# Ñuble

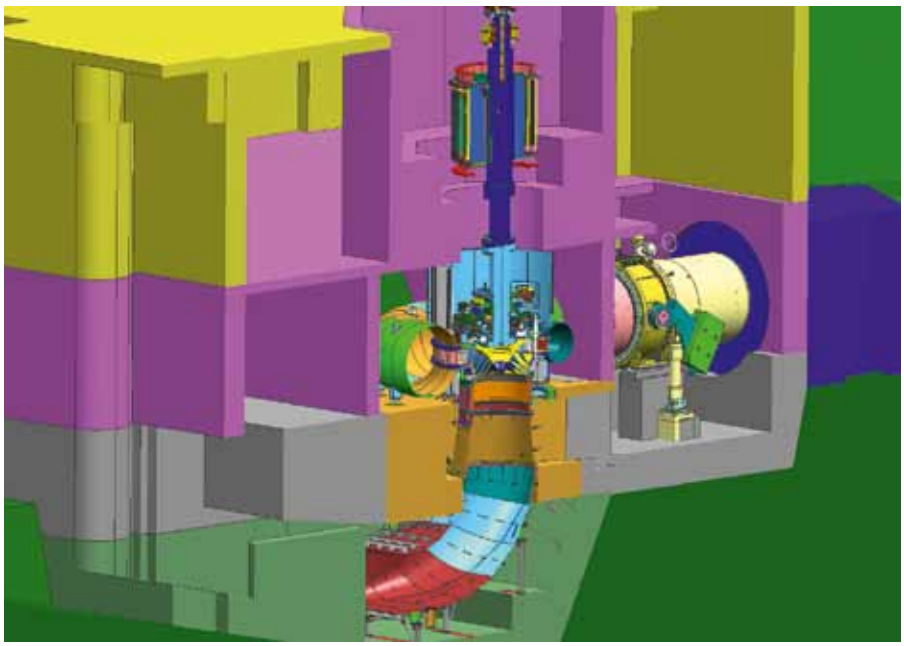
## Electromechanical equipment for a new hydropower plant in Chile

**ANDRITZ HYDRO has recently signed a contract with Hidroelectrica Ñuble SpA for the complete electromechanical and hydromechanical equipment of the new Ñuble hydropower plant in Chile. Hidroelectrica Ñuble SpA is a subsidiary of the Chilean power holding company Electrica Puntilla S.A.**

The Ñuble run-of-river power plant is located about 4.8 km upstream of the town of San Fabian in the Bío Bío region and uses the water of the Ñuble River and its tributaries. The hydropower plant has a daily regulated area of 300,000 m², which was designed to regulate the outflow to the river in compliance with the environmental protection scheme.

An important aspect of the final decision to award ANDRITZ HYDRO with the contract was our strong and consolidated presence in Chile, our leading technical competence, as well as the high quality of equipment and services of all ANDRITZ HYDRO projects executed in Chile so far.

ANDRITZ HYDRO's scope includes supply, installation, supervision, commissioning, and on-site training for two vertical 71 MW Francis turbines and governors, two butterfly inlet valves including hydraulic control, two synchronous 75 MVA generators with static excitation systems, the electrical power systems, the mechanical auxiliaries systems, as well as the complete systems for Automation, Control and Protection (ACP), including communication from/to the national dispatch center. Furthermore, ANDRITZ HYDRO will deliver the penstock, six spillway radial gates (head: 22.4 m), two channel radial gates (head: 8.2 m), one intake wagon gate, two draft tube gates, and the complete architectural finishing of the power house.



▲ Schematic layout drawing of turbine and generator

The electricity generated by HPP Ñuble, will be supplied directly into the national grid (SIC) for domestic use. With an estimated annual energy production of 620 GWh, it will make an important contribution to meet the increasing energy demand of the country. The start of commercial operation is planned for May 2017.

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| TECHNICAL DATA |
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| Output: 2 x 71 MW / 2 x 75 MVA |
| Voltage: 13.8 kV / 230 kV |
| Head: 152.5 m |
| Speed: 333 rpm |
| Runner diameter: 2,230 mm |

▼ Vertical Francis turbine section