

ENCLOSURE (B) 6

PILOT PLANT FOR
PROPANE PHENOL EXTRACTION
(PHENOL EXTRACTION IN
PROPANE SOLUTION)

by .

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I. HISTORY

The history is the same as the propane deasphalting and dewaxing plant.

II. CAPACITY

This plant was designed the same capacity as the propane deasphalting and dewaxing plant.

III. OPERATING METHOD

This plant is one step extraction plant and the mixture of phenol and cresol is used as solvent. (Phenol 65% and cresol 35% (Volume)). See Figure 1(B)6 and Figure 2(B)6.

The raw material is the deasphalted and dewaxed oil from the propane deasphalting and dewaxing plant. The raw material is injected into the Extracting Tower (Volume 500 liters) from the bottom by charging pump.

The solvent is also injected into the Extracting Tower from the top by charging pump. The mixing and separating temperatures are about 40°C - 45°C. Raffinate is removed into the Raffinate Receiver (Volume 100 liters at 30°C and 20 kg/cm² pressure) from the top of the Extracting Tower and extract also into the Extract Receiver (Volume 100 liters at 30°C and 20 kg/cm²) from the bottom. Raffinate and extract enter into the two Stripping Towers (Volume 150 liters at 80°C, 1 - 3 kg/cm² pressure) and at last are taken out as the products.

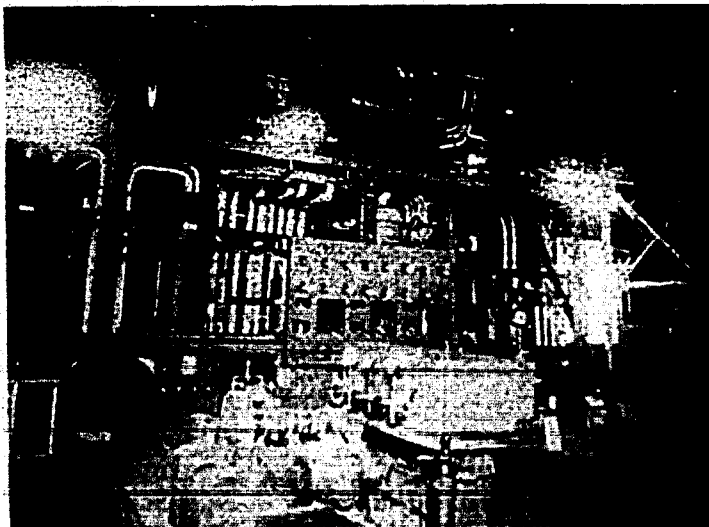


Figure 1(B)6

PROPANE-PHENOL EXTRACTION PILOT PLANT
Phenol Extraction in Propane Solution Section

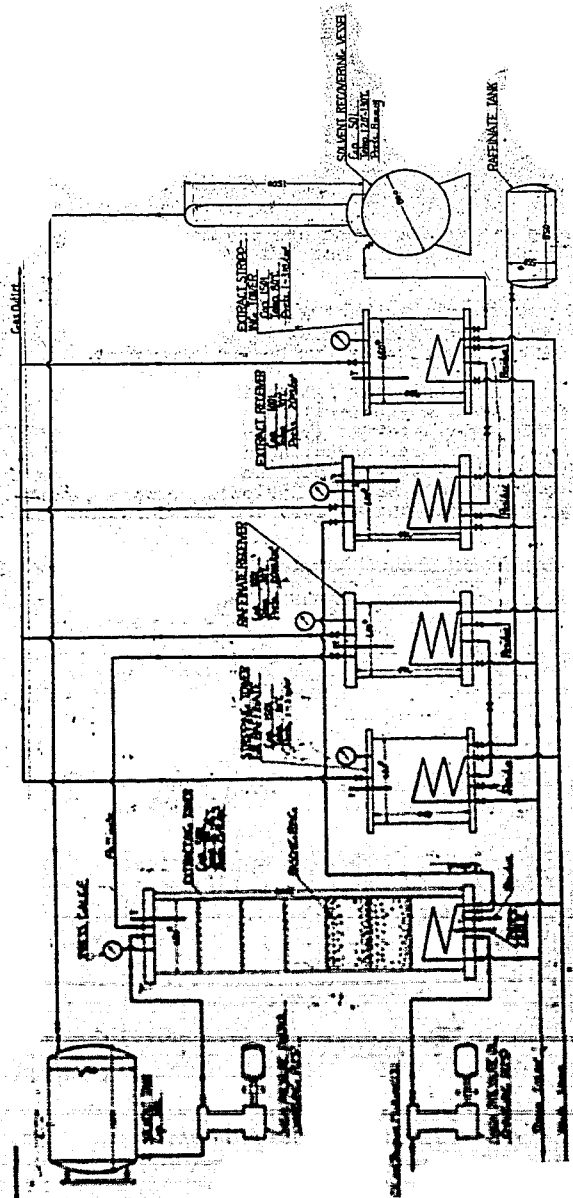


Figure 2(B) 6
PILOT PLANT FOR PROPANE PHENOL EXTRACTION
(Phenol Extraction in Propane Solution)