



OIL FILTRATION SYSTEMS



INDUSTRY

*Application Study written by
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CJC™ Application Study

Cone Crusher - Gear Oil

CUSTOMER

Compania Minera Disputada, Chile.
Nature of business: Copper Mine.

THE SYSTEM

Norberg Symons 5 1/2 std. Cone Crusher (for medium and fine crushing of minerals) containing 800 litres of Esso Spartan 68 oil.

THE PROBLEM

The system suffered from grossly contaminated oil resulting in oil changes every 3 months and frequent, costly spare part replacement.

THE SOLUTION

CJC Fine Filter HDU 27/54 P-Y (400 ltr/hr) fitted with **B 27/27** (3 µm absolute) **Filter Inserts**. The CJC™ Filter unit is also equipped with a 125 µm suction filter.

Each CJC™ Filter Insert is capable of removing oxidation products, solid particles and water, and has a dirt holding capacity of 4 litres.

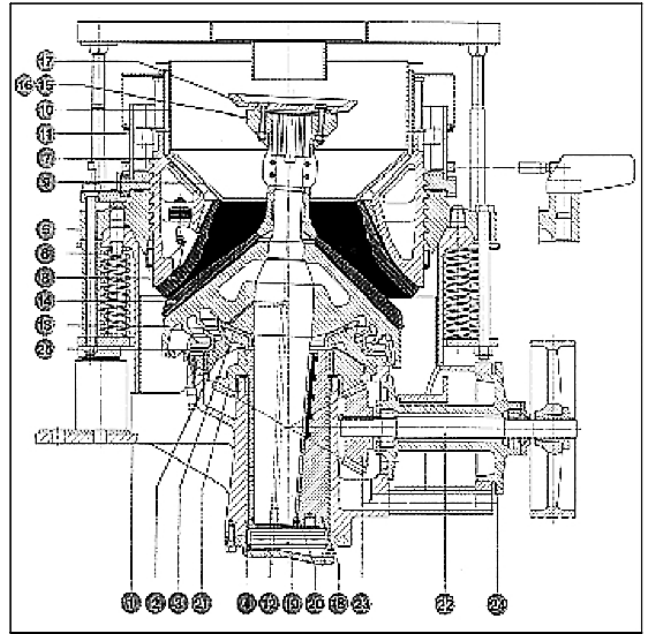
THE TEST

A comparison test was carried out on two identical cone crusher systems (crushers nos. 3 & 4). Crusher no. 3 has the CJC™ Filter fitted. Oil samples were taken from both systems after 2,300 and 1,200 hours.

THE RESULTS

After 300 hours of CJC™ filtration the contamination in crusher no. 3 was reduced by a factor of 6. After the same period the oil in crusher no. 4 had to be changed due to high particle contamination and subsequent increase in viscosity.

The filter inserts in the CJC™ Fine Filter on crusher no. 3 were replaced after 1,200 hours. The inserts were weighed and proved to contain up to 12 kgs. of dirt each.



Norberg Symons 5 1/2 std. Cone Crusher



*CJC™ Fine Filter
HDU 27/54 P-Y*



*Used CJC™ Filter Insert
type B 27/27*

THE RESULTS

ISO 4406	After 2 h	After 300 h	After 1200 h	Maintenance cost US\$
Crusher no. 3 with CJC filter	22/15	16/12	17/11	13,950.00
Crusher no. 4 without off-line filter	22/16	27/22	*)	4,975.00



C.C. JENSEN

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