

ResSI EPO Steel Putty 90 is a two-component, solvent-free, non-rusting Iron-filled epoxy repair compound designed for rebuilding, filling, and repairing worn or damaged metal surfaces. When mixed, the base and hardener react chemically to form a high-strength, machinable compound that adheres strongly to most metals and hard substrates.

It provides excellent mechanical strength, corrosion resistance, good heat conductance and long-term durability under service conditions, making it ideal for emergency repairs and maintenance applications in industrial environments.

FEATURES & BENEFITS

- ✓ Two-component, easy-to-mix and apply.
- ✓ Excellent adhesion to copper and most rigid substrates.
- ✓ Can be drilled, tapped, machined, or sanded after curing.
- ✓ Resistant to oil, water, fuels, and many industrial chemicals.
- ✓ Ideal for repairing worn parts, cracks, holes, and surface defects.
- ✓ High compressive and tensile strength ensuring durable repairs.

RECOMMENDED USES

- ✓ Repair of pumps, housings, shafts, flanges, valves, and other ferrous metal components.
- ✓ Rebuilding worn areas of machine parts, castings, and steel structures.
- ✓ Filling cracks, holes, corrosion pits and surface irregularities on iron and steel equipment.
- ✓ Restoration and maintenance of heavy machinery, gearboxes, engine blocks, and industrial equipment.
- ✓ Suitable for workshops, process industries, power plants and engineering applications.

SURFACE PREPARATION

All surfaces must be clean, dry, and free from oil, grease, rust, scale, and contaminants. For best adhesion, the substrate should be roughened by abrasive blasting or mechanical abrasion to achieve a minimum surface profile of 75 microns. After surface preparation, clean thoroughly with a suitable solvent cleaner to remove all dust and residues before applying the compound.

APPLICATION

Before use, thoroughly mix the Base and Hardener components in the ratio of 100:33 by weight until a uniform colour and smooth consistency are obtained. The mixed material should be applied immediately using a putty knife, spatula, or trowel.

The working time of the 100gm mixed material is approximately 90 minutes at 25°C, depending on ambient temperature. Machining, drilling, or overcoating may be carried out once the compound has fully cured, typically after 24 hours at 25°C. Clean all tools and application equipment promptly after use with a suitable epoxy thinner or solvent before the material hardens.

SHELF LIFE

12 months from date of manufacture (sealed containers).

TECHNICAL PROPERTIES

Property	Typical Data
Type	Two-component (Base + Hardener)
Mixing Ratio (by weight)	100:33
Appearance	Dark Grey paste
Density	1.67 ± 0.05 g/cm ³ (mixed)
Pot Life	70-90 minutes (100gm) @ 25°C
Touch Dry	4-5 hours @ 25°C
Full Cure	24 hours @ 25°C (faster with heat)
Compressive Strength	> 85 MPa
Flexural Strength	> 47 MPa
Temperature Resistance	Up to 90°C (dry service)
Solids	95% or above

PACK SIZE

Ressi EPO Steel Putty is available in the following pack sizes:

250 g and 85 g (Base + Hardener)
500 g and 170 g (Base + Hardener)

HEALTH AND SAFETY

Ressi EPO Steel Putty contains epoxy resins and amine hardeners. Avoid contact with skin and eyes and do not inhale vapors. Always wear gloves, goggles, and suitable protective clothing during use. Ensure adequate ventilation in the working area. In case of contact, wash immediately with soap and water and seek medical attention if irritation occurs. Refer to the Material Safety Data Sheet (MSDS) for complete safety and handling information.