



Chem Grout CG-600

Test hole drilling & filling

CASE STUDY

Background

Perth-based mining contractor, Ranger Drilling, was contracted by Rio Tinto Hope Downs Mine to deliver a works package including drilling and grouting of exploration test holes ranging in depth from 70m to 200m. These holes allow for geotechnical testing equipment to be inserted and grouted into position for the purpose of monitoring water pressure and ground movement. The job site endures harsh conditions, including very high temperatures, and is situated in a remote rural location. Ranger Drilling required a short-term rental solution specific to this project.

CGS Solution

The ChemGrout CG-600 Diesel Hydraulic Colloidal mixer was identified as the ideal solution. This grout plant is a heavy-duty, high-volume colloidal mixing plant. The 368L high-shear colloidal mixer is equipped with a centrifugal diffuser-type pump rotating at speeds up to 2,000 RPM that disperses the cementitious material down to its finest particle size to achieve complete particle wetness. The mixing tank is also equipped with a bridge breaker to break apart the material before entering the colloidal mix pump.

The agitated storage tank, with a 0.37m³ capacity, is equipped with a variable-speed, high-efficiency paddle mixer that maintains a thoroughly mixed grout while waiting to be pumped.

The grout pump is connected directly to the agitated storage tank to provide a continuous pumping operation.

The positive displacement, rotor-stator progressive cavity pump can deliver up to 76L/min.

The CG-600 is ideal for neat cement, bentonite, microfine cements, flyash, lime dust, and post-tension grout mixes.

Over 37 cubic metres of bentonite was batched and pumped during the first stage of the project. The highly efficient colloidal mixer enables a low water-to-cement ratio, resulting in very high-strength grout with little, if any, bleed water release.

Contact CGS Equipment today to discuss how the Chem Grout range can help your business deliver bigger, better projects with confidence.

