

PROJECT REFERENCE

Integrated Steam and ORC Heat-Recovery Reference

High-pressure condensate energy recovery

A representative Boomtec Industry project record for high-pressure condensate energy recovery.

Application	High-pressure condensate energy recovery
Customer / location	Confidential industrial customer in China
Heat source	Water / high-pressure condensate
Inlet temperature	184 °C
Inlet pressure	1.1 MPa(a)
Flow rate	31.45 t/h
Reference output	1.5 MW ORC plus 4.5 MW steam-turbine configuration
Expander / model	Radial-inflow expander for ORC; steam turbine for the integrated configuration / OTG-1500 plus steam-turbine configuration
Bearing / working fluid	Maglev bearing for the ORC unit; oil-bearing steam-turbine configuration / Water / process steam
Cooling / controls	Water cooling / DCS control; grid interface project-specific

Project configuration and supply boundary

Flash tank, ORC generator set, steam-turbine generator set, circulating-water pumps, aftercooler, condensate tank and pump, piping, instrumentation, valves, DCS cabinet, low-voltage cabinet and high-voltage grid cabinet

Reference status

Project status recorded in source file: operating

Scope note: This summary translates only clear information available in the project record. Final equipment selection, performance, certification, interfaces and supply scope remain application-specific and require confirmation against the customer's actual operating data and agreed project boundary.