APPLICATION CASE HISTORY – CHOCKFAST® RED HF

HIGH-SPEED 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.

Approximate skid dimensions
40 ft (1220 mm) L x 15 ft (458 mm) W
18.0 ft (5486 mm) L x 52.0 ft (15850 mm) W - 3 total

Grout clearance
1.5 in (3.81 cm)

Jobsite Conditions During Grout Installation
Clear, 55 - 80°F (12.8 – 26.7°C)

The Installation was performed using two - pump / mortar mixer crews stationed on opposite sides of the compressor skid. The grout pumps used were Model P-25 grout pumps, manufactured by Machine Technologies.

A total of 80 cu. ft. (2.27 m³, 2266 liters) of Chockfast Red HF were used to complete the job in less than 3 hours. The entire grouting operation took place with no interruption.

WITH THIS SUCCESSFUL GROUT INSTALLATION, SOME SIGNIFICANT FIRSTS WERE ACHIEVED

First large-scale field installation of ITW Performance Polymers Chockfast Red HF.

First installation under the target application which Chockfast Red HF was primarily designed around - high-speed gas compressor packages. Their large skid footprint and low grout clearances make this type of equipment one of the most difficult grout installations in industry and the ideal application to demonstrate the flowability and versatility of Chockfast Red HF.

First installation of Chockfast Red HF using grout pumps for placement.
THE SELECTION OF CHOCKFAST RED HF FOR THIS INSTALLATION PROVIDED A NUMBER OF KEY ENHANCEMENTS TO THE GROUT OPERATION AND VALUED 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 grouts. Ultra flowable grout genuinely pushes easier and moves faster.

The large unit size and improved mixing process of Chockfast Red HF allows for more productive grout batching - greater amounts of mixed grout are produced in a shorter period of time with less effort. This provides more ready material on-hand for placement and complements higher grout output placement methods (like pumping).

The alternative installation option of pumping Chockfast Red HF makes it increasingly easier to reach areas with very limited access like found in many skid package applications. Pumping allows for high level of placement control.

Equipment location, the mass of piping & other obstructions and inaccessibility of the fabricated steel skid create difficult challenges to the installer when placing grout using standard methods. This can mean increased set-up, installation and tear-down costs. This cost multiplies when there are several pieces of equipment to be grouted. Using pumps can save on expensive assembly and dismantling of head boxes, grout troughs and platforms that may be required when placing grout in a conventional manner.

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

After mixing A&B liquids (in the mixer) 5 - 40 lb. bags of aggregate are added to the liquid blend
The pump is engaged and CF Red HF is fed through a flexible rubber hose to discharge point

Point discharge gives the grout handler a high level of placement control
CF Red HF moves out from under perimeter skid flange

CF Red HF is easily placed between piping and other obstructions
Completed grouting with CF Red HF - end flange - perimeter
Completed grouting with CF Red HF - pipes and bottle supports