



# HYPOXY STRONG STEEL STEEL REPAIR PUTTY

**PRODUCT:** H-1 1oz/28.4 gms.

**DESCRIPTION:** A two-component epoxy formulation highly filled with carefully selected pure steel fillers, modified curing agents, and special high quality additives to provide maximum strength, durability, and ease of application. Will adhere to vertical surfaces and is easily machineable with standard metalworking tools and equipment.

## APPLICATIONS:

STRONGSTEEL hardens to a gray metallic mass and adheres soundly to almost every material except for polyethylene.

A permanent, non-shrinking metallic filler for blow holes in castings. Ideal for building up metal surfaces. Widely used for fast, inexpensive, but accurate drill jigs and placement fixtures.

STRONGSTEEL is especially formulated for repairing valves, pumps, castings, water jackets, radiators, Pipe, Tanks, Engine Blocks etc.

STRONGSTEEL® is unaffected by water, oil and gasoline and widely used by professional tradesman worldwide.

STRONGSTEEL® cured deposit can be machined, sanded, drilled and tapped which makes it a popular choice for automotive, plumbing and HVAC repairs.



## PHYSICAL PROPERTIES:

Color -:	Dark Grey
Pot Life 1 lb. @ 24°C (75°F) -:	45 minutes
Viscosity -:	Non-sagging Paste
Mixed Viscosity -:	330,000 cps
Cure Shrinkage -:	0.0005 in/in
Temperature Resistance -:	250°F (121°C)
Hardness (Shore, ASTM D 1706) -:	83D
Cured Density -:	17.5 cu. in. per lb.
Coefficient of Thermal Expansion -:	40 X 10 <sup>-6</sup> cm/cm/°C
Compression Strength (ASTM D 695) -:	8,600 psi (59 M Pa)
Tensile Strength (ASTM D 638) -:	3,500 psi (24 M Pa)
Dielectric Strength -:	30 Volts / mil

## CHEMICAL RESISTANCE:

Hydrochloric Acid 10% -:	Very Good
Hydrochloric Acid 50% -:	Good
Sulfuric Acid 10% -:	Very Good
Sulfuric Acid 50% -:	Good
Water -:	Very Good
Ammonia -:	Very Good
Sodium Hydroxide 10%-:	Very Good
Gasoline, Oil, Kerosene -:	Very Good
Mineral Spirits -:	Very Good
Toluene -:	Good
Methanol -:	Fair
MEK -:	Fair
Propylene Glycol -:	Very Good



## TYPICAL APPLICATIONS :-

### 1. REPAIR A LEAKING PIPE –

- Clean, dry and roughen the area around the leak.
- Cut a piece of the fibre glass tape long enough to wrap around the leaking area three times.
- Thoroughly mix the HYPOXY STRONGSTEEL as instructed on packaging.
- Spread the mixed HYPOXY STRONGSTEEL on one side of the fibre glass tape and wrap the tape three times around the leaking area of the pipe. HYPOXY STRONGSTEEL side down.
- Thoroughly cover the exposed side of the tape with more HYPOXY STRONGSTEEL and allow it to cure.

\*\*The cost savings are substantial when you repair a leak with HY-POXY® STEELBOND® instead of replacing the pipe. Plus HY-POXY® STEELBOND® does not corrode so the repaired area will outlast the rest of the pipe

### 2. REPAIRING A CRACKED ENGINE BLOCK

- Clean, dry and roughen the area around the crack.
- Thoroughly mix HY-POXY® STRONGSTEEL® as instructed on the packaging.
- Spread the HY-POXY® STRONGSTEEL® over the crack and surrounding area to a thickness of at least 1/2" (12.55mm)

For a larger gap or hole follow the same procedure but attach a wire or fibreglass screen across the gap as a backing for the HY-POXY® STRONGSTEEL®.

\*\*The savings by using HY-POXY® STRONGSTEEL® for this repair are at least the cost of a new block!

### 3. Fill a blow hole in a casting.

- Clean and dry the cavity as much as possible.
- Thoroughly mix the HY-POXY® STRONGSTEEL® as instructed on the packaging.
- Fill the blow hole to slightly above the surface of the hole.
- After the putty hardens, it can be filed or machined off flush with the surrounding surface.

## DIRECTIONS FOR USE :

- Surfaces must be clean, dry, and preferably roughened for maximum adhesion if possible with file or sand paper. Do not touch the surface after they have been prepared.
- Squeeze out equal volumes of resin and hardener. Volume Ratio is 1:1.
- Mix thoroughly for 6 minutes, making ensure all the hardener comes in contact with resin.
- Apply the mixed compound with putty knife, spatula, or similar tool. The tool may be moistened with water to provide a smooth finish to the HY-POXY.

**CURING TIME:** At 75°F (24°C) a 1/2" (12.5mm) layer of HY-POXY STRONGSTEEL will hard in approx. 45 minutes. FULL cure times are as follows:

TEMPERATURE	WORKING TIME	FULL CURE TIME
60°F (16°C)	90 Minutes	32 Hours
75°F (60°C)	45 Minutes	16 Hours
90°F (32°C)	25 Minutes	8 Hours

**NON-WARRANTY:** We can accept no responsibility or liability for lack of results because the storage, handling, and application of the compound is beyond our control.

**PL CALL IN YOUR LOCAL AUTHORISED DEALER TO GET FULL ADVANTAGE OF PRODUCT TRAINING AND KNOW HOW TO MAKE MORE USE OF HY POXY PRODUCTS**



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