MINEROS BUCKET DREDGERS

CUSTOMER
Mineros SA, El Bagre, Colombia

BACKGROUND
Mineros SA operates bucket dredgers on the Nechi River near El Bagre, Colombia.

In 2007, Mineros purchased hydraulic drive systems to replace the electromechanical bucket line drive systems on Dredger 14 and 16.

The bucket line drives on each of these dredgers have a total rated torque of 796,000 Nm (7,045,197 lbf-in) – that's 398,000 Nm (3,522,599 lbf-in) on each side.

The dredgers operate virtually continuously, digging through around 15 metres of mud before mining gold from around 10-12 metres of auriferous gravel on the river bed.

APPLICATION
The bucket line drives are fitted with a total of 12 Dellner SKP 220-248 SA single acting disc brakes. The brakes hold the gravel belt during maintenance or for replacement of the big buckets.

Each brake provides a tangential braking force of 294,400 Nm (2,605,661 lbf-in).