

S1.6.3 High Pressure Pumps for Membrane Technologies

Peter Cartwright,

Cartwright Consulting

The crossflow, pressure-driven membrane separation technologies require pressure as the driving force to effect separation.

Pressure requirements can range from as low as 30 psig for microfiltration (MF) applications, and up to 1000 psig for reverse osmosis (RO) seawater desalination applications.

This presentation describes the types of pumps utilized for these technologies and defines the engineering and economic considerations involved in total system designs.