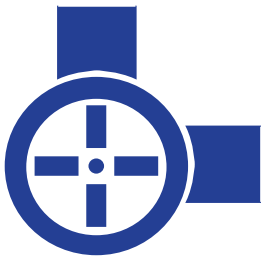


TITANIUM STICK

A titanium reinforced epoxy stick



Pipe & Metal Repair

What is Titanium Stick?

Titanium Stick is a two pack pre-measured, titanium reinforced, epoxy stick which has been specially formulated to bond and repair materials that are exposed to high temperatures in industrial applications.

Each stick contains pre-measured portions of base and activator. No measuring or mixing tools are needed – just cut, mix and apply.

Where can Titanium Stick be used?

Titanium Stick is suitable for use on a range of metals, but is particularly effective on iron, steel, stainless steel, titanium and ceramics.

This industrial-strength product cures tough and hard and bonds tenaciously to metals. After 8 hours of cure, Titanium Stick can be machined, tapped, drilled, ground or filed.

Titanium Stick does not adhere to polyethylene, polypropylene or PTFE.

Key benefits and features of Titanium stick

- Easy to mix, use and apply.
- Suitable for repairing corrosion and mechanical wear and tear of pumps, tools, engines, castings, pipes and shaped steel work.
- Suitable for rebuilding stripped threads, blow holes, castings, moulds.
- Solventless with a low odour.
- Longer working time before full cure than traditional sticks (Copper Stick, Aqua Stick etc)
- High operating temperature.
- Excellent resistance to a range of harsh chemicals.
- Very hard finish.
- Long shelf life – 2 years minimum.

Instructions for Use

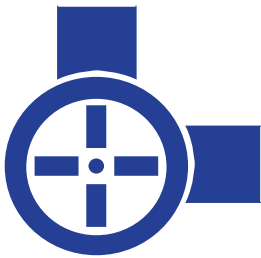
Before applying, roughen and clean the area to be repaired and follow the steps below. Wear impervious gloves when mixing and handling uncured product.

1. Roughen and clean the area to be repaired.
2. Wearing impervious gloves, twist or cut off the required amount of Titanium Stick with gloved fingers, then mix by kneading to a uniform colour.
3. Apply to the repair surface within 1 hour of mixing.
4. Force into any cracks or holes to be filled and strike off any excess material before hardening begins, preferably with a tool moistened with clean water. Heating Titanium Stick or applying to warm surfaces will accelerate the cure. For a smooth cured appearance, rub with water or a damp cloth prior to hardening.
5. After 2 hours, the epoxy will form a tenacious bond. Curing at higher temperatures (65°C/150°F) will provide a stronger bond and faster hardening; lower temperature will slow down the cure.



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6. After 8 hours at room temperature, Titanium Stick can be drilled, tapped and sanded.

For best results: Use damp fingers for easier mixing, application and a smooth appearance of the cured compound. Remove excess material before hardening begins.

Health and Safety

Before use, it is important that you have read the Safety Data Sheet in its entirety and the appropriate PPE is worn during use.

Uncured Properties

Work life @ 24°C	1.5 – 2 hours
Non-volatile content	>99%
Density	16.5 lb/gal (1.90 g/cm ³)
Functional cure	8 hours
Cure time to full cure @ 21°C	3 days

Cured Mechanical Properties

Shore D Hardness

@ 24°C	80	ASTM D2240
@ 260°C	48	ASTM D2240

Lap shear tensile strength (steel to steel)

Cured @ 24°C for 24 hours	2 MPa	ASTM D1002
Cured @ 65°C for 24 hours	5 MPa	ASTM D1002
Compressive Strength	8,000 psi (55 MPa)	ASTM D695
Shrinkage	<1%	ASTM D2566

Temperature Limits

Continuous	-40°C to +232°C
Intermittent	-40°C to +260°C

Chemical resistance	Resistant to hydrocarbons, ketones, esters, alcohols, halocarbons, aqueous salt solutions and dilute acids and bases
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Cured Electrical Properties

Electrical resistance	30,000 megohms-cm	ASTM D257
Dielectric strength	300 volts/mil	ASTM D149

