APPLICATION CASE HISTORY – CHOCKFAST® RED HF

A SERIES OF HIGH-SPEED COMPRESSOR SKIDS WERE GROUTED USING CHOCKFAST RED HF

Skid dimensions (each)
14.0 ft (4267 mm) L x 32 ft (9754 mm) W - 3 total;
18.0 ft (5486 mm) L x 52.0 ft (15850 mm) W - 3 total

Design grout clearance – 2 in (51 mm)
Actual clearance range – 1.5 – 2.5 in (38 - 64 mm)

Mean outside temperatures during grout installations
82-50°F (28-10°C) Max High – 96°F (36°C);
Min Low - 37°F (3°C)

The contractor completed installation of Chockfast Red HF using pumped placement technique.
The installations employed two – pump / mortar mixer crews stationed on opposite sides of the compressor skid. The pumps used were the Model P-25 grout pump, manufactured by Machine Technologies.

The installation crew grouted six packaged skids using a total of 1,225 cu. ft. (34.7 m³; 34,688 liters) of Chockfast Red HF packaged in 2.5 cu. ft. units (0.071 m³; 70.8 liters).

Different factors were taken into consideration on the decision to use Chockfast Red HF and the pumped installation method.

Construction schedule
The client required the grout work performed as quickly as possible to contribute in expediting the construction schedule for the project. This meant using the best method to achieve minimum turnaround between grouting operations.

Remote location
The plant site was in a remote location. Once on site, the grout crew and their tools & equipment were solely committed to 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
In late summer, the weather conditions at the project location were hot with dry days and cool nights. Grout installations in these conditions required a special preparation, handling and installation approach to achieve consistent results.
WITH THIS SERIES OF SUCCESSFUL GROUT INSTALLATIONS, 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 overall project costs. Focusing on minimum turnaround between grouting operations made possible with the pump placement approach, the contactor completed all grout installations over a two-week period. This reduced the number of schedule days originally planned to carry out the work – applying significant time saving to the overall construction schedule.

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 – produce greater amounts of mixed grout with less effort and time. This provides more ready material on-hand for placement and high output placement.

Chockfast Red HF provides excellent working & cured physical properties even at shallow depths.