

Revised Water Quality Table as of 2021

The water quality parameters have been standardized for *Shell&Tube + Flooded* and *Brazed Plate Heat Exchangers*, as reported in the following table:

DAE Water quality requirements	Shell&Tube + Flooded	BPHE
Ph (25 °C)	6.8 ÷ 8.4	7.5 – 9.0
Electrical conductivity [$\mu\text{S}/\text{cm}$] (25°C)	< 800	< 500
Chloride ion [$\text{mg Cl}^- / \text{l}$]	< 150	< 70 (HeatPump) < 300 (CoolingOnly)
Sulphate ion [$\text{mg SO}_4^{2-} / \text{l}$]	< 100	< 100
Alkalinity [$\text{mg CaCO}_3 / \text{l}$]	< 100	< 200
Total Hardness [$\text{mg CaCO}_3 / \text{l}$]	< 200	75 ÷ 150
Iron [$\text{mg Fe} / \text{l}$]	< 1	< 0.2
Ammonium ion [$\text{mg NH}_4^+ / \text{l}$]	< 1	< 0.5
Silica [$\text{mg SiO}_2 / \text{l}$]	< 50	-
Chlorine molecular ($\text{mg Cl}_2/\text{l}$)	< 5	< 0.5