—President &amp; CEO</td>
<td>3.3%</td>
<td>Applied research, engineering, testing, product development</td>
<td>Products</td>
<td>Product development</td>
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<tr>
<td>TRW Automotive, Inc</td>
<td>12025 Tech Center Drive, Livonia 48150 734-266-2600 <a href="http://www.trw.com">www.trw.com</a></td>
<td>John C. Plant—President &amp; CEO</td>
<td>3.3%</td>
<td>Braking, steering, suspension, seat belt systems, inflatable restraints, safety electronics and engine components</td>
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<tr>
<td>Company Name</td>
<td>Contact Information</td>
<td>Parent Organization</td>
<td>PRINCIPALS</td>
<td>Total Employment</td>
<td>Automotive R&amp;D Spending</td>
<td>R&amp;D Activities</td>
<td>Products</td>
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<tr>
<td>U.S. Manufacturing Corporation</td>
<td>CONTACT INFORMATION 28201 Van Dyke Avenue, Warren 48093 586-467-1600 <a href="http://www.usmfg.com">www.usmfg.com</a></td>
<td></td>
<td>R&amp;D ACTIVITIES Design and development using the latest CAE tools, production-intent prototype manufacturing, testing and metallurgical analysis capabilities</td>
<td>122</td>
<td>100%</td>
<td></td>
<td>Extruded tubular products and machined components including axle housings and assemblies, steering racks and transmission shafts</td>
</tr>
<tr>
<td>U.S. Steel Automotive Center</td>
<td>CONTACT INFORMATION 5850 New King Court, Troy 48098 248-267-2500 <a href="http://www.usautomotive.com">www.usautomotive.com</a></td>
<td>PARENT ORGANIZATION United States Steel Corporation</td>
<td>PRINCIPALS Mike Juddo—Director of Product Technology Dr. Ming Shi—Technical Manager Brian Cowell—Marketing Manager Automotive</td>
<td>122</td>
<td>100%</td>
<td>R&amp;D ACTIVITIES Advanced steel characterization and application technology for all automotive aspects</td>
<td>BIW manufacturing, high strength steel applications</td>
</tr>
<tr>
<td>Umicore Autocat USA, Inc</td>
<td>CONTACT INFORMATION 2347 Commercial Drive, Auburn Hills 48326 248-340-1040 <a href="http://www.automotivecatalysts.com">www.automotivecatalysts.com</a></td>
<td>PARENT ORGANIZATION Umicore</td>
<td>PRINCIPALS Gregory Garr—Technical Director</td>
<td>270</td>
<td>$120 Million</td>
<td>R&amp;D ACTIVITIES Applied technology and catalyst testing</td>
<td>Autoemotive emission control catalysts</td>
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<td>Valeo</td>
<td>CONTACT INFORMATION 3000 University Drive, Auburn Hills 48326 248-340-3000 <a href="http://www.valeo.com">www.valeo.com</a></td>
<td>PARENT ORGANIZATION Valeo Group</td>
<td>R&amp;D ACTIVITIES Design, testing, product development</td>
<td>75</td>
<td>100%</td>
<td>R&amp;D ACTIVITIES Advanced steel characterization and application technology for all automotive aspects</td>
<td>Distributed networking tools and services for automotive systems and controls</td>
</tr>
<tr>
<td>Vector CANtech, Inc</td>
<td>CONTACT INFORMATION 39500 Orchard Hill Place, Suite 550, Novi 48375 248-449-9290 <a href="http://www.vector-cantech.com">www.vector-cantech.com</a></td>
<td>PARENT ORGANIZATION Vector Informatik, GmbH</td>
<td>PRINCIPALS Bruce Emaus—President John Cain—VP, Sales &amp; Marketing Mark Jensen—Product Manager, Diagnostics Rick Lotoczky—Product Manager, Network Tools Robert Miller—Product Manager, Embedded Software Components</td>
<td>75</td>
<td>20%</td>
<td>R&amp;D ACTIVITIES Advanced steel characterization and application technology for all automotive aspects</td>
<td>Distributed networking tools and services for automotive systems and controls</td>
</tr>
</tbody>
</table>

**Facility Description**: Technical center and lab, marketing and sales.

**Overall**: This table provides a comprehensive overview of various companies involved in automotive research and development, including their contact information, parent organizations, principal individuals, total employment, automotive R&D spending, R&D activities, products, and facility descriptions. Each company is listed with a focus on their roles in R&D, specifically pertaining to automotive applications.
VI Engineering

CONTACT INFORMATION
27300 Haggerty Road, Suite F-10, Farmington Hills 48331
248-489-1200
www.viengineering.com

PRINCIPALS
Bob Jacobs—President & CEO
Dean Streck

TOTAL EMPLOYMENT
50

PROFESSIONAL STAFF
PhDs: 8
Numerous Masters Degrees
Degreed Engineers: 30+

R&D ACTIVITIES
Design and build test systems and software for a wide range of automotive components and systems including R&D test systems, in vehicle test and data acquisition systems, durability systems, and production test systems (functional and end of line)

PRODUCTS
Technologies covered include vision, motion, rotating devices, lasers, optics, real time, analog/digital, mixed signal, data categorizing and analysis and more

FACILITY DESCRIPTION
Engineering, test system development, vision lab, test system assembly and prove out

Visteon Technical Center

CONTACT INFORMATION
One Village Center Drive, Van Buren Township 48121
734-710-2000
www.visteon.com

PARENT ORGANIZATION
Visteon

PARENT COUNTRY OF INCORPORATION
USA

PRINCIPALS
John Quigley—Global Technology Development
John Kill—VP Product Development

TOTAL EMPLOYMENT
3,600

AUTOMOTIVE R&D SPENDING
100%

R&D ACTIVITIES
Applied research, testing, engineering and product development

PRODUCTS
All-wheel drive systems, integrated circuits, audio and in-vehicle entertainment systems, fuel storage and delivery systems

FACILITY DESCRIPTION
Multiple facilities

Walbro North America Technical Center

CONTACT INFORMATION
4144 Doerr Road, Cass City 48726
989-872-2131
www.walbro.com

PARENT ORGANIZATION
TI Automotive

PARENT COUNTRY OF INCORPORATION
United Kingdom

R&D ACTIVITIES
Engineering, design, product development, testing, prototyping

PRODUCTS
Carburetors, ignition systems, fuel injection, and air/fuel management components

WaveCrest Laboratories, LLC

CONTACT INFORMATION
1613 Star Batt Drive, Rochester Hills 48309
248-606-0600
www.wavecrestlabs.com

PRINCIPALS
Kevin Pavlov—Senior Vice President/ General Manager
Gary Gloceri—Vice President, Product Development
Todd Kendall—Director, Product Development
Frank W. Ervin III—Director, Business Development
Anthony Offredi—Operations Manager

TOTAL EMPLOYMENT
23

AUTOMOTIVE R&D SPENDING
$1.5 Million

PROFESSIONAL STAFF
Engineers: 10
Designers (CAD and Product): 4
Technicians: 3

R&D ACTIVITIES
Engineering, design, testing, prototyping, product development

PRODUCTS
Electronically-controlled chassis and powertrain technology in motor design, motor control hardware, software and drive electronics, vehicle system optimization and control systems, energy systems including battery pack design and management

FACILITY DESCRIPTION
12,000 sq. ft. capable of being sectioned into two large private areas with separate external badge access in the event that multiple competing customers require support services. The shop area hosts a machine shop and electrical/electronics battery development area along with a 12,000 lb. vehicle hoist, vehicle and motor dynamometers and various testing stations dedicated to specific engineering developments

OTHER SERVICES
Electric propulsion systems, vehicle controls and battery management systems

Wagon Engineering

CONTACT INFORMATION
28025 Oakland Oaks Court, Wixom 48393
248-262-2020
www.wagon-usa.com

R&D ACTIVITIES
Product development, project management

PRODUCTS
Modeling, design and engineering, manufacturing feasibility, testing, and prototypes

FACILITY DESCRIPTION
Styling and modeling studios, color and trim matching room, model shop. 50,000 sq. ft. facility
Webasto Product North America, Inc

CONTACT INFORMATION
15083 North Road, Fenton 48430
810-593-6000
www.webasto.com

PARENT ORGANIZATION
Webasto AG

PARENT COUNTRY OF INCORPORATION
Germany

AUTOMOTIVE R&D SPENDING
$10+ Million

R&D ACTIVITIES
Testing and product development

PRODUCTS
OE automotive solutions in three main areas—roof systems (including convertible roof systems, roof modules, glass sunroofs, lamella roofs, panorama roofs, solar sunroofs), temperature management (including A/C systems, parking heaters, supplementary heaters) and body systems (including rear spoilers, motorcycle windshields, loading systems)

Wineman Technology, Inc

CONTACT INFORMATION
1668 Champagne Drive, Saginaw 48604
989-771-3000
www.winemantech.com

PRINCIPALS
Darryn La Zar—VP Sales & Marketing
Matthew Eurich—VP Engineering & Operations
Robert Wineman—President
James Wineman—CEO

TOTAL EMPLOYMENT
45

PROFESSIONAL STAFF
Engineers: 27
Designers: 2
Technicians: 4

R&D ACTIVITIES
Test systems, hardware and software simulation, prototyping, design & build

PRODUCTS
Inertia—control & data acquisition for servo-hydraulics and dynamometers; EASE—hardware software simulation environment; VIEW—data acquisition software; various hardware board products for breakout of data acquisition and signal conditioning

FACILITY DESCRIPTION
8,600 sq. ft. production; 5,000 sq. ft. general office

OTHER SERVICES
Product Testing: Design & build test systems for virtually any product
Product Validation: Software and hardware systems for electronic control module validation
Consulting: System specification

Yazaki North America, Inc

CONTACT INFORMATION
6801 North Haggerty Road, Canton 48187
734-983-1000
www.yazaki-na.com

PARENT ORGANIZATION
Yazaki International Corp (Holding), Yazaki Corp

PARENT COUNTRY OF INCORPORATION
Japan
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<td>Mitsubishi Motor Research &amp; Development of America, Inc</td>
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<td>Toyota Technical Center USA, Inc</td>
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<td>Translume, Inc</td>
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| Auburn Hills    | Dow Corning Analytical Solutions Laboratory |

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| Brimley         | Continental Teves—Brimley Development Center|

| Buchanan        | Clark Engineering Services, LLC         |

| Burton          | MDE International, Inc                  |

| Cadillac        | Michigan Rubber Products, Inc           |

<p>| Calumet         | ThermoAnalytics                         |</p>
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### Companies by Location

#### Madison Heights
- Gonzalez Design Engineering
- Henkel Surface Technologies
- Sulfo Technologies, LLC

#### Marysville
- Blue Water Automotive Systems

#### Michigan Center
- Truck Emission Control Technologies, Inc

#### Milford
- Michigan Scientific Corp (MSC)

#### Monroe
- TWB Company, Inc

#### Muskegon
- L3 Communications

#### New Haven
- General Purpose Vehicles LLC

#### Northville
- Key Plastics LLC
- Mitsubishi Electric Automotive America
- SEWS-DTC, Inc
- ZF Sachs Automotive of America

#### Northville Township
- Meiden Technical Center North America, LLC

#### Novi
- Alcan Automotive—Applied Engineering Center
- Cooper-Standard
- dSPACE, Inc

#### Nunica
- Baker Engineering, Inc

#### Orion
- Cobasys

#### Orion Township
- InSyS Corp

#### Ottawa Lake
- Dana Corporation

#### Plymouth
- Aisin World Corp of America
- AVL Powertrain Engineering, Inc
- Collins & Aikman Corporation
- Dow Corning Corp
- Durr Industries, Inc
- ELESYS North America, Inc
- Emeskeay, Inc
- Fraunhofer USA, Inc
- Freudenberg-NOK
- Fujitsu Ten Corporation of America
- Ilmor Engineering, Inc
- Isuzu-DMAX Technical Center
- Johnson Controls Inc Automotive Systems Group
- JTEKT North America, Inc
- Kostal of America, Inc
- MAHLE Powertrain, LLC
- Nacho Robotic Systems Inc
- NetShape International
- OC Automotive Solutions Center
- Preh, Inc
- SSI Technologies Inc
- Tower Automotive Technical/Customer Service Center
- Toyota Boshoku America
- Vector CANtech, Inc
### Plymouth (continued)

- Karmann USA Inc
- Koyo North American Engineering & Technical Center
- Link Engineering Company
- Metaldyne
- Perceptron
- Sanluis Rassini
- Sealant Equipment and Engineering, Inc
- SKF North American Technical Center
- TGR Technical Center, LLC
- TRAM Inc

### Plymouth Township

- Behr-Hella Thermocontrol, Inc
- Hella North America, Inc

### Pontiac

- Edscha North America

### Portage

- MANN+HUMMEL Automotive
- Summit Polymers Technical Center

### Redford

- Thermal Dynamic Resources

### Redford Township

- Sterling Truck Corporation

### Richland

- Parker Hannifan—Pneumatic Division

### Rochester Hills

- American Axle and Manufacturing—AAM Technical Center
- Auburn Engineering
- BOS Automotive Products, Inc
- Branson Ultrasonics Corporation
- Dura Automotive Systems, Inc
- FANUC Robotics America, Inc
- Gates Automotive Technical Center (GATC)
- Mark IV
- Modern Engineering
- Tesla Motors, Inc
- WaveCrest Laboratories, LLC

### Romulus

- Aztec Manufacturing

### Saginaw

- Saginaw Machine Systems, Inc
- Wineman Technology, Inc

### Saint Joseph

- Edgewater Automation

### Saline

- Renosol Corporation

### South Haven

- Trelleborg Automotive

### Southfield

- Comau Pico
- Denso International America, Inc
- Eaton Innovation Center
- GE Automotive Center of Excellence
- Honda R&D Americas, Inc
- Kaiser Aluminum
- Lear Corporation Technical Division
- Panasonic Automotive Systems Company of America (PASA)
- Peterson Spring

### Southgate

- American Specialty Cars—ASC

### Spring Lake

- Medallion Instrumentation Systems
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<th>Companies</th>
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<td>Center for Rapid Prototyping and Innovation</td>
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Companies within the component groupings are listed according to their specialties. Component groupings include:

- Chassis
- Powertrain/Drivetrain
- Interior
- Emissions
- Safety/Vehicle Control
- Materials
- Electrics/Electronics/Controls/Entertainment/Navigation
- Alternative Fuels/Hybrid
- Processes/Automation
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<td>Altair Engineering, Inc</td>
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| Mark IV                                                               |
| Martinrea                                                             |
| Meridian Automotive Systems                                           |
| Metaldyne                                                             |
| Mitsubishi Electric Automotive America                                |
| Modern Engineering                                                    |
| National Automotive Center (NAC), US ARMY Tank—Automotive R&D&E Center|
| NetShape International                                                |
| NHK International Corporation                                          |
| Nissan Technical Center North America                                 |
| Nisshinbo Automotive Corporation                                      |
| NSK Americas, Inc                                                     |
| NTN Automotive Center                                                 |
| Ogihara America Corporation                                           |
| Parker Hannifan—Pneumatic Division                                    |
| Patel Industries Ltd, Inc                                             |
| Peterson Spring                                                       |
| Plastech Engineered Products, Inc                                     |
| Pro-Tech Industries                                                   |
| QQC, Inc                                                              |
| Revolutionary Engineering, Inc                                        |
| Robert Bosch Corporation                                              |
| Roush                                                                 |
| Sanluis Rassini                                                       |
| SHAFI, Inc                                                            |
| Shape Corporation                                                     |
| SKD Automotive Group                                                  |
| SKF North American Technical Center                                   |
| Solvay Engineered Polymers Automotive Applications Development Center |
| SpaceForm, Inc                                                        |
| SSI Technologies Inc                                                  |
| Stabilis                                                              |
| Stork Climax Research Services                                        |
| Takao America Corporation                                             |
| TGR Technical Center, LLC                                             |
| Thermal Dynamic Resources                                             |
| ThyssenKrupp Budd Company Automotive Center                           |
| Toyota Gosei North America Corporation                                |
| Trelleborg Automotive                                                 |
| TRW Automotive Inc                                                   |
| Visteon Technical Center                                              |
| Walbro North America Technical Center                                 |
| Wineman Technology, Inc                                               |
| Yorozu America                                                        |
| ZF Sachs Automotive of America                                        |
### Vehicle Component/Specialties

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- CalsonicKansei North America, Inc
- Cascade Engineering
- Collins & Aikman Corporation
- Cooper-Standard
- Delphi Corporation
- Delta Technologies Group
- Denso International America, Inc
- Design Intent Engineering, Inc
- Dow Corning Corp
- Dura Automotive Systems, Inc
- Dynamic Corporation
- Eaton Innovation Center
- Emergent Systems
- Faurecia Automotive Seating, Inc
- Fisher & Co
- Foamex International Inc
- Ford Motor Company Scientific Research Labs
- Fredricks Design, Inc
- GDX Automotive
- General Motors Technical Center
- Grammer Industries, Inc
- Grupo Antolin-North America, Inc
- Guardian Automotive Products
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- Henkel Surface Technologies
- HP Pelzer Automotive Systems
- Intemet Corporation
- Intertek ETL Entela
- Intier Automotive Technical Center
- Johnson Controls Inc Automotive Systems Group
- Key Plastics LLC
- Key Safety Systems, Inc
- Keykert
- Kongsberg Automotive, Inc
- Kostal of America, Inc
- Lear Corporation Technical Division
- Magna Donnelly Corporation
- Martinrea
- Meridian Automotive Systems
- Michigan Rubber Products, Inc
- Modern Engineering
- Munro & Associates, Inc
- Nissan Technical Center North America
- Noble Polymers
- OC Automotive Solutions Center
- Plastech Engineered Products, Inc
- Plastic Flow, LLC
- Preh, Inc
- RECARO North America, Inc
- Renosol Corporation
- Rieter Automotive North America, Inc
- SHAFI, Inc
- Shape Corporation
- SKD Automotive Group
- Solvay Engineered Polymers Automotive Applications Development Center
- Sturgis Molded Products
- Summit Polymers Technical Center
- Tachi-S Engineering U.S.A., Inc
- Takata, Inc
- Teleflex Automotive, Inc
- Tellurex Corporation
- TG North America
- TGR Technical Center, LLC
- The Woodbridge Group
- Thermal Dynamic Resources
- Toyo Seat USA Corporation
- Toyota Gosei North America Corporation
- Toyota Boshoku America
- TRAM Inc
- U.S. Manufacturing Corporation
- Valeo
- Wagon Engineering
- Webasto Product North America, Inc
- Wineman Technology, Inc

### Emissions

- ACT Laboratory
- Altair Engineering, Inc
- AM General Engineering & Product Development Center
- American Honda Motor Co
- American Specialty Cars—ASC
- Autocam Corporation
- Automated Software Technology, LLC
- AVL Powertrain Engineering, Inc
- Bosal International North America
- CalsonicKansei North America, Inc
- Dearborn Group, Inc
- Delphi Corporation
- Denso International America, Inc
- Detroit Diesel Corporation
- ElectroJet, Inc
- Emmeskay, Inc
- Environmental Protection Agency—National Vehicle and Fuel Emissions Laboratory (NVFEL)
- EXPERT Corporation
- Ford Motor Company Scientific Research Labs
- General Motors Technical Center
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| General Motors Technical Center |
| George R. Ryder & Associates, Inc |
| Global Embedded Technologies, Inc |
| GM, DaimlerChrysler and BMW Hybrid Development Center |
| International Catalyst Technology |
| Keweenaw Research Center    |
| L3 Communications           |
| Meiden Technical Center North America, LLC |
| Metaldyne                   |
| Modern Engineering          |
| NextEnergy                  |
| Paragon Laboratories, Inc   |
| Pro-Tech Industries         |
| Revolutionary Engineering, Inc |
| Ricardo Inc                 |
| Roush                       |
| Sayora International        |
| Southwest Research Institute |
| T/J Technologies, Inc       |
| Tesla Motors, Inc           |
| Testing Service Group       |
| WaveCrest Laboratories, LLC |
| Wineman Technology, Inc     |

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Research and development defined in the following categories:

- Basic Research
- Applied Research
- Engineering/Design
- Testing
- Product Development
## Basic Research

- Allied Photochemical, Inc
- Automated Software Technology, LLC
- BASF Corp
- Cobasys
- Collins & Aikman Corporation
- Control Power-Reliance, LLC
- Delphi Corporation
- Dow Automotive
- Dow Corning Analytical Solutions Laboratory
- Dow Corning Corp
- dSPACE, Inc
- Encel LLC
- Environmental Protection Agency—National Vehicle and Fuel Emissions Laboratory (NVFEL)
- Ford Motor Company Scientific Research Labs
- Fredricks Design, Inc
- Global Human Body Models Consortium
- GM, DaimlerChrysler and BMW Hybrid Development Center
- Gonzalez Design Engineering
- Grupo Antolin-North America, Inc
- Henkel Surface Technologies
- Honda R&D Americas, Inc
- Inergy Automotive Technical Center
- International Catalyst Technology
- Johnson Matthey Testing
- Keweenaw Research Center
- Magna Donnelly Corporation
- Material Sciences Corporation
- National Automotive Center (NAC), US ARMY Tank—Automotive R&D&E Center (TARDEC)
- NHK International Corporation
- Nissan Technical Center North America
- Patel Industries Ltd, Inc
- QMP America
- Ricardo Inc
- Sayora International
- SenSound
- SpaceForm, Inc
- T/J Technologies, Inc
- Tellurex Corporation
- Thermal Dynamic Resources
- Trelleborg Automotive
- WaveCrest Laboratories, LLC

## Applied Research

- 3M Automotive Innovation Center
- Adaptive Materials
- Alcan Automotive—Applied Engineering Center
- Alcoa
- Altair Engineering, Inc
- American Axle and Manufacturing—AAM Technical Center
- Application Research Center
- ArvinMeritor Automotive
- Automated Software Technology, LLC
- BASF Corp
- Behr America
- Clark-MXR Incorporated
- Cobasys
- Coherix, Inc
- Collins & Aikman Corporation
- Compact Power
- Concept Design Lighting
- Control Power-Reliance, LLC
- Delphi Automotive Systems Technical Center
- Delphi Corporation
- Delta Technologies Group
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- Dow Automotive
- Dow Corning Analytical Solutions Laboratory
- Dow Corning Corp
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- Dura Automotive Systems, Inc
- Durr Industries, Inc
- Eaton Innovation Center
- ElectroJet, Inc
- ELESYS North America, Inc
- Emmesky, Inc
- Encel LLC
- EXPERT Corporation
- Faculty Consulting, LLC
- FCI Automotive
- FEV Engine Technology, Inc
- Flex-N-Gate Michigan Technology Center
- Foamex International Inc
- Ford Motor Company Scientific Research Labs
- Fraunhofer USA, Inc
- Fredricks Design, Inc
- Freudenberg-NOK
- Gates Automotive Technical Center (GATC)
- General Dynamics Land Systems
- General Motors Technical Center
- Gentex Corporation
- Global Embedded Technologies, Inc
- Global Human Body Models Consortium
- GM, DaimlerChrysler and BMW Hybrid Development Center
- Gonzalez Design Engineering
- Greening Testing Laboratories, Inc
- Grupo Antolin-North America, Inc
- Guardian Automotive Products
- Harada Industry of America, Inc
- Hayes Lemmerz International, Inc Technical Services
- Henkel Surface Technologies
- Hi-Lex Automotive Center
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Keykert
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Kostal of America, Inc
Koyo North American Engineering & Technical Center
KUKA Robotics Corporation
L3 Communications
Lear Corporation Technical Division
Lectronix Corporation
Link Engineering Company
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Lotus Engineering—Powertrain
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Magna Donnelly Corporation
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MANN+HUMMEL Automotive
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McLaren Performance Technologies
Medallion Instrumentation Systems
Meiden Technical Center North America, LLC
Meridian Automotive Systems
Metalase Technologies, LLC
Metaldyne
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Michigan Scientific Corp (MSC)
MicroHeat
Mitsubishi Motor Research & Development of America, Inc
Modern Engineering
Munro & Associates, Inc
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Automotive R&D&E Center (TARDEC)
NetShape International
NextEnergy
NHK International Corporation
Nippon Antenna America, Inc
Nissan Technical Center North America
Nisshinbo Automotive Corporation
NK Designs, Inc
Noble Polymers
North American Lighting, Inc
NSK Americas, Inc
NTN Automotive Center
OC Automotive Solutions Center
Ogidha America Corporation
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Peterson Spring
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Plastic Flow, LLC
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Prodrive Englehard, LLC
Pro-Tech Industries
QQC, Inc
Quality Verification Enterprises, Inc
RECARO North America, Inc
RedCedar Technology
Revolutionary Engineering, Inc
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Robert Bosch Corporation
Robotic Production Technology
Roush
Saginaw Machine Systems, Inc
Sanluis Rassini
Saturn Electronics and Engineering, Inc
SenSound
SEWS-DTC, Inc
Shape Corporation
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SKD Automotive Group
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Solidica, Inc
Solvay Engineered Polymers Automotive Applications
Development Center
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Southwest Research Institute
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Specialized Vehicles, Inc
Sterling Truck Corporation
STM Power, Inc
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T/J Technologies, Inc
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Product Development (continued)

Ogihara America Corporation
Panasonic Automotive Systems Company of America (PASA)
Parker Hannifan—Pneumatic Division
Patel Industries Ltd, Inc
Peterson Spring
Pioneer Automotive Technologies
Plastech Engineered Products, Inc
Plastic Flow, LLC
PPG Kansai Automotive Finishes U.S., LLC Troy—Automotive Technical Center
Preh, Inc
Pro-Tech Industries
QQC, Inc
RECARO North America, Inc
Renosol Corporation
Revolutionary Engineering, Inc
Ricardo Inc
Rieter Automotive North America, Inc
Robert Bosch Corporation
Robotic Production Technology
Roush
Sanluis Rassini
Saturn Electronics and Engineering, Inc
SenSound
SHAFI, Inc
Shape Corporation
SKD Automotive Group
SKF North American Technical Center
Solvay Engineered Polymers Automotive Applications Development Center
Soutec Soudronic
Southwest Research Institute
SpaceForm, Inc
Specialized Vehicles, Inc
SSI Technologies Inc
Stabilus
Sterling Truck Corporation
STM Power, Inc
Stork Climax Research Services
Summit Polymers Technical Center
T/J Technologies, Inc
Tachi-S Engineering U.S.A., Inc
Takao America Corporation
Takata, Inc
Teleflex Automotive, Inc
Tellurex Corporation
Tesla Motors, Inc
Textron Fastening Systems Technical Resource Center Lab
TG North America
The Woodbridge Group
Thermal Dynamic Resources
ThyssenKrupp Budd Company Automotive Center
TI Group Automotive Systems Corporation
Tokico USA Inc
Tower Automotive Technical/Customer Service Center
Toyo Seat USA Corporation
Toyoda Gosei North America Corporation
Toyota Boshoku America
Toyota Technical Center USA, Inc
TRAM Inc
Translume, Inc
Trelleborg Automotive
Truck Emission Control Technologies, Inc
TRW Automotive Inc
Valeo
Visteon Technical Center
Wagon Engineering
Walbro North America Technical Center
WaveCrest Laboratories, LLC
Webasto Product North America, Inc
Yazaki North America, Inc
Yorozu America
ZF Sachs Automotive of America
Companies in this index are grouped according to the additional or special services they offer. Categories include:

- Consulting/Contract
- Testing Facilities
- Facilities available for outside use
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## Facilities Available for Outside Use

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Michigan automotive R&D companies were contacted by e-mail and telephone and were asked to fill out a form to obtain the most current information about their businesses. If a company did not respond, key information about their operations was obtained through Internet research, or the data from the 2005 directory was verified.

**SOURCES OF DATA**

- **2007 - New profile form received**
- **2005 - Previous directory information verified**
- **Web 2007 - Information obtained through company website**
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Mechanical Simulation Corporation · Web 2007
Medallion Instrumentation Systems · Web 2007
Meiden Technical Center North America, LLC · 2007
Meridian Automotive Systems · Web 2007
Metalase Technologies, LLC · 2007
Metaldyne · 2007
MGA Research Corp · 2005
Michigan Rubber Products, Inc · Web 2007
Michigan Scientific Corp (MSC) · 2007
MicroHeat · Web 2007
Mitsubishi Electric Automotive America · 2005
Mitsubishi Motor Research & Development of America, Inc · 2007
Modern Engineering · Web 2007
Molex Automotive · 2007
MSX International · 2007
Munro & Associates, Inc · 2007
Nachi Robotic Systems Inc · Web 2007
National Automotive Center (NAC), US ARMY Tank—Automotive R&D&E Center (TARDEC) · 2005
NetShape International · Web 2007
New Dimension Laser, Inc · 2007
NextEnergy · 2007
NHK International Corporation · 2007
Nippon Antenna America, Inc · Web 2007
Nissan Technical Center North America · 2007
Nisshinbo Automotive Corporation · Web 2007
NK Designs, Inc · 2005
Noble Polymers · 2007
North American Lighting, Inc · 2005
NSK Americas, Inc · Web 2007
NTN Automotive Center · Web 2007
OC Automotive Solutions Center · Web 2007
Ogihara America Corporation · Web 2007
Panasonic Automotive Systems Company of America (PASA) · Web 2007
Paragon Laboratories, Inc · 2005
Parker Hannifan—Pneumatic Division · Web 2007
Patel Industries Ltd, Inc · 2007
Perceptron, Inc · 2007
Peterson Spring · Web 2007
Pioneer Automotive Technologies · Web 2007
Plastech Engineered Products, Inc · 2005
Plastic Flow, LLC · 2005
POM Group · Web 2007
PPG Kansai Automotive Finishes U.S., LLC · Web 2007
Troy—Automotive Technical Center · Web 2007
Preh, Inc · 2007
Prodrive Englehard, LLC · Web 2007
Pro-Tech Industries · 2005
QMP America · Web 2007
QQC, Inc · 2005
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Michigan’s Automotive R&D Industry

**Strength in Numbers**

Michigan’s automotive / vehicle research and development community continues to grow as the world’s leading industrial intelligence center. In the five years since the publication of the first directory over 150 companies from around the globe have established operations in Michigan, broadening and strengthening this region’s impact on one of the world’s most essential industries.

For additional printed copies of this directory, comments or additions contact Eric Shreffler at 517-373-9808 or Shrefflere@michigan.org
Our Mission

The mission of the Michigan Economic Development Corporation, in collaboration with its local economic partners, is to transform the economy of our state. By executing the Governor’s economic development strategy, MEDC promotes business and tourism, thereby generating opportunities and economic growth, MEDC further achieves its mission by retaining and expanding commerce; by facilitating new partnership; and by serving as the principal advocate for the business community, thereby creating desirable jobs and contributing to a superior quality of life for all Michigan residents.