# METALCLAD CeramAlloy EBX

### Economy version of our extraordinary CeramAlloy<sup>®</sup>CBX, Super Abrasion Resistant Polymer Composite.

**METALCLAD® CeramAlloy® EBX** is a three component, 100% solids, polymer composite specifically formulated to effectively repair and rebuild all types of equipment subject to severe abrasion.

*CeramAlloy*<sup>®</sup> *EBX* is a paste when mixed, so it is easily applied. When cured, however, *CeramAlloy*<sup>®</sup> *EBX* becomes a metal-hard, highly abrasion resistant compound engineered to repair deeply damaged components in the most

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

#### **Repairs & Protects...**

- Elbows
- Pipes
- Pumps
- Chutes
- Deflector Plates
- Cyclones
- Separators
- Vibratory Feeders
- Transfer Augers
- ...and more.



aggressive abrasive environments.









<b>Technical Date</b>	a			
Volume capacity per	r 5 kg. 124 i	n³ / 2032 cc		
Mixed density	0.089	lbs per in <sup>3</sup> / 2.46	gm per cc	
Coverage rate per 5 @ 200 mils/5mm		ft²/ 0.40 m²		
Shelf life	Indef	Indefinite		
Volume solids	100%	, 0		
Mixing ratio	Base	Activator	Aggregate	
By volume	5	2	15	
By weight	7	2	20	

#### Working Life & Cure Times

	bient erature	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

<b>Physical Proper</b>	ties Typica	al Values	Test Method	
Compressive strength	13,000 psi	910 kg/cm <sup>2</sup>	ASTM D-695	
Flexural strength	5,000 psi	350 kg/cm <sup>2</sup>	ASTM D-790	
Hardness - Shore D	86		ASTM D-2240	
Tensile Strength	2,100 psi	147 kg/cm 2	ASTM D-2370	
Tensile Shear Adhesion (CL+AC primer to substrate)				
Steel	4000 psi	280 kg/cm <sup>2</sup>	ASTM D-1002	
Aluminum	2500 psi	175 kg/cm <sup>2</sup>	ASTM D-1002	
Copper	3000 psi	210 kg/cm <sup>2</sup>	ASTM D-1002	
Stainless steel	4100 psi	287 kg/cm <sup>2</sup>	ASTM D-1002	

Chemical Resistance				
Acetic acid (0-10%) G Ammonium hydroxide (0-10%) EX Aviation fuel EX	Methyl alcohol			
Butyl alcohol EX	Nitric acid (10-20%) G			
Calcium chloride EX	Phosphoric acid (0-10%) G			
Crude oil	Potassium chloride			
Diesel fuel	Propyl alcohol EX			
Ethyl alcohol	Sodium chloride EX			
GasolineEX	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 Kerosene EX	Toluene G Xylene			
EX - Suitable for most applications including immersion.				

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



## Using CeramAlloy<sup>®</sup> EBX

Surface Preparation - METALCLAD<sup>®</sup> CeramAlloy<sup>®</sup> EBX 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** - CeramAlloy<sup>®</sup> CL+AC is supplied as a primer in each 5 kg CeramAlloy<sup>®</sup> EBX 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<sup>®</sup> 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<sup>®</sup> EBX should ideally be performed when the priming layer of CeramAlloy<sup>®</sup> CL+AC is just tacky and certainly within 8 hours of application.

Note: CeramAlloy $^{\!\circ}$  CL+AC is available separately as a primer for the 20 kg units of CeramAlloy $^{\!\circ}$  EBX.

**Mixing & Application** - For your convenience, the CeramAlloy<sup>®</sup> EBX 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, 2 parts Activator and 15 parts Aggregate by volume (5:2:15, v/v).

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

Apply the mixed CeramAlloy<sup>®</sup> EBX 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.

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

**Health & Safety** - Every effort is made to insure that ENECON<sup>®</sup> 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 SAFETY DATA SHEETS (SDS) supplied with the material (also available on request) for more information.

**Technical Support** - The ENECON<sup>®</sup> 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<sup>®</sup> Fluid Flow Systems Specialist or the ENECON<sup>®</sup> Engineering Center.



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