Boiler Blowdown Rate (TDS Balance)

11/10/2026

Project: boiler-blowdown-rate

Input Parameters

Steam generated	10,000 kg/h
Dissolved solids in feedwater	150.00 ppm
Maximum dissolved solids in boiler water	3,000.0 ppm
Drum pressure (absolute)	10.500 bar
Feedwater temperature	105.00 °C

Calculated Results

Blowdown flow	526.32 kg/h
Blowdown as a share of steam	5.2632 %
Blowdown as a share of feedwater	5.0000 %
Feedwater flow	10,526 kg/h
Cycles of concentration	20.000
Heat leaving with the blowdown (above feedwater)	48.422 kW
Boiler water enthalpy (saturated liquid)	772.10 kJ/kg
Feedwater enthalpy	440.90 kJ/kg