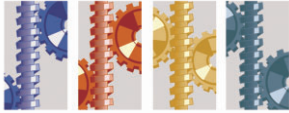




OIL FILTRATION SYSTEMS

# CJC™ Application Study

## Gear Oil - Cone Crusher



### INDUSTRY

*Application Study  
written by:  
Kim Kjær  
C.C.Jensen A/S  
Denmark*

*In cooperation with:  
Marcelo González L.  
C.C.Jensen Chile, S.L.*

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### CUSTOMER

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

### THE SYSTEM

Norberg Symons 5½ 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™ FineFilter HDU 27/54 P-Y** (400 L/h) fitted with **2 CJC™ FilterInserts B 27/27** (3 µm absolute). 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.

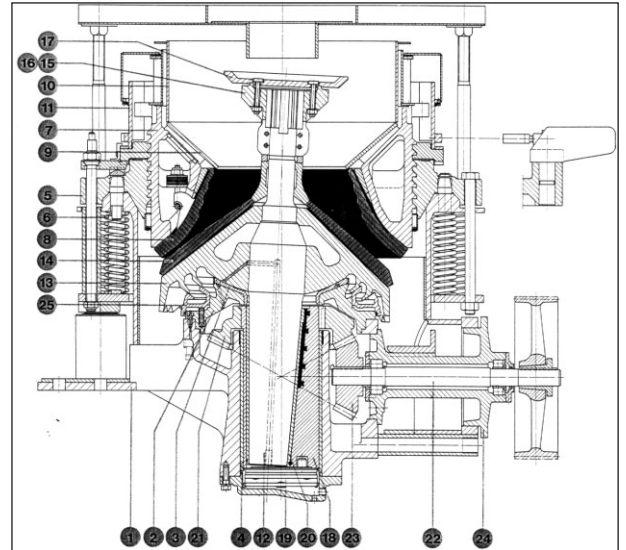
### THE TEST

A comparison test was carried out on two identical cone crusher systems (crushers No. 3 and No. 4). Crusher No. 3 has the CJC™ Filter fitted. Oil samples were taken from both systems after 2, 300 and 1200 hours.

### THE RESULT

After 300 hours of CJC™ oil filtration the contamination in crusher No. 3 was reduced by a factor 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 ½ std. Cone Crusher.



CJC™ FineFilter  
HDU 27/54 P-Y



Used CJC™ FilterInsert  
Type B 27/27

### THE RESULT

ISO 4406 Maintenance	After 2 h	After 300 h	After 1200 h	Cost US\$
Crusher No 3 With CJC™ Filter:	22/15	22/16	17/11	4,975.00
Crusher No 4 Without CJC™ Filter:	22/16	27/22	*)	13,950.00

\*) Oil on crusher No 4 was changed after 314 hours.

