

## METLAC, MEXICO

### Environmentally-friendly beer production

Cerverceria Cuauhtemoc Moctezuma SA de CV is a beer factory in Mexico. It is part of the Heineken Group. In June 2017, the factory received a prize for environmental excellence based on its consumption of renewable energy. Some 20% of the factory's electricity demand comes from its own hydropower plant, Metlac.

Because of its long-held expertise in small hydro and its important local presence and support network in Mexico, ANDRITZ Hydro received a contract to refurbish the plant. The scope of the contract comprises supply of three generating units including Francis horizontal turbines, butterfly inlet valves,

synchronous generators, a cooling water system, automation, and complete electrical power systems. The contract also includes removal of the old equipment and installation and commissioning of its replacement. Executed in an open consortium between the ANDRITZ Hydro locations in Grenoble, France, and Morelia, Mexico, this order again shows the competence of ANDRITZ in the small and mini hydropower market, as well as the strong international cooperation between all our locations.

#### AUTHOR

Sergio Contreras  
hydronews@andritz.com

#### TECHNICAL DETAILS

Total output: 7.37 MW

Scope: 3 × 2.45 MW

Head: 125 m

Speed: 900 rpm

Runner diameter: 618 mm



## EMBALSE DIGUA, CHILE

### 91 GWh per year of clean energy

ANDRITZ Hydro has signed an important contract with Chile's Besalco Energia Renovables (BSER) for the supply of the electro-mechanical equipment for a small hydropower plant. The contract is for the Embalse Digua plant in the Maule Region of Central-Southern Chile.

ANDRITZ Hydro's scope of supply comprises the complete electro-mechanical equipment for the hydropower station, as well as additional equipment required for the by-pass irrigation system. The contract includes turbines, generators, butterfly valves, Howell Burger discharge valves, mechanical and electrical auxiliary equipment, and the complete control and protection system. In order to take full advantage of the system's seasonal variations in head and flow rate, two additional turbine runners with a design especially suited to usage in the dry season are also part of the contract.



Commissioning and hand over of Embalse Digua is scheduled for the last quarter of 2019. It will provide about 91 GWh per year of clean energy to the Chilean Central Interconnected System (SIC).

#### AUTHOR

Diego Pigozzo  
hydronews@andritz.com

#### TECHNICAL DETAILS

Total output: 20 MW

Scope: 2 × 10 MW

Voltage: 6.6 kV

Head: 71.4 m

Speed: 428.6 rpm

Runner diameter: 1,450 mm