

Introduction

Seawater is heated and vaporized in each stage, condensing the vapor into freshwater using Multi-stage flash distillation (MSF), which also includes anti-corrosive technology. MSF is a widely used desalination process that involves multiple evaporation stages.

Concentrated solar power(CSP) is another widely used process for energy production.

USP:

Conventionally, MSF uses fossil fuels to heat the water which is Expensive, exhaustible and contributes to pollution
We are integrating the concentrated solar power technique which is:

Clean, inexhaustible and cheaper, in the long run, and for large-scale.

MSF also offers

high energy efficiency

suitable for large-scale desalination projects.

Tech Stack: Concentrated solar power(CSP)

Multi-stage flash distillation(MSF)

Use case:

CSP-MSF distillation can be used to

Desalinate seawater or brackish water,

Providing a source of fresh water for irrigation, industrial processes(like food processing), groundwater recharge.

Potable water for daily consumption in arid regions where freshwater resources are scarce.

Showstopper:

MSF distillation faces challenges such as dependency on Sun.

