MAINTENANCE PRODUCTS

1. WEAR ABRASION RESISTANT PRODUCTS

Demech Wear Resistant products are specially formulated to impart outstanding resistance and cavitations. The commendable Wear Resistance is achieved by incorporation of special Ceramic fillers. These products have no substitute for attending maintenance, repairs and problems of pumps, cyclones separators and condenser tube plats etc.

a. WEAR RESISTANT PUTTY

A Ceramic fibers filled Epoxy offering excellent wear and abrasion resistant properties. This non-rusting, non-shrinking putty provides smooth, low friction finish for equipment exposed to wear, erosion and cavitations.

Salient Features

- Non-sagging and non-shrinking - ease of application for over-head and vertical surfaces and conforms to odd shapes.
- Offers excellent wear resistance for rotating or sliding parts – resists abrasion, corrosion, and cavitations.
- Renews worn surfaces fast - reduces downtime.
- Prolongs equipment life.

Application Area

- Pipes, Elbows, Transitions
- Pumps
- Butterfly valves
- Deflection plates
- Turbine Blades
- Tanks
b. BRUSHABLE CERAMIC

An ultra smooth ceramic reinforced epoxy that provides a high gloss, low friction coating to protect against turbulence, abrasion and cavitation.

Technical Details

- Excellent abrasion resistance
- Low coefficient of friction – very smooth surface
- Resistant to wear and abrasion

Salient Features

- Ceramic and silicon carbide filled
- Easy to mix and use – Ease of application reduces downtime
- Ultra smooth brushable consistency – High gloss finish to fight friction, turbulence and protect against cavitation
- Superior adhesion – Forms a solid bond

Application Area

- Coating of Heat Exchangers
- Coating of Condensors / Waterboxes
- Coating of Pumps
- Coating of Pipes & Elbows / Tanks
- Coating of Chutes, Impellers, Valves, Electrostatic Precipitators etc
- Resurfacing and repairing rudders and pintel housings
c. ANTI STICK

An epoxy base product especially designed by incorporating Nano particles provides high gloss, low coefficient friction coating to protect against turbulence, abrasion and cavitations.

Technical Details

- Excellent abrasion resistance
- Low coefficient of friction – very smooth surface
- Resistant to wear and abrasion

Salient Features

- Nano material filled for protection against abrasion, cavitations, bimetallic corrosion
- Ease of application reduces downtime
- Ultra-smooth brushable consistency – high gloss finish to fight friction, turbulence and protect against cavitations
- Superior adhesion
- Useful for repairs of equipment requiring food grade coatings

Application Area

- Heat Exchangers
- Water Boxes
- Condensers
- Pumps
- Pipes and Elbows
- Tanks
- Chutes
- Impellers
- Valves
d. **WEARING COMPOUND**

A two component epoxy designed to protect, rebuild and repair high wear areas of processing equipment. Due to ceramic filling offers outstanding resistance to abrasion and corrosion.

**Technical Details**

- Excellent wear resistant properties
- Abrasion resistant to overhead and irregular surfaces
- Higher compressive strength

**Salient features**

- Renews worn surfaces fast-reduces downtime
- Extends wear life-resists sliding abrasive wear and eliminates costly wear part inventory
- Wont sag or shrink-provides abrasion resistance on overhead and irregular surfaces
- Easy mix and use

**Application Area**

- Transport elbows and transitions
- Cyclone and separator bodies
- Dust collectors and exhausters
- Pump liners and impellers
- Fan blades and housings
e. PNEU WEAR HT

TUFF WEAR™ PNEU-WEAR HT is a two-component epoxy, incorporated with small ceramic beads for protecting processing equipment from fine particle abrasion. This trowel applied epoxy is recommended for rebuilding, repairing, and protecting pump housings, chutes, elbows, cyclones, and other material handling equipments against pneumatic dry abrasion.

Technical Details

- Max. operating temperature 235 ºC

Salient Features

- Provides abrasion resistance on over-head and vertical surface without sagging and shrinkage
- Ideal to work on uneven surfaces
- Easy to mix and use – renews worn surfaces fast, reduces downtime
- Small ceramic beads resist the sliding abrasion and prolong equipment life
- Maximum protection against pneumatic abrasion

Application Area

- Pneumatic conveying systems
- Elbows
- Pumps
- Hoppers
- Cyclones
- Dust collectors
2. METAL REPAIR PRODUCTS

The thermosetting properties of the resins have been utilized in developing special type of Compounds to suit the demands of industries. These compounds filled with different metal and non metal powders like steel, bronze, aluminium, ferrosilicon can be used to repair, restore, worn out and damaged parts, to get the equipment quickly back into service.

a. ALUMINIUM PUTTY

A two part epoxy system heavily reinforced with aluminium powder. Ideal for repairing aluminium parts or where an aluminium finish is desired.

**Technical Details**

- High Compressive Strength
- High Aluminium content- Cures to Aluminium like finish
- High bond strength
- High temperature resistance – 250 Oc

**Salient Features**

- Won’t sag or shrink – can be applied to overhead and vertical surfaces
- Conforms to odd shapes
- Easy to mix and use – rebuilds worn parts fast
- Reduces downtime
- Forms a non-rusting aluminum-like finish
- Superior adhesion – forms a solid bond

**Application Area**

- Repairing aluminum castings
- Repairing and rebuilding worn aluminum parts
- Making models and jigs for holding odd shaped parts
- Making aluminum dies
b. BRONZE PUTTY

A bronze filled epoxy compound for patching, filling, bonding and rebuilding bronze surfaces. Cured material has a bronze like finish that can be machined, drilled, tapped or filled just like the original metal.

Technical Details

- Excellent bond strength
- High Bronze content - Cures to Bronze like finish
- Good machinability
- Good chemical resistant properties

Salient Features

- Won't sag or shrink
- Easy to mix and use – rebuilds worn parts fast, reduces downtime
- For repairs of bronze components without hampering the aesthetics
- Ideal choice in place of brazing
- Excellent bonding to bronze, alloys, brass, copper etc
- Can be machined, drilled, and tapped

Application Area

- Patching non-structural defects in bronze castings
- Sealing cracked castings, tanks, vessels and valves
- Repairing holes
- Rebuilding bronze Impellers
- Renewing bolt and screw holes
- Making models and jigs for holding odd shaped parts.
c. FAST CURE STEEL PUTTY

A Fast curing steel reinforced, two part epoxy designed for making fast and durable repairs to a variety of metals.

Technical Details

- Excellent adhesion strength
- Fast curing properties
- Excellent solution for online leakage

Salient Features

- Hardens in ten minutes – fast emergency repairs that reduce downtime
- Cures in 4 minutes
- Steel filled system cures to a metal like finish
- Non-sag paste allows application versatility for overhead and vertical surfaces and conforms to odd shapes
- Bonds to steel, cast iron, stainless steel. Concrete and clean and abraded bronze, copper and aluminium

Application

- Arresting leakages in transformers
- Repairing of Stripped threads
- Repairing of Cracked battery cases
- Arresting leakages in Storage tanks
- Arresting leakages in Pipe and Elbows
d. METAL MAGIC STICK

A versatile product used in industrial maintenance which can be applied like putty with metal finish.

Technical Details

- Excellent bond strength in wet surface
- Fast curing
- Excellent solution for online leakage

Salient Features

- Good adhesion in presence of water- adheres to most damp surfaces
- Cures in 10 minutes- used for fast repairs
- Epoxy adhesive stick is used like putty and cures to a steel like finish
- Convenient packaging makes it very easy to use
- Adheres to most types of clean surfaces

Application

- Seals chemical tanks
- Stops leaks in pipes
- Fills oversized bolt holes
- Smoothens welds
- Repairs holes in elbows, cracks in castings
e. STEEL PUTTY

It is a steel reinforced two part epoxy that cures to a metal like finish and can be machined, drilled, tapped or filed. Repairs stainless steel parts on applications where a stainless steel finish is desired.

Technical Details

- Excellent adhesion strength even at high temperatures
- High compressive strength
- Good resistance to acid/alkali and solvents

Salient Features

- Resists rust and corrosion
- Rebuilds worn parts fast, reduces downtime
- High Steel content
- Superior adhesion
- Does not sag or shrink
- Can be machined, drilled or tapped

Application Area

- Sealing cracked castings, tanks, vessels and valves
- Arresting leakages in transformers, pipes & tanks
- Patching defects in steel parts
- Making models and jigs for holding odd shaped parts
- Making metal dies
- Resurfacing worn out portions
- Filling cavity areas
f. **SUPERIOR METAL**

A two component 100% epoxy system. It is extremely resistant to corrosion, chemical attack and abrasion. It is ideal for restoring worn surfaces.

**Technical Details**

- Outstanding Compressive strength
- Resistant to various chemicals, oil, water etc
- Excellent for rebuilding of steel

**Salient Features**

- Non Rusting Polymer Compound
- Can be machined, drilled and tapped
- Application versatility
- Long lasting
- Fast curing that helps equipment back to service in just few hours

**Application Area**

- Repair of Shaft keys
- Repair of Bearing Housing
- Reclamation of wornout Shafts
- Repairing of the damaged flange /coupling holes
- Repairing of engine blocks etc.
g. **WET SURFACE REPAIR PUTTY**

A two component epoxy formulation that adheres to damp and underwater surfaces.

**Technical Details**

- Excellent adhesion strength in wet conditions with metal substrate
- Excellent performance in vertical application
- Cures in moist conditions and even underwater

**Salient Features**

- Can be applied to wet and underwater surfaces
- Smooth, easily trowelable
- One to one mixing ratio
- No need for a thoroughly dry repair surface as it is required with conventional epoxies

**Application Area**

- Habitually wet environments in
- Pulp and paper mills
- Wastewater treatment plants
- Marine environments