ThistleBond

www.thistlebond.info

Rebuild of eroded and corroded Pump Housings:

The Following ThistleBond section is concerned with the rebuilding of eroded and corroded pump housings and should be read in conjunction with the Technical Data sheets of the following ThistleBond Products: Super Metal Rebuilding System, Extended Life Super Metal Rebuilding System, Rapid Setting Super Metal, PlasSteel Twist Stick, Ceramic Carbide Wearing Compound.

COMMON DEFECTS

Pitting and Scarring on external surfaces produced by prolonged periods of exposure to highly abrasive products, leading to a reduction in performance and efficiency and ultimately holes in the outer surface of the pump housing. Without preventative maintenance or repair this can lead to scrapping of components.

PREPARATION

All work should be carried out in strict accordance with the relevant ThistleBond Technical Data Sheet. The product selection and application techniques should be based on the nature of the repair and the product being pumped.

SURFACE PREPARATION

There two types of repair that can be carried out by the ThistleBond product range.

1. If the pump housing cannot be taken out of service, but the system pressure can be turned off for 1-4 hours, thus stopping any product passing through the pump. The outer surface of the pump housing should be abraded using a grinding disc to remove any surface rust or surface contaminants. The area to be repaired should then be cleaned using ThistleBond Universal Cleaners.
2. If the pump can be taken out of service, then blast clean the damaged area to **Swedish Std SA 2 1/2 ensuring a profile of 75 microns minimum using an angular grit.** This method of surface preparation will ensure a longer lasting repair. After blasting, all damaged areas must be cleaned using ThistleBond Universal Cleaners.

APPLICATION TECHNIQUE

In situ repair and out of service repair– Using the chosen ThistleBond product, apply the material, using the applicator provided, in to the hole or crack. Ensure that the product applied has been pushed sufficiently into the surface of the pump housing and covers al of the effected area. Once this has been achieved apply the ThistleBond material onto the surrounding area to the repair, approximately 2” in all directions. The product should then be left undisturbed to fully cure before the equipment is returned to service.

TECHNICAL SUMMARY

PRODUCT	ABRASION RESISTANCE	WORKING LIFE (20C)	FULL CURE (20C)
SUPER METAL REBUILDING SYSTEM	GOOD	20 MINUTES	72 HOURS
RAPID SETTING SUPER METAL	GOOD	2-3 MINUTES	2 HOURS
PLASSTEEL TWIST STICK	FAIR	2-3 MINUTES	2 HOURS
CERAMIC CARBIDE WEARING COMPOUND	EXCELLENT	25 MINUTES	24 HOURS