



Plants for the Simultaneous Production of NaCl / Na_2SO_4

Advantages

Producing high quality NaCl and Na_2SO_4 in the same plant offers an attractive means of utilising sulphate rich brines as a feedstock for salt works to maximise revenue by:

1. Minimising Brine Feed

- Less solution mining → Lower pumping costs
- Smaller brine purification plant → Reduced chemical consumption
- Smaller crystallization plant → Smaller equipment
→ Lower overall plant cost

2. Reducing Purge Flow

- Lower salt losses → Higher NaCl recovery
→ Pure Na_2SO_4 as by-product

3. Environmental Gains

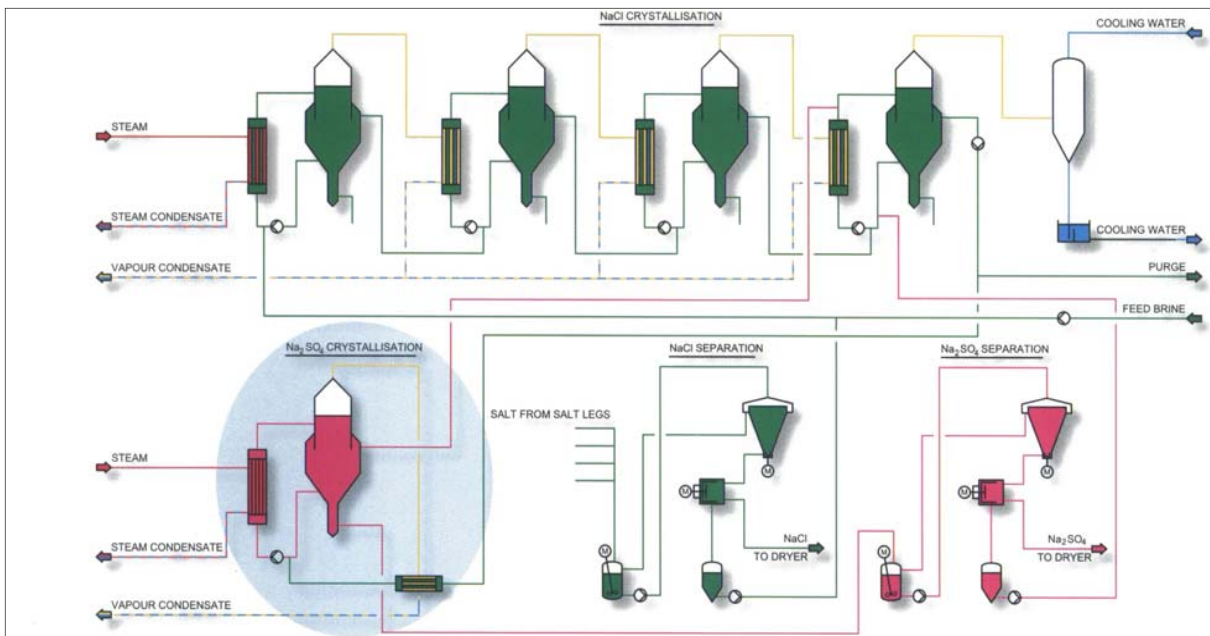
- Less purge from crystallization → Reduced disposal cost
- Less sludge from brine plant →



Installation of NaCl/Na₂SO₄ combined plant



Circulation pump



Typical Flow Diagram

Plant Characteristics

- Production capacities of up to 1.2 million tpa
- Advanced concepts to minimize operating costs
- Depending upon the relative costs of steam and and electric power, the design can be based upon:
 - ⇒ Multiple effect (ME)
 - ⇒ Mechanical Vapour Recompression (MVR)
 - ⇒ Thermal Vapour Recompression (Ejectors)



SEP Salt & Evaporation Plants Ltd.
Neuwiesenstrasse 69
CH - 8400 Winterthur
Switzerland
Phone +41 52 260 50 70
Fax +41 52 260 50 80
info@sepwin.ch
www.sepwin.ch