

Automatic river water filtration for protection of the Turbine cooling system in Schwarzach storage power station

The Hydro-Electric Power Station lies on the Salzbach riverbank south-west of the town of Schwarzach in Salzburg. In the turbine hall stand four Francis spiral turbine units, each one with nominal power output of 34,400 kW.

The numerous turbine cooling systems are supplied with river water from the Salzbach. During flood conditions the proportion of suspended particles and glacial sediment increases dramatically in water supply. The filter systems originally installed were not able to deal with these conditions being too maintenance-intensive and not adequately protecting the turbine cooling systems.

Only after installation of the BOLL & KIRCH automatic system precisely dimensioned to the special operating conditions of the plant was it possible to achieve the safe, low-maintenance and optimum operation of the turbine cooling system in the power station Schwarzach. The Automatic BOLLFILTER Type 6.18.2 HD installed there is able to cope with the operating fluctuations of flow, pressure and dirt-load primarily because the Heavy Duty (HD) construction, super-efficient backflush technology and precision engineered filter element technology are designed for this purpose.

Franz Harlander, the responsible foreman at the power plant Schwarzach, confirms: "This filter type has been in operation for some time to our complete satisfaction and with a manageable maintenance effort."



Schwarzach storage power station on the bank of the Salzbach's river.



Franz Harlander near the BOLLFILTER Automatic installation in the machine hall of Schwarzach storage power station



removed and examined filter element

- Customer** VERBUND Hydro Power AG
- Operator** VERBUND Hydro Power AG
- System** BOLLFILTER Automatic Type 6.18.2 HD DN 350
 - Flow rate: 1.350 m³/h
 - Filter fineness: 500 Microns
 - Filterfeinheit: 500 Mikron



BOLL & KIRCH Filterbau GmbH
Siemensstr. 10 -14,
50170 Kerpen, Germany
Tel.: +49 2273 562 0
Fax: +49 2273 562 223
info@bollfilter.com
www.bollfilter.com