

# XL-SSM Machinable Composite

## GENERAL DESCRIPTION

**XL-SSM** has been especially engineered for use in repairs requiring final machining. A filled material, XL-SSM has very good overall chemical resistance and physical strength. It can be easily built up to thickness of 1 inch or more and its cure time facilitates quick finished repairs. Shaft repairs may include applications subjected to sludge, oil, petrochemicals, acids, slurries, etc. XL-SSM has an excellent track record with a wide variety of materials.

## FEATURES

- Easily machined
- Very good wear resistance
- Excellent corrosion resistance
- Good temperature resistance
- Easily worked with in thick applications
- Excellent compressive strength
- Machinable with conventional tools

## PACKAGING

1 kg. (2.21 lb.) units; approximately 38 cubic inches

## COVERAGE

**XL-SSM** can be applied up to 1 inch or more. Theoretical coverage at 500 mils in thickness is 0.55 ft<sup>2</sup>/kg.

**COLOURS** : XL-SSM is steel gray in colour.

## MIXING RATIO

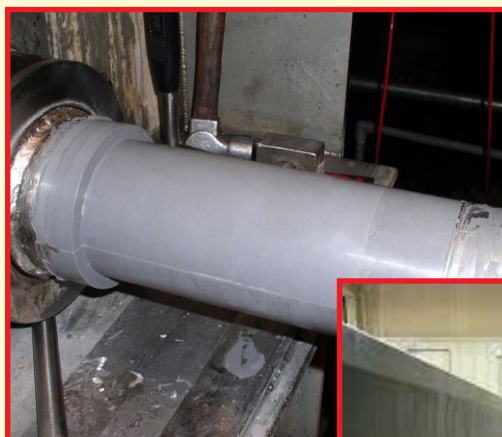
3 parts base (B) to 1 part (A) hardener by weight  
3 parts base (B) to 1 part (A) hardener by volume

## POT LIFE


































for a 1 kg unit mix at 21°C, pot life is approximately 25 minutes. High temperatures or larger mass will shorten this time, lower temperatures or smaller mass will extend it. Pot life can also be extended by spreading the mass out to dissipate heat.




## SURFACE PREPARATION

The area to be repaired should be machined down so that it is undercut to a minimum of 1/16 of an inch. The surface of the cut should be rough; a thread pattern or gramophone cut should be used. The ends of the cut should be keystoneed or undercut as far as the bit can cut, leaving a fine edge on the shaft. After machining, the area must be thoroughly cleaned with MEK or similar solvent to remove all traces of cutting or lubricating agents.



# CHEMICAL RESISTANCE GUIDE FOR XL-XAC

Acids										Alkaline					Hydrocarbons					Solvents					Misc-								
Hydrochloric Acid 37%	Hydrochloric Acid 20%	Nitric Acid 67%	Nitric Acid 30%	Nitric Acid 20%	Phosphoric Acid 85%	Phosphoric Acid 40%	Phosphoric Acid 20%	Sulphuric Acid 98%	Sulphuric Acid 50%	Sulphuric Acid 20%	Ammonium Hydroxide	Calcium Chloride	Calcium Hydroxide	Calcium Carbonate	Sodium Carbonate	Sodium Hydroxide 50%	Sodium Hydroxide 30%	Potassium Hydroxide	Crude Oil	Fuel Oil	Gasoline	JP-5	Kerosene	Mineral Spirits	Acetone	Benzene	Methylene Chloride	Methyl Ethyl Ketone	Toluene	Beer	Deminerlized Water	Seawater	Sodium Hypochloride
																																	

 Suitable for Immersion Service @ 70 Deg. F
  Suitable for Splash/Spills & Secondary Containment
  Not Recommended

## TECHNICAL DATA & INFORMATION

### Basic Chemical Resistance at Room Temperature:

Inorganic Acids Dilute	Very Good-Excellent
Organic Acids	Good-Very Good
Solvents	Good-Very Good
Alkalis	Excellent
Salts	Excellent
Alcohols	Excellent
Hydrocarbons	Excellent

### Typical Physical Properties of Cured System:

Density	1.83
% Solids	100
Flexural Strength @ 21°C	1322 kg/cm <sup>2</sup>
Tensile Strength @ 21°C	851 kg/cm <sup>2</sup>
Tensile shear @ 21°C	211 kg/cm <sup>2</sup>
Service Temperature Max.	218°C
Operating pH Range	1.5-14.0

## Mixing

Mix ALL of Part A with ALL of Part B. Mixing may be done on a large mixing board or container large enough to hold both the base and hardener. The selected mixing surface must be clean and dry. Mix the material thoroughly until no streaks of any kind are visible. If materials are cold, warm them to 21°C before mixing.

## Application :

**Cement :** Linings of duct of cement & raw mills, clinker feeding bins, hoppers & silos. Lining of pump casings, slurry tanks, Heat exchangers/condenser tube sheets of CPP, traveling water screens of CPP, external lining of DG sets & its ductings. Acids caustics, storage/vessel internal linings.

**Power Plant :** Ash slurry tanks, condenser water box & doors linings, cooling tower fans, coal bunkers, hydro scroll cases hydro wheels, hydro wicket gates, traveling water screens, circulating pump casings. Internal linings of water, acids, caustics & hydrocarbon storage tanks of DM plants. Trenches & floors of DM Plants, coal carrying rail cars.

**Steel Industries :** Internal linings of Gas holders, storage vessels in oxygen plant. Acids/caustics storage tanks & vessels in pickling plant & CRM, Iron ore slurry pump casings pipeline coatings.

**Other Industries :** Bulbous Noses, Bow & stern thrusters, corroded/cairtated wet lines. Discharge pipes, sea chests & scoops, sluice gates, valve body surfaces of marine/ship applications. Centrifuges, product chutes, pump casings stock chests of paper plant. Acids caustics hydrocarbons tanks of refineries.

## Storage

Store all product in a clean, warm area where the temperature remains between 60-90°F (15-30°C). Cold products are very viscous and will be difficult to mix and apply. Products shipped during cold months can remain cold for many days even when stored as recommended. Paste or trowel applied products will remain cold longer than liquid or spray applied products. Heating of the individual components may be required to bring the products to the recommended temperatures.

## Packaging- 1kg. / 5kg.

All products are formulated and tested for long term effectiveness in a variety of environments. The information listed is a compilation of over fifteen years of laboratory tests, material supplier data, field installations and technical publications. Because the only true reliable test is one that is in actual operation, no warranties either expressed or implied as to the performance of these products is given.

X'tralife to your wear prone components



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Technologies  
Private Limited

An ISO 9001:2000 Company

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# Wear & tear doctors to the industries