# **Single Super Phosphate**

# Single Super Phosphate (SSP)

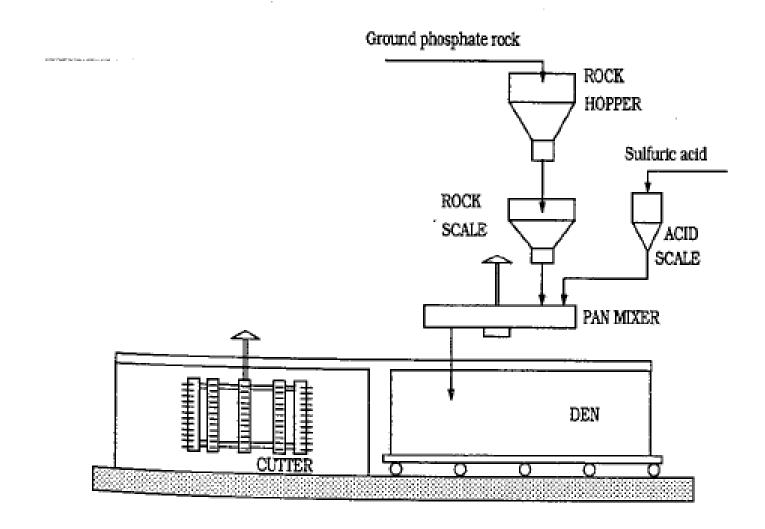
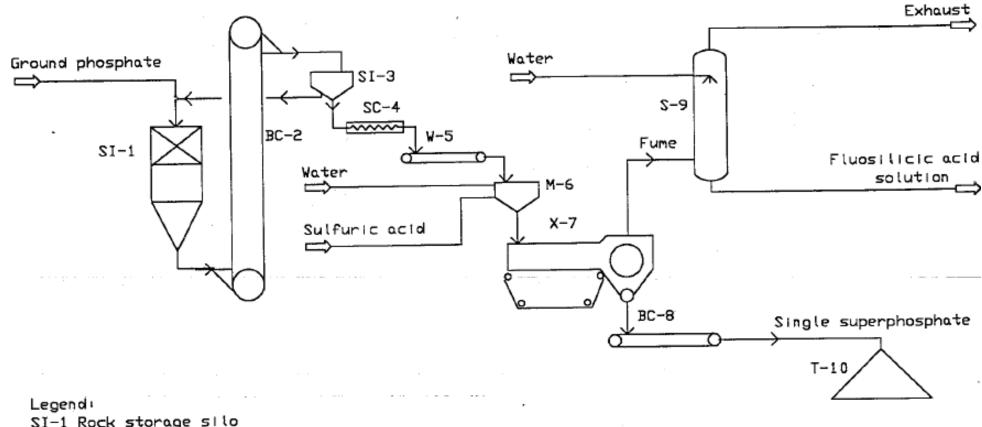


Figure 14.1. Batch Manufacture of Single Superphosphate.



SI-1 Rock storage sito

BC-2 Bucket elevator

SI-3 Surge hopper

SC-4 Metering screw

W-5 Weigh feeder

M-6 Cone mixer

X-7 Slat conveyor continuous DEN

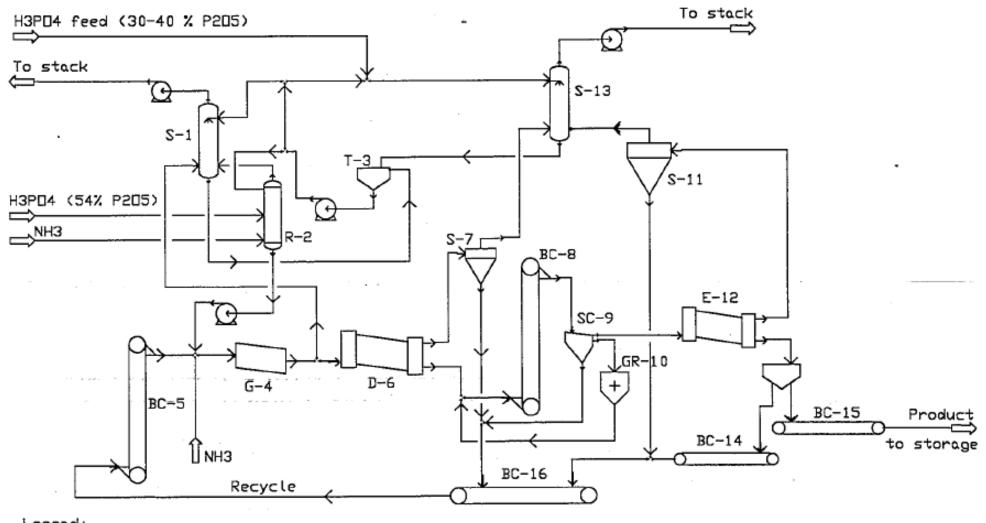
BC-8 Belt conveyor

S-9 Fume scrubber

T-10 Superphosphate storage pile

Figure 14.2. Continuous Manufacture of Single Superphosphate.

# **Ammonium Phosphates**



Legendi

S-1 Scrubber

R-2 Preneutralizer

T-3 Surge tank

G-4 Granulator

BC-5, BC-8 Bucket elevators

D-6 Dryer

S-7, S-11 Cyclones

SC-9 Screens

GR-10 Crusher

E-12 Cooler

S-13 Scrubber

BC-14, BC-15, BC-16 Belt conveyors

Figure 12.5. TVA DAP Process.

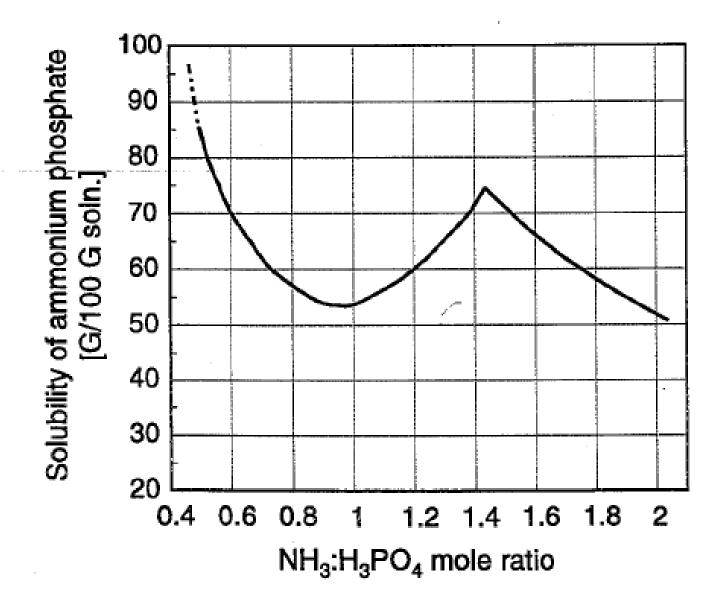
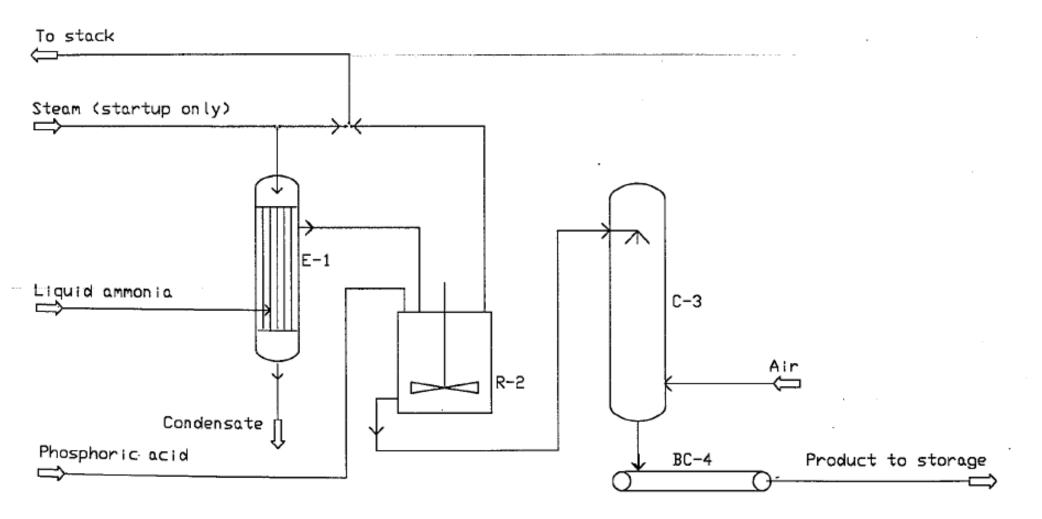


Figure 12.6. Effect of NH<sub>3</sub>:H<sub>3</sub>PO<sub>4</sub> Mole Ratio on Solubility of Ammonium Phosphate at 75°C.



#### Legend:

E-1 Ammonia vaporizer

R-2 Pressure reactor

C-3 Spray tower

BC-4 Belt conveyor

Figure 12.13. Fisons "Minifos" Process.

#### Potash Fertilizers

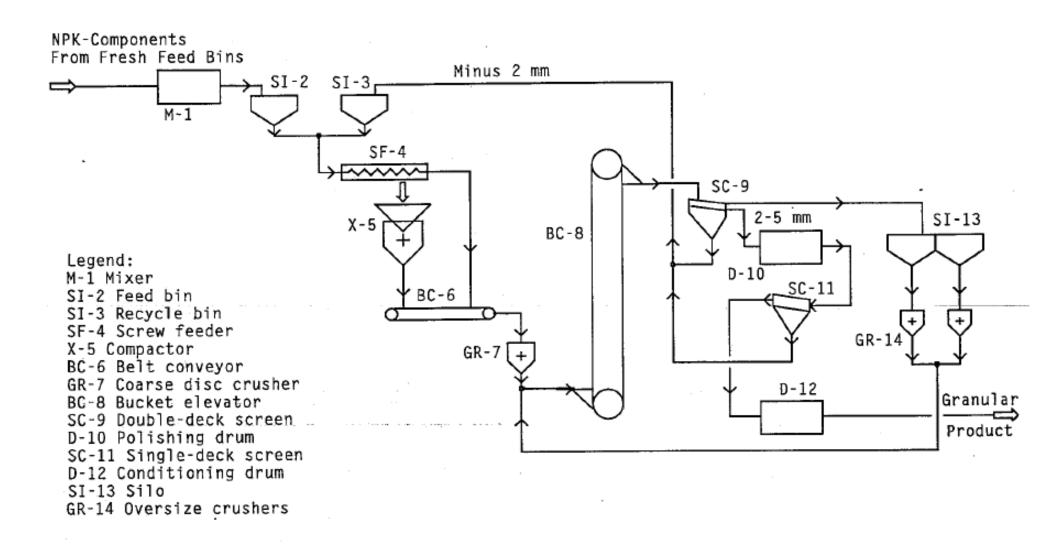


Figure 15.3. General Flowsheet for Potash Compaction/Granulation Plant.