METALCLAD® SpeedAlloy™

The Leak Stopper - and More!

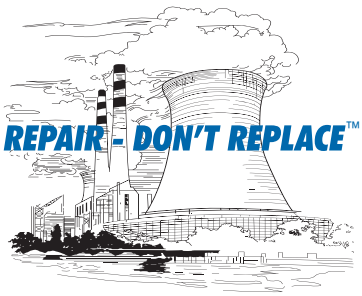
The First Choice for Fast, Reliable Mechanical Repairs.

- Quick Curing
- Trowelable
- Requires No Heat
- Unlimited Shelf Life
- 100% Solids
- Available in unique ENECON® 'A-Packs'

METALCLAD® SpeedAlloy™ is a quick curing, 100% solids, polymeric 'leak stopper' used for making fast, effective repairs to equipment which must be returned to service almost immediately.

METALCLAD® SpeedAlloy™ has a paste consistency when first mixed then transforms into a metal-hard composite in just minutes.

- Pipes & Tanks
- Sumps
- Radiators & Fuel tanks
- Cracked & holed casings
- Damaged keyways
- Stripped threads
- Scored shafts
- Hydraulic rams



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Technical Data

Volume capacity per 167gm "A Pack"	4.3 in^3 / 72 cc
Mixed density	0.085 lbs per in^3 / 2.33 gm per cc
Coverage rate per "A Pack" @ 0.25 in / 6 mm	17.2 in^2 / 0.012 m^2
Shelf life	Indefinite
Volume solids	100%

Mixing ratio	Base	Activator
By volume	1	1
By weight	2	1

Cure Times

Ambient Temperature		Working Life	Machining Light Load	Full Mechanical	Chemical Immersion
41°F	5°C	10 min	60 min	2 hrs	72 hrs
59°F	15°C	7 min	45 min	1 hrs	48 hrs
77°F	25°C	5 min	30 min	40 min	36 hrs
86°F	30°C	3 min	20 min	30 min	24 hrs

Physical Properties

	Typical Values		Test Method
Compressive strength	22,500 psi	1575 kg/cm^2	ASTM D-695
Flexural strength	16,100 psi	1125 kg/cm^2	ASTM D-790
Izod impact strength	1.3 ft lbs/in	0.69 j/cm	ASTM D-256
Hardness - Rockwell	R-90		ASTM D-785
Hardness - Shore D	84		ASTM D-2240
Tensile Shear Adhesion			
Steel	2300 psi	161 kg/cm^2	ASTM D-1002
Aluminum	2100 psi	147 kg/cm^2	ASTM D-1002
Copper	2250 psi	158 kg/cm^2	ASTM D-1002
Stainless steel	1800 psi	126 kg/cm^2	ASTM D-1002
Surface resistivity	1 x 10^{15} ohms		ASTM D-257
Volume resistivity	1 x 10^{15} ohm/cm		ASTM D-257
Dielectric constant	7.5		ASTM D-150

Chemical Resistance

Acetic acid (0-10%)	EX	Methyl alcohol	G
Acetic acid (10-20%)	G	Methyl ethyl ketone	G
Acetone	G	Nitric acid (0-10%)	EX
Aviation fuel	EX	Nitric acid (10-20%)	G
Butyl alcohol	EX	Phosphoric acid (0-5%)	EX
Calcium chloride	EX	Phosphoric acid (5-10%)	G
Crude oil	EX	Potassium chloride	EX
Diesel fuel	EX	Propyl alcohol	EX
Ethyl alcohol	G	Sodium chloride	EX
Gasoline	EX	Sodium hydroxide	EX
Heptane	EX	Sulfuric acid (0-10%)	EX
Hydrochloric acid (0-10%)	EX	Sulfuric acid (10-20%)	G
Hydrochloric acid (10-20%)	G	Toluene	G
Kerosene	EX	Xylene	EX

EX - Suitable for most applications including immersion.
G - Suitable for intermittent contact, splashes, etc.

Your Local ENECON® Fluid Flow Systems Specialist

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Using SpeedAlloy™

Surface Preparation - METALCLAD® SpeedAlloy™ should be applied only to clean, dry and well roughened surfaces.

1. Remove all loose material and surface contamination and clean with a suitable solvent which leaves no residue on the surface after evaporation such as acetone, MEK, isopropyl alcohol, etc.
2. If necessary, apply moderate heat to remove ingrained oil and clean again with solvent.
3. Roughen surface by abrasive blasting, grinding, rotary file or other appropriate means.

Note: In situations where adhesion is not desired, such as when making molds and patterns or to ease future disassembly, apply a suitable release agent (mold release compound, paste wax, etc.) to the appropriate surfaces.

Mixing & Application - For your convenience, the METALCLAD® SpeedAlloy™ Base and Activator have been supplied in precisely measured, convenient 'A packs' to simplify mixing. To use this unique 'A pack', remove the divider and mix in the envelope until streak free. Then, cut one corner of the envelope and squeeze the mixed SpeedAlloy™ out onto the repair area.

Using an appropriate tool, apply the mixed SpeedAlloy™ to the prepared surface, pressing firmly to insure intimate contact and eliminate any air pockets at the bond line or within the material. In all cases, work quickly and deliberately, since SpeedAlloy™ is a fast system.

Some applications such as holed pipes or tanks and cracked casings may require the use of reinforcement tape to bridge the damaged area(s) followed by the application of additional material to completely cover the reinforcement tape.

Health & Safety - Every effort is made to insure that ENECON® products are as simple and safe to use as possible. Normal industry standards and practices for housekeeping, cleanliness and personal protection should be observed.Please refer to the detailed MATERIAL SAFETY DATA SHEETS (MSDS) supplied with the material (also available on request) for more information.

Cleaning Equipment - Wipe excess material from tools immediately. Use acetone, MEK, isopropyl alcohol or similar solvent as needed.

Technical Support - The ENECON® engineering team is always available to provide technical support and assistance. For guidance on difficult application procedures or for answers to simple questions, call your local ENECON® Fluid Flow Systems Specialist or the ENECON® Engineering Center.