## **ABBREVIATIONS**

Acronym Full Form

ANN Artificial neural network

AI Artificial intelligence

ASW Aspen simulation workbook

BS&W Basic sediment and water

CAPEX Capital expenditure

CFD Computational fluid dynamics

DCS Distributed control system

DDP Dehydration and desalting process/plant

DSS Decision support system

GRG Generalised reduced gradient

HSE Health, safety and environment

bbl/day Barrel per day

LM Levenberg-Marquardt

MLP Multilayer perceptron

MSE Mean squared error

OPEX Operational expenditure

ppm Parts per million

ptb Pounds per thousand barrel

RBF Radial basis function

RTO Real-time optimization

SRE Salt removal efficiency

VP Model Versatile process model

WRE Water removal efficiency

WW Wash water