

# Chockfast

## Pumpable Chockfast® Red Versaflow Grout for Lube Oil Skids

A modular, Lube Oil System is an essential type of equipment that provides critical lubrication and cooling to hydrodynamic bearings used in rotating process machinery and power generating systems. These systems are essential to the life and maintenance-free operation of process and power equipment.

A lube oil system has three basic purposes:

- Dissipate or settle contaminants
- Store a prescribed amount of oil and provide for rundown capacities
- Provide for temperature fluctuations, expansion volumes, location for heating, and oil purifier connections

Lube oil systems are fabricated on a modular steel skid, which is grouted to a concrete foundation. A high-performance epoxy grout is required between the steel and concrete for solid, precise alignment, support and vibration damping throughout the equipment life cycle.



*Lube oil skid formed and prepared for grouting*

### Solution:

Chockfast Red Versaflow epoxy grout was selected due to its:

- Outstanding working and cured physical properties
- Optimized formulation for placement with commercial grout pumps without aggregate reduction
- Placement with a grout pump reduces the need for head boxes and other, costlier, preparations necessary in using traditional installation methods
- High Effective Bearing Area (EBA) of >95%
- Chemical resistance



*Dumping mixed Chockfast Red Versaflow into pump hopper*

### Project Installation:

- Skid dimensions: 21 ft x 10 ft. (6.4 m x 3 m)
- Two separate pours were completed:
  - The first pour locked the skid to the concrete for precise support, alignment, and vibration damping
  - The second pour filled the 9" (23 cm) skid cavity depth to provide improved structural rigidity for additional vibration damping
- Due to winter installation, industry best practices of tenting & heating the work area, including equipment, and material, were used to create a stable and practical working temperature of 70-75° F (21-24° C)
- An electric powered rotor/stator pump system was used to transfer mixed material to the fill locations
- Installation was completed by a crew of 4



*Chockfast Red Versaflow being pumped under the skid*

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## Project Outcome:

The customer successfully completed the installation with Chockfast Red Versaflow grout, achieving their intended plan and schedule.

### Improved Labor Efficiency

- Strategic pumping of Chockfast Red Versaflow Grout eliminates larger crew sizes typically required for installing non-pumpable grouts
- Much time and money are saved by eliminating the need for head boxes and other, costlier, preparations necessary when using traditional installation methods

### Reduced Installation and Clean-up Time

- Improved fluid consistency of Chockfast Red Versaflow and pumping technique shortened the installation time required over traditional installation methods.
- Strategic pumping techniques give more control over the installation - reducing material spills, waste and allowing easier quicker cleanup once the job is complete
- Improved fluid consistency of Chockfast Red Versaflow eliminates the impulse to reduce aggregate - which is known to decrease grout batch yield but increase overall grout material cost

By using Chockfast Red Versaflow grout with an effective installation approach, the lube oil skid was quickly and easily installed with reduced time and cost. The precise and permanent alignment of the system, along with excellent vibration damping provided by Chockfast Red Versaflow, will help maintain tightness of valves & fittings, increase the foundation life and lower overall maintenance costs.



*Chockfast Red Versaflow pumped into lube skid cavity*



*Cured Chockfast Red Versaflow under the lube skid*

The technical information, recommendations and other statements contained in this sheet are based upon good faith tests or experience that ITW Performance Polymers believes are reliable, but the accuracy and completeness of such information is not guaranteed. This information is not intended to substitute for the customers' own testing.

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