

Hydro Power plant Big Creek Water Works

Filtration solutions for seal water

Background:

Big Creek Water Works is an independent hydro turbine built in the 1980s. After over 30 years of service the original axial bearings were replaced with wooden bearings. Clean bearing seal water is needed for the new bearings and the client initially installed a manual filter. This system was expensive and time consuming requiring regular cartridge changes.

Description of the solution:

The BOLLFILTER Automatic Type 6.04 was chosen to replace the cartridge filters. It was easily installed and reliably filters the water used to power the turbine in a self-cleaning process. The power plant is very remote which makes reliability critical. For this reason, the client chose to install a second BOLLFILTER Automatic Type 6.04 in parallel to secure continuous operation.

Added value for the customer:

After one year of successful operation, the following advantages have been identified:

- No human intervention required
 - Reduced personnel costs
 - Reduced maintenance – 50 hours per year
- Finer Filtration (80µm)
 - Leaner water which prolongs the life of the main bearings
 - Avoiding costly repairs of bearings

System in use: BOLLFILTER Automatic Type 6.04 DN 40
Filtration grade: 80 microns
Filtration element: mesh wire filtration
Flow Rate: 5 l/s

Client: Big Creek Water Works



Water Source for Bearing Seal Water



BOLLFILTER Automatic Type 6.04 DN40