

Revolutionary products . . .

. . . for rebuilding, resurfacing and protecting all types of fluid flow machinery, equipment and structures.

METALCLAD CeramAlloy™ CBX

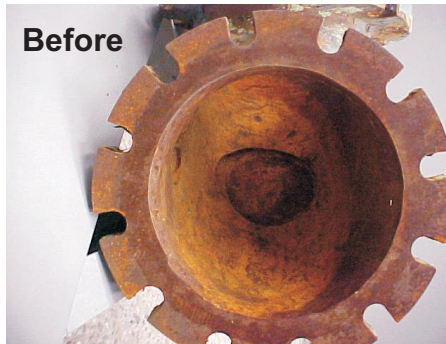
METALCLAD
CeramAlloy™ CBX

Extraordinary Abrasion Resistance
Trowelable
Requires No Heat
Unlimited Shelf Life
100% Solids
Safe & Simple To Use

METALCLAD CeramAlloy™ CBX is the best material to use to protect equipment subject to very aggressive abrasive environments.

Repair & protect all types of equipment subject to very aggressive abrasion.

Engineered to repair deeply damaged components.



METALCLAD CeramAlloy™ CBX is a three component, 100% solids, polymer composite specifically formulated to provide effective repair and rebuilding characteristics on all types of equipment subject to severe abrasion.

METALCLAD CeramAlloy™ CBX is a paste when mixed, so it is easily applied. When cured, however, CBX becomes a metal-hard, highly abrasion resistant compound.

Elbows, Pipes, Pumps, Chutes, Deflector Plates, Cyclones, Separators, Vibratory Feeders, Transfer Augers, etc.

METALCLAD
CeramAlloy™ CBX



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The Fluid Flow
Systems Specialists.

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Technical Data

| | | | |
|---|--|-----------|-----------|
| Volume capacity per 5 kg. | 110 in ³ / 1790 cc | | |
| Mixed density | 0.100 lbs per in ³ / 2.76 gm per cc | | |
| Coverage rate per 5 kg. @ 200 mils/5mm | 3.78 ft ² / 0.35 m ² | | |
| Shelf life | Indefinite | | |
| Volume solids | 100% | | |
| Mixing ratio | Base | Activator | Aggregate |
| By volume | 5 | 2 | 14 |
| By weight | 7 | 2 | 20 |

Cure Times

| Ambient Temperature | Working Life | Full Mechanical | Chemical Immersion |
|---------------------|--------------|-----------------|--------------------|
| 59°F 15°C | 30 min | 48 hrs | 3 days |
| 77°F 25°C | 20 min | 24 hrs | 2 days |
| 86°F 30°C | 15 min | 16 hrs | 1 day |

Physical Properties

| | | | |
|--|------------|-------------------------|-------------|
| Compressive strength | 16,000 psi | 1125 kg/cm ² | ASTM D-695 |
| Flexural strength | 6,000 psi | 422 kg/cm ² | ASTM D-790 |
| Hardness - Shore D | 86 | | ASTM D-2240 |
| Tensile Strength | 2,500 psi | 176 kg/cm ² | ASTM D-2370 |
| Tensile Shear Adhesion (CL+AC primer to substrate) | | | |
| Steel | 4000 psi | 280 kg/cm ² | ASTM D-1002 |
| Aluminum | 2500 psi | 175 kg/cm ² | ASTM D-1002 |
| Copper | 3000 psi | 210 kg/cm ² | ASTM D-1002 |
| Stainless steel | 4100 psi | 287 kg/cm ² | ASTM D-1002 |

Chemical Resistance

| | | | |
|--------------------------------------|----|-----------------------------------|----|
| Acetic acid (0-10%) | G | Methyl alcohol | G |
| Ammonium hydroxide (0-10%) | EX | Mineral oil | EX |
| Aviation fuel | EX | Nitric acid (0-10%) | EX |
| Butyl alcohol | EX | Nitric acid (10-20%) | G |
| Calcium chloride | EX | Phosphoric acid (0-10%) | 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

Using CeramAlloy™ CBX

Surface Preparation - CeramAlloy® CBX should only be applied to clean, dry, firm and well roughened surfaces.

1. Remove all loose material and surface contamination
2. Depending on the surface, solvent clean and/or remove contamination by abrasive blasting, steam cleaning, pressure washing, or other suitable means.
3. After removing all surface and sub-surface contamination, flush the area as necessary and allow to dry completely.

Priming The Surface - A 250 gm unit of CeramAlloy® CL+AC is supplied as a primer in each 5 kg CeramAlloy® CBX system. Pour the contents of the Activator container into the Base container and mix thoroughly. Prime the area to be treated with the mixed CeramAlloy® CL+AC using a stiff-bristled brush. As a guide, an even thickness of approximately 10 - 12 mils should be obtained. Priming should be completed within 45 minutes of mixing. Overcoating with CeramAlloy® CBX should ideally be performed when the priming layer of CL+AC is just tacky and certainly within 8 hours of application.

[Note: CeramAlloy® CL+AC is available separately as a primer for the 20 kg units of CeramAlloy CBX.]

Mixing & Application - For your convenience, the METALCLAD CeramAlloy® CBX Base, Activator and Aggregate have been supplied in precisely measured quantities to simplify mixing of full units. Should a small amount of material be required, measure out 5 parts Base and 2 parts Activator and 14 parts Aggregate, by volume.

To facilitate mixing of full units, a mechanical mixing device is strongly recommended. Combine the Base and Activator in the large, plastic bucket and, with the mixer running, slowly add the Aggregate.

Apply the mixed CeramAlloy® CBX to the prepared and primed surface using a trowel, putty knife, or other appropriate tool, pressing well to insure intimate contact and force out any air entrapped as a result of the mixing technique and/or device used.

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.

All information contained herein is based on long term testing in our laboratories as well as practical field experience and is believed to be reliable and accurate. No condition or warranty is given covering the results from use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept liability if the desired results are not obtained.

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