Steam Consumption from Heat Duty

11/10/2026

Project: steam-flow-from-heat-duty

Input Parameters

Heat duty	1,000.0 kW
Steam pressure at the user (absolute)	8.0000 bar
Steam condition	Dry saturated
Steam temperature (superheated only)	250.00 °C
Condensate sub-cooling below saturation	0 K

Calculated Results

Steam flow	1,758.4 kg/h
Saturation temperature at p	170.41 °C
Steam enthalpy	2,768.3 kJ/kg
Condensate enthalpy	721.02 kJ/kg
Heat given up per kg of steam	2,047.3 kJ/kg