HPP Gamp, Austria

Hydro Steel Structures

Kuenz installed the complete hydraulic steel structure system, including trash rake cleaning and the crane systems for the weir.

For the revitalization of the Gamp Hydropower Plant, Salzburg AG trusted in Kuenz.

Positioned seeling plates before concreting

Kuenz gantry cranes

Weir with flaps in down position

The Gamp Hydropower Plant in Hallein, Austria is operated by Salzburg AG and belongs to the the Flachgau – Tennengau hydro plant group in the province of Salzburg. It is important for Salzburg AG to produce electricty out of renewable, environmentally-friendly energy sources, and to utilize these resources to the fullest. The Gamp Hydropower Plant was completed in April 2007 and since then has been supplying 15,200 households with electricity.

Kuenz supplied the weir gates and the equipment of the hydraulic steel structures for the powerhouse. The weir system demonstrates Kuenz´s new and patented assembly technique. This innovative technique shows efficiency in the construction progress by featuring significant time-saving techniques for concrete construction. Concrete installation and hydro steel structure assembly can be separated and well-coordinated. Recesses and grouting with secondary concrete can be avoided.

Kuenz's assembly technique

- Adjustments on the completed concrete level
- Erection and anchorage of sealing plates and reinforcement
- Placing and pouring of concrete

For the revitalization of the Salzach Hydropower Plant, Salzburg AG´s utmost concern was to pay attention to nearby environmental and ecological zones. Ecological compensation measures, such as one of the most modern fish ladders and amphibian spawning grounds, significantly increase the ecological balance in proximity to the hydro plant.

Markus Matschl,
Project Manager Hydro Steel Structures, Salzburg AG
„Kuenz has delivered the best concept for this challenging installation site. Also the good teamwork has been proven once more.“

Technical data on the HPP Gamp project	
Data power plant:	
Capacity	8.6 MW
Power generation	53 GWh
Weir plant	3 main weir flaps 1 radial gate
Data weir:	
Radial gate	1
Clear width	10 m
Clear height	5.2 m
Swivelling angle of gate	84°
Lifting capacity	1060 kN
Flaps	3
Clear width	26.7 m
Clear height of flaps	4.6 m
Data gantry crane:	
Capacity	2 x 18 t
Track width	11.2 m
Length of craneway	134.5 m
Lifting height	15.5 m
Data trash rack cleaning machine:	
Type	RRM H1000
System implemented with a rotatable gripper	
Width of rake	2.7 m
Hoisting speed	20 m/min
Cleaning depth	17.2 m
Rack inclination	18°
Cleaning force at the rack	30 kN
Length of rail track	22.5 m

The best references are successful projects.

PCH de Pouzin, France

The French company Compagnie Nationale du Rhône consigned Kuenz with the delivery of inlet stoplogs, a stop log lifting frame and the inlet trash rack for the hydropower plant Pouzin. A Kuenz Trash Rack Cleaning Machine Type H1000 takes care of the proper removal of debris.

HPP Prem, Germany

Kuenz furnished the hydro-mechanical components for the rehab of Prem hydroelectric station in Germany. Customer Uniper ordered two vertical low level outlet gates and three sets of tailrace stoplogs.

HPP Illspitz, Austria

The complete hydro-mechanical eqipment package for the new Illspitz hydroelectric station was supplied by Kuenz. The scope included three radial gates with flap on top, spillway stoplogs and two draft tube gates. Further, Kuenz installed two sets of turbine intake stoplogs, intake trash racks and two stationary trash rack cleaning machines of type K1.

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