Erosion, Corrosion, Cavitation, Wear and Chemical Attack Problems on:

pipes • pumps • impellers • valves • tanks • condensers • heat exchangers • tube sheets • water boxes • chillers • absorbers • shafts hydraulic rams • FGD systems • scrubbers • centrifuges • cooling towers • containment dikes • troughs • spillways • propellers • kort nozzles • bow thrusters • rudders • struts • hull fairing

A recognized world leader in developing advanced polymer technologies, the ENECON organization has pioneered unique coating systems for industry including the U.S. Navy, the petrochemical industry and electrical utilities. These extraordinary polymer systems are the result of years of research and development work that began with the first epoxy non-skid deck coatings approved by the U.S. Navy and the first products approved to the Department of Defense Specification C-24176 for hull fairing / smoothing.

The senior management of ENECON Corporation have many years of combined practical experience in troubleshooting industrial fluid flow problems. They have worked closely in the past with such diverse and prestigious organizations as the Panama Canal, Army Corps of Engineers, United States Navy, nuclear and fossil fuel power stations, pulp and paper mills, petrochemical plants, mining and quarrying operations, food processing facilities, etc.

ENECON is strategically positioned to provide industry, utilities and institutions with the finest repair and protection products and services available. ENECON, therefore, is the name to call when fluid flow problems are costing you time, money and aggravation.

International Testing & Approvals *

U.S. Military Specification DOD-C-24176/QPL-24176
Nuclear Irradiation, Decontamination & DBA Testing
Canadian Electrical Association No. 5116530 - Reduction of cavitation Erosion Damage/87 - Rated "Best"
Coating Services Group (CSG) Torus Liner Performance (Nuclear) Evaluation
CeramAlloy CL+ (No. 3168) - Highest Rating
Other Tests/Approvals/Commendations: U.S. Coast Guard, U.S. Navy, ABS, U.S.D.A.

* Specific details/product information available upon request.
METALCLAD . . .  
the most advanced metal repair and protection systems available.

Wherever erosion, corrosion, wear or chemical attack create problems in fluid flow systems, METALCLAD polymer composites provide the ultimate solution.

ENECON researchers have combined the latest and safest polymer technology with unrivaled fluid flow systems engineering knowhow to produce the most advanced polymer systems available for rebuilding, resurfacing and protecting virtually all fluid flow components.

METALCLAD systems exhibit outstanding compressive and flexural strengths as well as phenomenal adhesion. Their ability to cure at low temperatures, their superb chemical resistance and their non-shrink properties make them the obvious choice for the maintenance engineering professional.

METALCLAD repair and protection systems offer incredible savings over conventional repair or replacement procedures.

METALCLAD SpeedAlloy™  
The "leak stopper!"
Fast, easy, non-slump; can be used to repair just about any leak in minutes: pipes, tanks, sumps, casings, radiators, fuel tanks, etc. Bonds to virtually any rigid surface!

METALCLAD DurAlloy™
Multi-purpose; can be drilled, tapped, turned on a lathe, sanded & polished. Can be used to repair worn shafts, cracked casings & engine blocks, stripped threads, sloppy keyways, scored hydraulic rams, oversize bearing / bush housings, etc. Trowelable requires no heat.

METALCLAD CeramAlloy CP+™
Outstanding erosion resistance. Trowelable system for repairing and rebuilding metal damaged by erosion and corrosion: pumps, valves, heat exchangers, tube sheets, water boxes, etc.

METALCLAD CeramAlloy CL+™
The ultimate resurfacing system for protecting fluid flow equipment. Brushable, self-leveling, castable.. For pumps, valves, water boxes, tube sheets, tanks, propellers, kort nozzles, bow thrusters, rudders, struts, etc.
FLEXICLAD®…
extraordinary, super resilient polymer systems specifically developed for cavitation problems.

Whether it’s pump impellers or ships’ propellers, cavitation damage to metal is a never ending problem — and one that presented very few repair options to the maintenance engineer in the past. But now, FLEXICLAD® DuraTough™ systems from ENECON provide exceptional protection to equipment prone to cavitation attack and subsequent damage. Super tough, super resilient and cost effective.

FLEXICLAD® DuraTough™ systems provide the sensible alternative to some of the most severe erosion / corrosion problems in industry today.

FLEXICLAD® DuraTough™ systems are also ideal for creating or repairing flexible seals on machinery and equipment such as on heat exchangers, pumps, valves and piping systems.

CHEMCLAD®…
the ultimate in chemical protection systems.

Resistant to a very wide variety of organic and inorganic acids, alcohols, alkalis, esters, ethers, hydrocarbons, halogenated hydrocarbons, ketones, oils, salts, etc., CHEMCLAD® systems from ENECON are the finest chemical resistant claddings available.

They are revolutionary polymer composites that can be easily and safely applied by brush, roller, squeegee or airless spray - even in confined spaces.

For Metal…
pipes, tanks, pumps, valves, fume hoods, drains, heat exchangers, etc.

For Concrete…
containment dikes, troughs, spillways, process areas, etc.
ENECRETE® DuraQuartz™... the finest concrete repair and protection system available.

ENECRETE® DuraQuartz™ is a three component, 100% solids, concrete repair compound specifically formulated and precisely engineered to provide solutions to even the most difficult concrete repair and protection problems. ENECRETE® DuraQuartz™ is extremely versatile. It can be mixed to any consistency - from a viscous liquid to a stiff mortar. DuraQuartz™ is not only for concrete; it will bond to marble, stone, slate, terrazzo, tiles, … even metal!

ENECRETE® DuraQuartz™ is the professional’s choice for repairing critical areas subject to shock, impact, abrasion and chemical attack such as: containment dikes and troughs • spillways • chemical loading, storage, and transfer areas • pump bases • anchor bolts • setting and grouting tiles • etc...

ENECRETE® WP & WS... the jobsite leak plugger that stops running water in under 60 seconds, and leak sealer that coats, fills, seals & protects!

ENECRETE® WP is a cementitious, one component, extremely fast-setting product with the ability to stop running water through masonry structures. It is designed to be mixed with water and to stop the leak in less than a minute.
ENECRETE® WP’s unique properties enable it to stop leaks and running water:
• Sets in one minute
• Develops strength immediately
• Chemically resistant
• Does not shrink or expand significantly
• Has excellent freeze-thaw resistance
• Exhibits thermal expansion properties similar to concrete

ENECRETE® WS is a protective and waterproofing product for masonry structures. It employs a multiple curing reaction process to obtain its exceptional properties. The reactions that occur upon mixing combine the hydration reaction of calcium / silica / aluminum cement, for strength and durability, with the film-forming reaction of a polymer liquid, for waterproofing, chemical resistance and adhesion.
ENECRETE® WS can be used as a negative side / positive side flow preventive coating and as a repair mortar, depending on the component mixing ratio used.
WS is a dual-component product that is easy to prepare and apply in the field. One product that can be used to solve two common problems in industry — concrete attack and water infiltration.

1. The problem - manhole walls seeping water and an active leak filling the site with water...
2. A small batch of WP is quickly mixed and is ready for use...
3. The breach is cleaned of loose mortar and WP is applied to instantly stop the leak, forming a watertight plug...
4. After active leaks have been plugged with ENECRETE® WP, the walls are brushed with two coats of WS - the water sealer.
5. Protected, sealed and waterproofed - ENECRETE® WS has sealed and protected in a few easy steps.
ENESEAL® HR ... for weather and waterproofing problem areas on all types of roofs...

A durable, seamless, microporous, moisture resistant, flexible, ‘skin’.

ENESEAL® HR is a single component, water based, liquid ceramic-filled membrane which cures to a durable, seamless, flexible ‘skin’ that refracts and reflects heat while providing a moisture resistant barrier to virtually any type of surface... i.e., all types of insulation, plastics, concrete, brick, block, slate, tiles, wood, metal, bitumen, glass, tar / asphalts, etc.

ENESEAL® HR is easily applied by brush, roller or spray. Because it's water based, cleanup is quick and easy with soap and water. Completely non-toxic and non-flammable.

Coping stone joints are always problem areas and are easily sealed with ENESEAL® HR.

Often underwater, gutter joints can be easily weather and waterproofed with the ENESEAL® HR Roof Protection System.

Roof seams (joining bituminous and / or cementitious materials) are thoroughly protected from leaking with ENESEAL® HR.

Why do metal flashings leak? Joining dissimilar materials, thermal extremes and structural movement are the main problems. The solution? Outstanding adhesion and flexibility, and long lasting dependability. All found in ENESEAL® HR.

Glazing bars have always been trouble — different thermal expansion factors of glass and metal demand a super-flexible product — and that's where ENESEAL® HR excels.

ENVIRONMENTAL FORCES THAT DESTROY

Sudden expansion and contraction resulting from thermal shock produces incredible stress on roofing - inevitably shortening its life and causing leaks.

Winds drive beneath unsealed areas, lifting and loosening material as well as shaking the structure, moving and twisting the roof.

An improperly sealed roof invites water to seep in and freeze, expanding by 25%, exerting extreme force and cracking protective surfaces.

Atmospheric pollutants produce highly acidic compounds which weaken cement, bituminous materials and metal flashings.

Heavy loads of snow stress the roof, pushing typical roofing materials beyond their breaking point.

Plant spores and seeds take their toll on your roof. Roots attack structures physically and chemically and, over time, can be as damaging as any storm.

The cost effective and commercially proven solution to all of these problems: ENESEAL® HR!
ENECLAD® SuperBond...

ultra-high performance structural adhesive
and universal surface bonding agent.

Better bonding, incredible performance.

ENECLAD® SuperBond is a revolutionary structural adhesive that provides unrivaled performance bonding a new concrete overlay to an existing, cured concrete surface or when bonding synthetic / plastic mortars to virtually any rigid surface. When used to bond new concrete to old, the strength of the resultant bond is many times greater than that of monolithic concrete! SuperBond is a 100% solids, two-component, high performance polymer composite exhibiting extraordinary adhesion to concrete, tile, stone, brick, block, terrazzo, marble, metal, wood and even glass! SuperBond is great for improving the adhesion of conventional structural caulking materials used in expansion and control joints.

As a universal bonding agent, SuperBond is ideal as a bond coat for many types of conventional paint systems for surfaces that are traditionally difficult to coat — galvanizing, glazed ceramic tile, glass, stainless steel, and aluminum.

ENECLAD® SuperBond can be used in different environments since it is highly resistant to corrosive and chemical conditions. SuperBond can even be used as a bonding agent for permanent immersion applications such as in swimming pools or on ships' hulls. It cures chemically, transforming the bond-line into a highly durable, waterproof film. The cured film is impervious to water (unlike plastic emulsions that can soften and emulsify).

Bonds to problem materials like never before...

- Galvanized surfaces
- Glazed ceramic tile
- Glass
- Stainless and aluminum
- Many More Materials...

...and, in most environments!
**Extreme Floor Protection For Extreme Environments**

ENECLAD™ high performance polymer systems have been specifically formulated for new or used concrete floors. ENECLAD™ produces a seamless surface that is easy to clean and easy to maintain.

Easy to apply ENECLAD™ seals and strengthens concrete floors. These extraordinary high-performance polymer composites are extremely abrasion resistant, making them ideal for heavy traffic areas in warehouses, hangars, loading docks, etc. They jacket the surface in a rugged, armored coating that resists forklift traffic, oil, gasoline and most industrial chemicals.

ENECLAD™ systems are solvent-free, odor-free, 100% solids, two component products specifically developed to solve the toughest industrial floor protection problems. They are easily applied by brush, roller or squeegee to a super high-gloss finish. Naturally, non-skid aggregates can be incorporated into the ENECLAD™ system to provide a highly durable, safety non-slip surface.

ENECLAD™ systems can also be used to repair and level damaged concrete surfaces, making them suitable for our extended line of ENECLAD™ high-gloss topcoats.

traffic and abrasion resistance · oil resistance
chemical resistance · detergent resistance
easy to apply · easy to maintain

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