

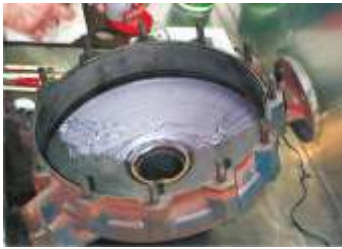
Material Data Sheet

Metal Protection Systems - High Wear Resistant, Energy-Elastic Composite Materials



Coating Of A Pumphousing

The interior of a pump housing was coated with **pro coat** to protect the metal walls against cavitation and corrosion.



Typical Applications

Reconstruction / protection against erosion, abrasion and cavitation at

- pump housings and pump impellers,
- turbines, valves, stop valves,
- pipes, slides, baffle plates etc.

Product Description

pro coat is a high wear proof, energy-elastic 2-component composite material for repairs and maintenance at machines, plants and systems of all kinds and is characterised by high wear resistance and tensile strength as well as a very good chemical resistance.

pro coat was developed especially as wear protection against erosion, abrasion and cavitation.

Repairs and corrective maintenance can be realised quicker, saver, more economic and easier with **pro coat**.

Liability optimize the **pro coat primer**



Properties

- ◆ high abrasion resistance
- ◆ high tensile strength
- ◆ very good chemical resistance
- ◆ high wear resistant
- ◆ energy-elastic
- ◆ high mechanical strength

Material Selection Criteria

pro coat is a 2-component composite material consisting of the two components A (base) and B (reactor).

pro coat is available in paste-like (P) and liquid (FL) consistence.

Shelf life

6 month

Package Sizes (cpl.)

250g
500g
1.000g

Preparation

Roughen the surface (sand blasting or grinding) to enhance the adhesion and degrease with **DIAMANT Cleaner**.

Remove possible humidity with a radiant heater.

Processing

Preparation

First apply **DIAMANT pro coat primer** to enhance the adhesion on metal surfaces.

Mixing

Mix both components (A and B) intensively considering the correct mixing ratio.

Application

Spread a thin adhesion layer of **DIAMANT pro coat paste-like** with pressure onto the surface and apply the necessary layer thickness immediately afterwards in one work flow. Apply **DIAMANT pro coat liquid** with a short-bristled brush. If there is a second coating necessary it has to be applied onto the not cured first coating (surface must be sticky).

- ◆ **pro coat** should be used completely, because the hardener component is moisture-sensitive. Crystallised material can be made ready for use again by heating up in a water bath / oven (40°C - 50°C, 1-2 h).

Range Of Products

DIAMANT pro coat is available in the following versions:

◆ P	#1775	paste-like
◆ FL	#1025	liquid
◆ primer	#1103	liquid

Notes: **pro coat primer**

The **pro coat primer** is a thin fluid, efficient primer for **pro coat paste-like** and **liquid**. **primer** is being used to enhance the adhesion on metallic surfaces and to bind humidity on the surface.

Application

Apply **pro coat primer** thinly by using a brush or a sponge. Depending on temperature or air humidity it can be continued to work after 2 - 3 hours.

Shelf Life:

min. 6 month

Use shortly after opening the original package, because the primer will be useless after reacting with humidity.

Package Size:

500g



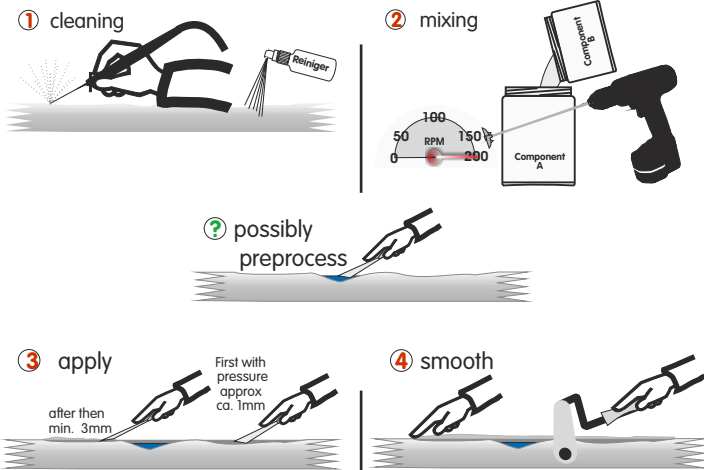
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Technical Data	P #1775	FL #1025	primer #1103
Pot Life (+20°C) [min]	20	30	-
pot life (+10 / 15°C) [min]	30	45	-
curing (+20°C) [h]	24	24	-
curing (+10 / 15°C) [h]	48	48	-
complete cure (+20°C) [days]	7	7	-
complete cure (+10 / 15°C) [days]	14	14	-
concentration [g/cm ³]	1,06	1,06	0,87 - 0,9
hardness DIN 53505 (+20°C) [Shore D]	40 - 45	40 - 45	-
hardness DIN 53505 (+20°C) [Shore A]	90 - 95	90 - 95	-
linear shrinkage (250x40x20mm) (1 week RT) [%]	0,1	0,1	-
temperature resistance [°C]	+ 120	+ 120	-
colour	alu	alu	green

All material values are average values and vary due to mixing ratio, material quantity and environmental conditions. The mentioned material values are based on normal conditions (STP) of 20°C (273K / 31,73°F) and 1013mbar (1013hPa).

It's this easy:



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Authorized
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ZERTIFIZIERUNG / CERTIFIED:
DIN EN ISO 9001 : 2000

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