

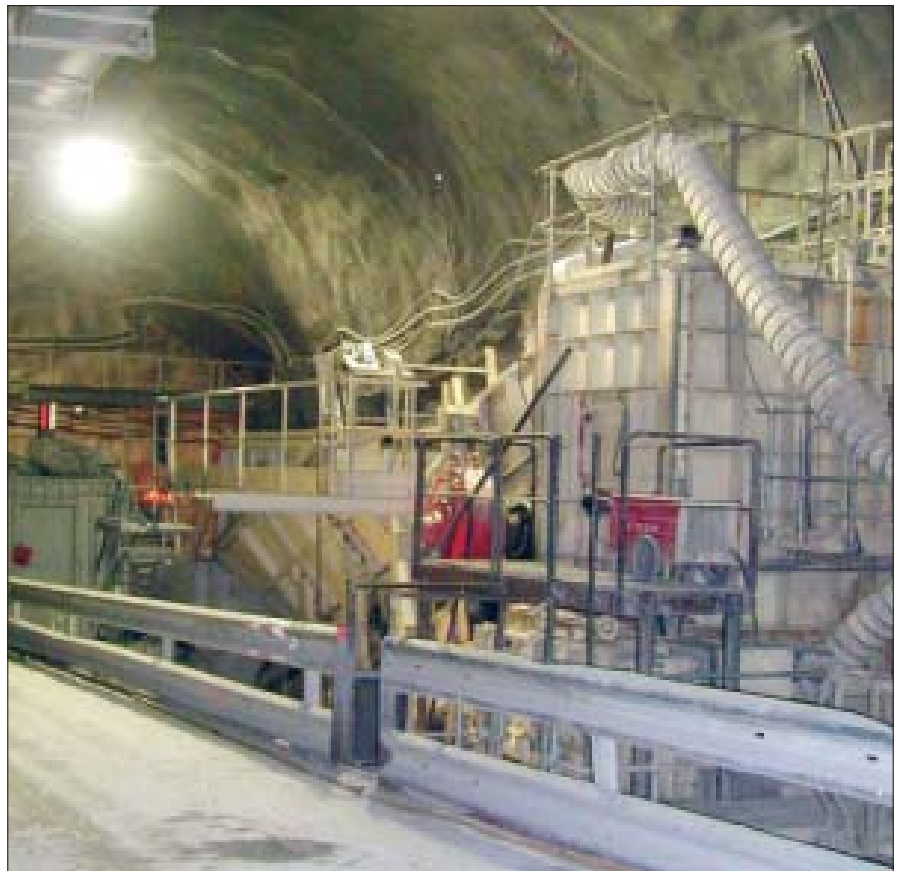
# In extremes of climate

## All around the world with MMD Mining Machinery Developments

▶ British company MMD Mining Machinery Developments design and manufacture a wide range of exceptionally compact mineral sizing machines used in mining operations. The Sizers reduce infeed material to a relatively small size, such that the outfeed can be conveyed out of the mine, or prepared for further processing.

MMD is a long-term customer of Hägglunds, utilising drive systems on many successful projects around the world. In 1990 the very first MMD application with a Hägglunds drive was started. It was a fully mobile rig with Marathon drives on the Sizer, the Feeder and the Outfeed Conveyor. Hägglunds diesel power units were used and flows were diverted to feeding the track drives when not needed for the Sizer. Many and varied sizes of system have been supplied since then to all corners of the globe, from the tar sands of Canada, with extremes of temperature from - 40° to + 40°, to Thailand, Venezuela, China, Africa and tunnelling projects in Switzerland.

2004 Hägglunds supplied drive systems to applications in Mali Northern Africa (using the CB motors) South Africa, Jamaica as well as 13 very large Feeders, each with complete drive systems, going to Columbia.



One of the mobile MMD rigs that has been operating in Swiss tunnel projects over the last couple of years. The rig has a drive system from Hägglunds with the Marathon motor on the feeder, the Compact motor on the conveyor and a central power unit.

The Sizers are of various size and can be either built into static crushing plants, fully mobile machines or semi mobile depending on the customer requirements. The Sizer Stations often comprise an MMD heavy duty apron plate feeder

which pulls the material from a hopper, (often a natural ground hopper) and feeds the primary material to the Sizer. Standard widths of the feeders are usually 1.5 m, 2.0 m, 3.0 m and 4.0 m with a length to suit the application.

The MMD Sizer contains a pair of contra-rotating shaft assemblies, which have relatively large teeth, co-operating on opposed drums to break the mineral ore. A wide range of MMD Mineral Sizers are available, which, along with the tooth design and configuration determines the maximum size of in-feed material and final product size that can be efficiently processed. The length of the sizing chamber is a major factor on the volume of material that can be processed. The fully mobile rigs are produced with tracks, takeaway conveyors and many auxiliary systems which rely upon hydraulic functions, all of which are incorporated in power units supplied by Hägglunds. ■



The rigs have to operate in varied climates.

Top photo: an MMD installation at Sean Quinn Cement in Ireland.

Middle photo: an MMD sizing rig in a coal mining operation, Zhungeer China.

Below photo: A fully mobile machine with drives from Hägglunds on the sizers, feeder and outfeed conveyor, tracking into position in the Tar Sands of Alberta Canada 1991.

