

BOLLFILTER AUTOMATIC REDUCE DOWNTIME at Continuous Casting Line

Outokumpu is one of the world's largest manufacturers of stainless steel. Its UK melting operations in Sheffield incorporates SMACC (Stainless Melting & Continuous Casting), which converts recycled material to produce some 500,000 tonnes of stainless steel each year. Using a continuous casting process, the stainless steel is produced for a huge variety of applications – from car exhausts to aerospace components.

The Outokumpu continuous casting line operates 24 hours a day, using water sprays fed from a central cooling water system to maintain the correct operating temperature and maintain casting quality. In order to prevent nozzle blockages, the cooling water must be filtered to remove particulates introduced during the process or in the open holding tanks. Previously this had been done using 80-mesh basket filters on the water feed to each casting zone.

Ten BOLLFILTERs Automatic Type 6.18 have been installed on the cooling water spray system – set up to automatically backflush after each casting cycle.

Kevin Davis, Engineer, explains the benefits. *“We have saved the manpower required to clean each basket filter during our monthly shut down. More importantly, we have never had to stop the line during casting to clear a blocked nozzle – something that typically used to occur once a month. With the high costs of downtime and maintenance, we have estimated a payback period of under 6 months for the cost of the filters.”*

Client	Outokumpu Continuous Casting
System	Ten BOLLFILTERs Automatic Type 6.18 Flow rate 60 m ³ /hr Filtration level: 250 micron



TOP. Images from the SMACC Continuous Casting Line.
CENTRE. Kevin Davis, Outokumpu Engineer.
BOTTOM. Part of the Installation of BOLLFILTER Automatic Type 6.18 serving the central cooling water system.



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