HYPOXY TITANBOND®

TITANIUM FILLED POLYMER COMPOUND

PRODUCT: H-900 1Lb (454 gms) Pack.

DESCRIPTION: A two-component Polymer formulation highly filled with carefully selected Special Metallic Fillers, Proprietary additives & modified curing agents to provide maximum strength, durability, high Temperature & chemical resistance and ease of application.
Cures at temperatures as low as 5ºC (40°F) Will adhere to vertical surfaces and is easily machinable with standard metal working tool.

HYPOXY TITANBOND is a trowel applied, machinable grade composite repair compound, formulated with Titanium fillers for maximum durability and performance.
Produces exceptional physical properties – compressive, tensile and adhesive strength – and is excellent for making permanent metal repairs.

HYPOXY TITANBOND deposit can be exposed to wide variety of chemicals – organic and inorganic acids, caustics, oils, solvents, and detergents for continuous exposure up to 177ºC & intermittently up to 210ºC.
The above feature makes it most suitable for casting repairs which further powder coated or chrome plated.

SUGGESTED APPLICATIONS

Repair of Pin holes, Blow holes, Surface irregularities in Aluminum & Steel Castings.
Fill up porosity in cast components.
Repair of damaged threads in cast components.
Repair of surface & subsurface cracks in Aluminum & Steel castings.
Worn Bearing Housings, Over size bearing & bush housing
Damaged Key-ways
Stripped Threads
Scored Hydraulic Rams
Worn Shafts Valve and Pump Components
Repairing Cracks in Engine Blocks
Scored Machine Beds
Distorted or steam cut flange faces
Fractured Castings
Ideal for Chocking and Levelling Machinery
Sealing Leaks in Storage Tanks, Pipes, Radiators,
Condensers, Heat Exchanger's and Flange.
Very high compressive strength makes it excellent for bedding and levelling machinery.

PHYSICAL PROPERTIES:

Color -:	Metalic Grey
Pot Life 1 lb. @ 24ºC (75ºF) -:	25 minutes
Viscosity -:	Non Sagging Paste
Coverage -:	¼" Thickness- 47 sq. inches per lbs.
Temperature Resistance -:	350ºF (177ºC)
Hardness (Shore, ASTM D 1706) -:	90D
Cured Density -:	11.9 cu. In. per lb.
Flexural Strength -:	7900 psi
Compression Strength (ASTM D 695 – 80)	18,400 psi
Tensile Strength (ASTM D 638)	2,400 psi
Adhesive Tensile Shear (ASTM D 1002) -:	2,158 psi

CHEMICAL RESISTANCE:

Hydrochloric Acid 10% -:	Very Good
Hydrochloric Acid 50% -:	Good
Sulfuric Acid 10% -:	Very Good
Sulfuric Acid 50% -:	Good
Water -:	Excellent
Ammonia -:	Excellent
Sodium Hydroxide 10%-:	Excellent
Gasoline, Oil, Kerosene-:	Excellent
Mineral Spirits -:	Excellent
Toluene -:	Good
Methanol -:	Fair
MEK -:	Fair
Propylene Glycol -:	Excellent
Trisodium Phosphate 5% -:	Excellent
Brake Fluid -:	Excellent
Ethaol -:	Excellent
Sodium Hypochlorite (Bleach) -:	Excellent

SURFACE PREPRATION :

Surfaces must be clean, dry, and preferably roughened for maximum adhesion. Proper surface preparation is critical to the long term performance of this product. The exact requirements for surface preparation vary with the severity of the application, expected service life, and the initial substrate condition.
Optimum preparation will provide a surface thoroughly cleaned of all contaminants and roughened to an angular profile between 75-125 microns (3 to 5 mils). This is normally achieved by initial cleaning, followed by abrasive blasting to a cleanliness of white metal (SA3 /SSPC-SP5) or Near White Metal (SA 2 ½ SSPC SP 10) followed by rinsing with an organic solvent which evaporates leaving no film residue.

MIXING : Add all of the hardener to all of the resin in the resin container. For smaller portions, dole out 2.5 parts resin to 1 part hardener by volume and 5 parts resin to 1 part hardener by weight.
Mix thoroughly for at least 6 minutes, making certain that all of the hardener comes in contact with all of the resin. While mixing be sure to scrape the sides and bottom of the container.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 TITANBOND.

WORKING LIFE AND CURING TIMES: At 75ºF (24ºC) a ½" (12.5mm) layer of HY-POXY TITANBOND putty will be useable in approximately 2 hours. FULL cure times are as follows:

TEMPERATURE	WORKING TIME (POT LIFE)	USEABLE CURE	FULL CURE TIME
40ºF (5ºC)	50 MINUTES	8 HOURS	32 HOURS
60ºF (16ºC)	35 MINUTES	3 HOURS	12 HOURS
75ºF (24ºC)	25 MINUTES	2 HOURS	8 HOURS
85ºF (30ºC)	18 MINUTES	1 HOUR	4 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.

HYPOXY SYSTEMS INDIA PVT. LIMITED

NEW DELHI – 110075. INDIA.

Mobile :- +91 9810247468, +91 9810352249

Tel. :- +91 11 28082018, Fax :- +91 11 45629850

E mail :- salesindia@hypoxy.com

Web site :- www.hypoxy.com