



**CLEAN OIL  
BRIGHT IDEAS**

# Hydraulic Oil Steel Strip Mill, Exit System

## CJC™ Application Study

Application Study  
written by:

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In cooperation with:  
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2001



### CUSTOMER

CORUS, Shotton Works, United Kingdom.  
(Formerly known as British Steel plc.)

### THE SYSTEM

The Exit system operates the Coil Traversing Beam, which transports heavy steel coils weighing up to 30 tonnes from the Pickle Line Bay.  
**Oil system:** 4,500 litres, Shell Tellus 1800, ISO VG 32, hydraulic oil.

### THE PROBLEM

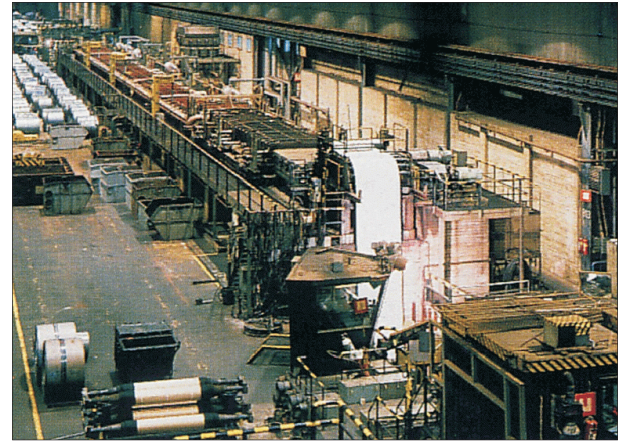
Historically, the system suffered from various hydraulic problems, such as pump failures frequently not coming on load, loading valves sticking, hydraulic shock, cooler failures, subsequent water ingress and contamination of the system. Plans to upgrade the system with proportional valves were progressing, but first a solution to control the contamination had to be decided.

### THE SOLUTION

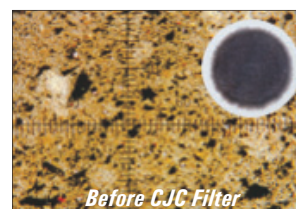
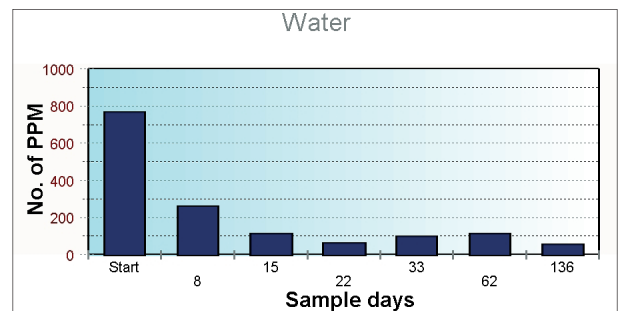
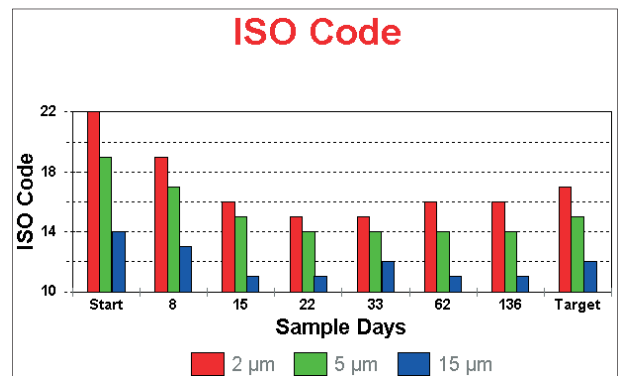
**CJC™ Filter Separator PTU3 27/108 P-EPW**, 2/speed motor and pump flow rates of 600 and 1,200 L/h. Installed with 4 of **CJC™ Filter Insert BLAT 27/27** (3 µm absolute), and water separation with **CJC™ Coalescing element**.

### THE RESULT

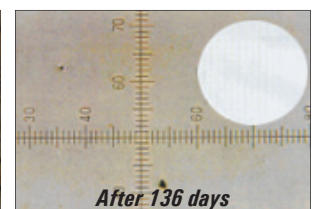
Within two weeks, improvements to system oil cleanliness were apparent, both visually and from analysis resulting in better hydraulic performance. In-line filter life had increased by a factor of 8. Water / moisture was under control, which permitted their Engineering Department to upgrade the system.



*CSM, Pickle Line - BWG Exit.*



*Before CJC Filter*



*After 136 days*