APPLICATION CASE HISTORY – CHOCKFAST® RED HF

MOTOR-DRIVEN, GAS COMPRESSOR PACKAGE

Chockfast Red HF is the next generation, three component, 100% solids epoxy grout. Our latest product in a long line of successful machinery grouting and chocking compounds. Chockfast Red HF offers excellent high-flow qualities for improved working and placement - and it is pumpable. Chockfast Red HF is suitable for small and large volume pours achieving excellent cured properties for dependable, long-term service under difficult to grout industrial machinery and equipment.

The contractor achieved highly successful results using Chockfast Red HF - installing the grout under a gas compressor with an elevated foundation. This installation had great significance for the contractor - while it was their first installation using a pump placement method, it was also their first installation using epoxy grout.

Approximate skid dimensions (each)
32 ft (9,754 mm) L x 16 ft (4,877 mm) W

Foundation dimensions (each)
35 ft (10,668 mm) L x 19 ft (5,791 mm) W

Design grout clearance
2.0 in (51 mm) Actual clearance range 1.5 - 2.0 in (38-51 mm)

Average jobsite weather conditions during grout installation
Clear, 60 - 90°F (15 – 32°C)

The contractor completed installation of Chockfast Red HF using pumped placement technique. The pump used was a Model P-25 grout pump, manufactured by Machine Technologies.

40 units, or 100 cu. ft. (2.83 m³, 2,832 liter), of Chockfast Red HF was required to complete the job.

DIFFERENT FACTORS WERE TAKEN INTO CONSIDERATION ON THE DECISION TO USE CHOCKFAST RED HF AND THE PUMPED INSTALLATION METHOD

Application complexity The fabricated skid had a substantial size “footprint” – large overall dimensions that can make preparations and installation of grout more difficult and costly. In addition, the equipment package was located on a 3 ft (914 mm) elevated foundation. The additional time needed and cost involved with setting up the work area (platforms, head troughs, equipment needs, etc.) became a key consideration to the final selection of Chockfast Red HF, and the pump placement method.

Remote location Nobody need imagine the ramifications of being unprepared for the grout work in a remote location.

CHOCKFAST® RED HF EPOXY GROUT
A HIGH-FLOW, PUMPABLE EPOXY GROUT
Once on site, it is critical to success that the installer have a sufficient and knowledgeable workforce, along with all tools & equipment necessary for getting the grout work done. Any delays while onsite would have a negative effect on their cost control and profitability. Seamless planning and execution of the grouting operation was vital to success.

Weather conditions Summer time in dry climates and at high elevations can provide for a wide temperature cycle within a 24 - hour period – with cool nights and hot days. The weather conditions outside had a direct effect in the work area even though the installation work was inside a building. Grouting in potentially hot conditions required the work commence early in the morning to take advantage of the cooler temperatures.

WITH THIS SUCCESSFUL GROUT INSTALLATION, SIGNIFICANT GOALS WERE ACHIEVED

Using the pump placement method, considerably less labor, equipment and materials were required to perform the work – contributing a significant reduction in time and overall project costs. This project demonstrated how easy Chockfast Red HF is to use and the simplicity of the pump placement method for installation of epoxy grout under difficult-to-grout applications. Having no previous experience with using epoxy grouts or grout pumps, the contractor was able to achieve definitive success the first time out with proper instruction on material, equipment and technique.

The selection of Chockfast Red HF for this installation also provided a number of major enhancements to the grout operation and performance benefits to the customer. The fluid consistency of Chockfast Red HF does not require reducing aggregate loads to improve grout flow and helps to reduce grout waste – less volume is required to achieve desired results versus standard grout formulations.

The fluid qualities and unique formulation of Chockfast Red HF are also keys to consistent performance when using grout-ready pumps as a placement alternative. Using pumps can save time and money on costly assembly and dismantling of head boxes, grout troughs and platforms that may be required when placing grout in a conventional manner. Pumping also makes it increasingly easier to reach areas with very limited access with a high level of placement control. The large unit size and improved mixing process of Chockfast Red HF allows for more productive grout batching – producing greater amounts of mixed grout with less effort and time. This provides more ready material on-hand for placement and high-output placement.

Excellent working & cured physical properties are achieved with Chockfast Red HF even at shallow depths:
• Long working time, but fast curing rates.
• High cured structural properties - compressive, tensile, flexural.
• High Effective Bearing Area (EBA) – greater contact for better load spread and vibration damping.

The equipment package was placed on a 3 ft (914 mm) elevated foundation.

The additional time needed and cost involved with setting up the work area (platforms, head troughs, equipment needs, etc.) when using conventional installation methods...

...became a key consideration to the final selection of CHOCKFAST Red HF and the pump placement method.

The installation crews had no prior experience with using epoxy grouts nor with pump placement of epoxy grout. With the proper instruction, the job went off without a hitch.

Pumping allowed for strategic point placement of the grout under critical structural members.

Segmentation of the pour area underneath the skid into smaller sections...

...and provides much needed pour control to the crew.

Pumping CHOCKFAST Red HF ensures the contact needed between equipment and foundation for critical support and load transference.

www.chockfast.com