Desuperheater Spray Water Flow

11/10/2026

Project: desuperheater-spray-water

Input Parameters

Inlet steam flow	20,000 kg/h
Inlet steam pressure (absolute)	64.000 bar
Inlet steam temperature	480.00 °C
Outlet steam pressure (absolute)	12.000 bar
Outlet steam temperature (target)	250.00 °C
Spray water pressure (absolute)	80.000 bar
Spray water temperature	130.00 °C

Calculated Results

Spray water flow	3,644.7 kg/h
Outlet steam flow	23,645 kg/h
Spray water per kg of inlet steam	18.224 %
Saturation temperature at the outlet	187.96 °C
Outlet superheat	62.035 K
Inlet steam enthalpy	3,370.1 kJ/kg
Outlet steam enthalpy	2,935.7 kJ/kg
Spray water enthalpy	551.64 kJ/kg