

Dust Supression on Well-Known Rotary Drilling Machine

Location	Sweden	Hydra-Cell model	G25XKCTHFEYA
Type of application	Dust Suppression	Flow rate	Up to 75 l/min (20 gpm)
Liquid	Water	Pressure	Up to 5 bar (725 psi)
Application details	The dust control system on one of the mining industry's most advanced and powerful large-diameter rotary drilling machines now relies on the Hydra-Cell G25 pump for water injection. The pump was installed in March 2012, preferred over unsatisfactory piston plunger pumps, and has run on continuous duty at a Swedish copper mine with no problems reported (as of December 2012). Three more drilling machines of the same type also working on this site will be equipped with G25 pumps in the near future.		
	Dust problems are created during rotary blast-hole drilling by the (necessary) use of compressed air to drive rock chips to the surface from the cutter head. The area round the hole is enclosed within a hood but the dust must be controlled – very often by injection of water into the air stream.		
	Although the injection pump may be favourably housed (as in this case) within the machine's control cab, water with particulate content can cause severe wear in plunger pumps and by restricting inlet piping lead to dry-running problems as well.		
	The Hydra-Cell's seal-less design and its Kel-Cell diaphragm position control technology avoids both these difficulties.		
Advantages of Hydra-Cell pump on this application	Seal-less design, with tolerance of particulate liquids. Dry running without damage. Compact build.		

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