

Pump Repair

January 15, 2009

Repairing with Polymer Material

READING ELECTRIC, a leading supplier of electro-mechanical equipment, services, and problem solver for Industrial and Commercial customers for over 50 years provides technical information to the Region's Residential, Commercial and Industrial Community. This Bulletin provides information on repairing pumps using Polymer Materials.

REPAIR APPLICATIONS: A method of repairing pumps that has gained acceptance because of cost and performance utilizes multi-purpose two-component, 100% solids polymer composites. These polymer composites quickly cure to a metal-hard material and can be easily machined on a lathe, drilled, tapped, filed, sanded and polished. There has been sufficient actual running field experience that has confirmed this method of repair for the following equipment. Many polymers have outstanding resistance to a broad range of chemicals including inorganic acids, alkalis, hydrocarbons, mineral oils, oxidizing agents, vegetables and fats, alcohols, aqueous solutions and emulsions. Check with the polymer Manufacturer for compatibility.

- Worn shafts
- Scored rams
- Stripped threads
- Cracked & holed casings
- Damaged Impellers
- Worn keyways
- Holed pipes, tanks, fittings, etc.
- Warped, distorted or steam-cut flange faces
- Oversize bearing & bush housings



PREPARING THE SURFACE FOR REPAIR:

The success of the repair is dependent upon the care taken in surface preparation, and is not unlike techniques used when applying most adhesive materials. In general the preparation steps are:

1. Remove all loose material and surface contamination.
2. Clean with a suitable solvent which leaves no residue on the surface after evaporation such as acetone, MEK, isopropyl alcohol, etc.
3. If necessary, apply moderate heat to remove ingrained oil and clean again with solvent.
4. Roughen surface by abrasive blasting, grinding, rotary file or other appropriate means.

*Rebuilding profiles underway**Another view of profiles**Completed application*

Note: In situations where adhesion is not desired, apply a suitable release agent (mold release compound, paste wax, etc.) to the appropriate surface.

REMEMBER: We offer 24 / 7 Repair Service.

For more information on Pump Repairs, Contact Russ Yerger at READING ELECTRIC at 80 Witman Road, Reading, Pennsylvania 19605. Phone: 610-929-5777; Fax: 610-929-1670; Visit our Website at www.readingelectric.com or email us for additional information at info@readingelectric.com

{TB578-011509}