Gap, Flush, Seal Gap Measurement

> Reliable, repeatable and operator independent
> Significantly reduce traditional inspection time
> Automated and integrated graphical reporting

www.asidatamyte.com/solutions
**Solid Fit Projects Quality Image**

A recent JD Power dependability study found that wind noise was the number one complaint of new car owners. When it comes to automobiles, body fit characteristics have a tremendous impact on customer perception of quality. Wind noise, water leaks and hard door closing are cited as leading causes of warranty claims. Not only do these problem areas affect overall quality image, the rework and returns that they generate have a huge negative impact on revenues and profitability. Conversely, solid and uniform fit leaves a lasting impression of quality with consumers.

The ease of implementing inspection plans and the speed of taking accurate measurements using the ASI DATAMYTE solutions allows you to assess the fit of your assembly, decreasing inspection time more than 50% and drastically reduce operator dependency.

**Laser Power**

ASI DATAMYTE Gap, Flush, Seal Gap Measurement Solutions feature non-contact ►LaserGauge and contact ►LMI sensors, controllers, data collectors and ►QDA software. Typical applications include Gap and Flush for fit, surface contours and geometrics on

- Body panels
- Body-in-white
- Check fixtures
- Door seal gap
- Deck lid seal gap
- Interior panels
- Cockpit
- Aircraft wings and body panels
- Aircraft rivet height

**Portability and Mobility**

Taking dimensional measurement via the ►LaserGauge system is ultra fast, nonintrusive, and noncontact. Wireless gauges provide extreme portability, allowing you to go just about anywhere, on or off the line. Reach seal gaps in tight spaces or carry the gage with you to harsh and challenging environments. Set up nimble measurement operations quickly where CMMs can’t go.

Feeding real time laser measurement data into the centralized ►QDA database makes it available for other uses and organizes it for presentation in ASI DATAMYTE’s flexible and user friendly reporting formats.

**Flexibility is Key**

ASI DATAMYTE ►LaserGauge and ►LMI systems adapt easily to the demands of your production lines. As you modify parts and assemblies or switch products, our Gap, Flush, Seal Gap Measurement Solutions provide the means to drive the conversion with minimal or no retooling from our part.

Flexible in-process laser measurements enable shorter product launch times. Studies show that implementing laser measurement earlier in the production cycle circumvents common quality issues and significantly shortens the cycle.

**Decrease inspection time and reduce operator dependency drastically**

Adapt easily to multiple measurement routines for different situations. Measure a large number of checkpoints during production ramp-up or take fewer measurements during full production. Flexibility in gage usage and
distribution allow you to achieve comprehensive analyses that support rapid root cause determination.

ASI DATAMYTE provides a complete range of gap, flush and seal gap technologies and devices.

**Laser Gauge Systems**
► **LaserGauge** systems are comprised of sensors, controllers and software. Sensors vary by size, specificity of function, portability, remote utilization and ability to mount and use with other tools. The sensor captures the contour of a surface and transmits it to the controller for processing. Software is used to develop and apply sophisticated measurement routines, organize and format data for optimized usage by statistical analysis tools, incorporate visualization techniques and present information in user-defined reporting layouts. CAD integration enables even faster check plan definition and analysis.

The selection and configuration of sensors, controllers and software depends on the specific measurement task and objectives.

**Gap and Flush Gages**
These are durable and hardened non-marring ► **LMI** gages that collect contour and dimensional SPC data quickly and accurately. Gap and flush readings are taken concurrently with rock-solid repeatability.

- Simultaneous Gap/Contour Gages for measuring dimensions on panels locked into check fixtures.
- Simultaneous Gap/Flush Gages for Body-In-White and Finished Body Applications are used for measuring panel to panel fit on assemblies.

To complement the Gap and Flush measurements on fixtures there are Surface and True Position probes available. The ► **LMI** Surface Probes are notoriously durable linear measurement instruments that continue to perform while others have been replaced or repaired many times. The True Position probes offer an accurate and repeatable way to collect variable information on the location of features in either two or three axis both in absolute and relative to other features.

**Seal Gap Measurement Systems**
The ► **LMI** Portable Seal Gap System replaces inconvenient feeler gauges, clay, calipers and thumbscrews. A versatile variety of gages are served by RF hubs situated in the car body and easily attached to door or deck flanges. Readings are collected remotely, and data is stored and made available for immediate analysis by ASI DATAMYTE’s SPC Solution. The entire system is rugged and flexibly deployed, from prototype build areas, to wind tunnels, body shops and final assembly.

**Data Collectors**
ASI DATAMYTE offers a variety of data lightweight ergonomic collectors that capture data efficiently and accurately from gap, flush, and seal gap gages and probes. All include multiple options for uploading collected data to a central database for analysis and archiving.

Graphical reports show where your attention and action is required

**Analysis and Reporting**
The ► **QDA** software makes dimensional data available for clear evaluations and distributes the information to any of a number of flexible reports. Data may be aggregated to cover a specific time period and/or by production batch. Of course, an evaluation can also be structured to focus on a single unit such as an auto body and all the data associated with it. Real time project-oriented reports display mission critical information quickly for fast breaking decision making.
ASI DATAMYTE’s Gap, Flush, Seal Gap Measurement Solution heads off defects, reduces inspection time, ensures uniform fit and raises overall product quality. A complete range of portable and integratable measurement tools loaded with far reaching capabilities ensure accuracy and feed a flexible reporting platform.

Major solution benefits and key features
> Reliable, repeatable and operator independent
> Significantly reduce traditional inspection time
> Automated and integrated graphical reporting
> Contact or non-contact solutions
> Portable and plant floor ready
> Proven and widely used system
> Easy to master, easy to use
> Used on BIW, Final Inspection and Audit area