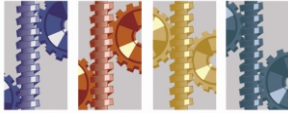




OIL FILTRATION SYSTEMS

CJC™ Application Study

Lubrication oil - Ball mill SAG



INDUSTRY

*Application Study
written by:
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2002

CUSTOMER

Disputada de Las Condes CMD,
Mining Company.
Faena Los Bronces, Chile.

THE SYSTEM

Ball mill SAG.
Main lubricating system.
Tank: 6,000 litres.
Oil: ISO VG 150.

THE PROBLEM

The oil was highly contaminated with pulp (ore-silica-water). The contamination caused numerous production stoppages.

THE SOLUTION

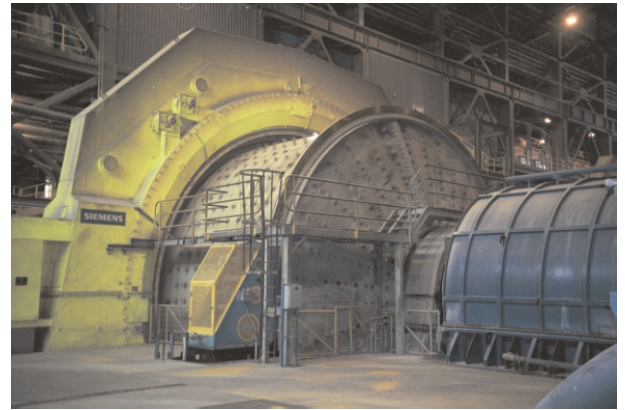
2 CJC™ FineFilter HDU 27/54.
Dirt holding capacity: 8 kg each.
Filtering level:
3 micron absolute / cellulose insert.
Heater: 3 kW.
Pump flow: 400 litres/hour.

THE RESULT

The oil was passed through the filter only once. After seeing the instant visual improvement of the oil CMD authorised payment for two units.

The cost to CMD inclusive of spares was US\$ 10,000.

In 5 days the oil and storage tank was cleaned, avoiding any production stoppages, costing in the region of US\$ 90,000.



SAG Mill usually employed by mining company in Chile.

THE RESULT

Part./ 1 mL:	2-5 µm	5-15 µm	15-25 µm	~ISO Code 4406/1999
Before the filter:	*)	697,670	197,066	* /27/25 ¹⁾
After the filter:	*)	42,317	6,396	24/23/20
Tank, 5 days:	70,795	18,877	59	24/21/13
	Before:	After:	5 days:	
Silica:	49 ppm	13 ppm	16 ppm	
Iron:	25 ppm	8 ppm	8 ppm	

*) 2 µm particles are not measurable in highly contaminated oil.
¹⁾ ISO Code 27/25 is normal in mining crushers and mills.

COMMENTS

Mr. Fernando Cavassa C,
Grinding maintenance chief - CMD L.B.:
"The equipment was installed just to clean the oil periodically. However, due to the outstanding results, it has been installed to operate continuously."

