

HYDRAULIC & LUBRICATION **Application Bulletin** PRIMARY METALS

Ultipleat® SRT filters protect continuous casting process

Application

In response to the increasing demand of the worldwide steel market, many steel makers have started to upgrade their rolling mills to meet customer requirements for volume and quality.

System Operating parameters:

Water-glycol fluid, 46 cSt @ 40°C, typical operating temperature 40°C (104°F).

Problem

Existing systems suffer from:

- Too many variable displacement pump failures
- Recurrent blockage of proportional valves,
- Excessive fluid contamination levels: ISO 4406 cleanliness code ~ 18/17/15.

The customer's objective was to improve the reliability of the hydraulic system and increase production rates

Solution

- Off-line:
 - 2 x Pall Ultipleat® SRT UR619 20" length filters @ 120 L/min (32 US gpm) 'AN' media ($\beta_{7(c)}$ >1000)
- Pressure-line:
 - 6 x Pall Ultipleat SRT UH319 20" length filters @ 225 L/min (60 US gpm) 'AP' media ($\beta_{5(c)}$ >1000)
- Filling-line:
 - 1 x Pall Ultipleat SRT UT319 20" length filters @ 30 L/min (8 US gpm) 'AP' media ($\beta_{5(c)}$ >1000)



6 x Pall Ultipleat SRT UH319 Series on the pressure line



Pall Ultipleat SRT UR619 Series filters on off-line loop circuit

Results

- Stabilized cleanliness level: ISO 4406 code 15/13/10.
- Significant reduction in piston pump and proportional valve failures
- Improved machine reliability and availability, reduction of downtime, & increased profitability at this site

Contact us at www.pall.com