

153001988

A N N E X C .  
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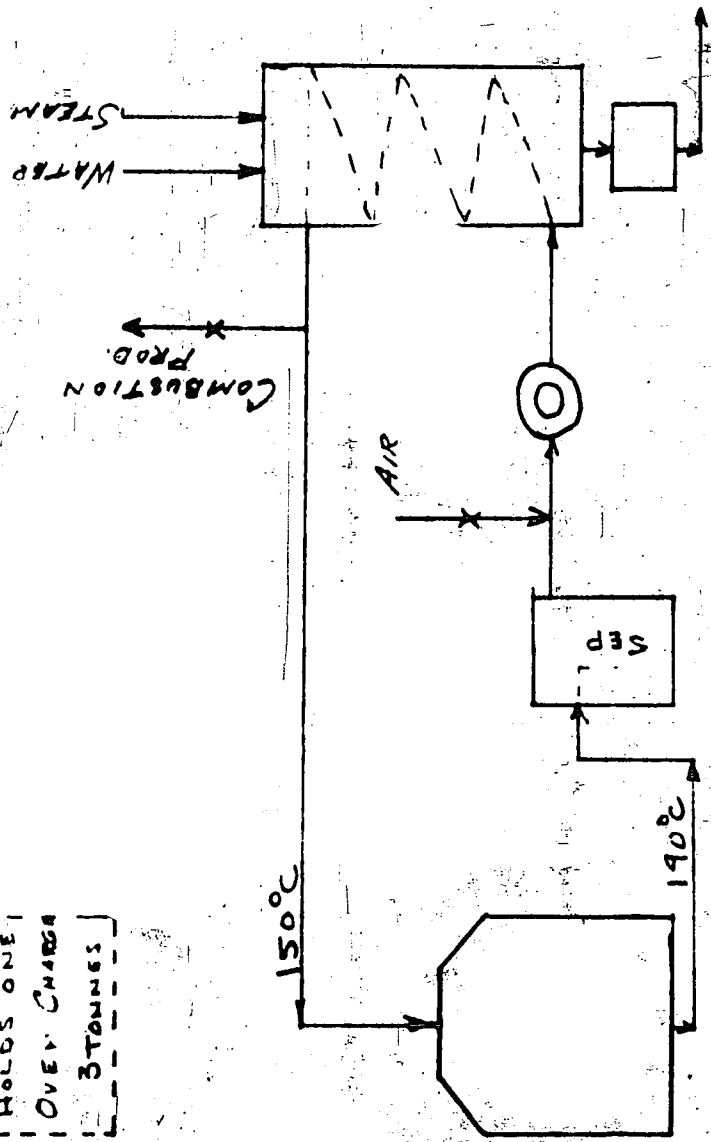
OXIDATION OF SPENT CATALYST

ANNEX C.

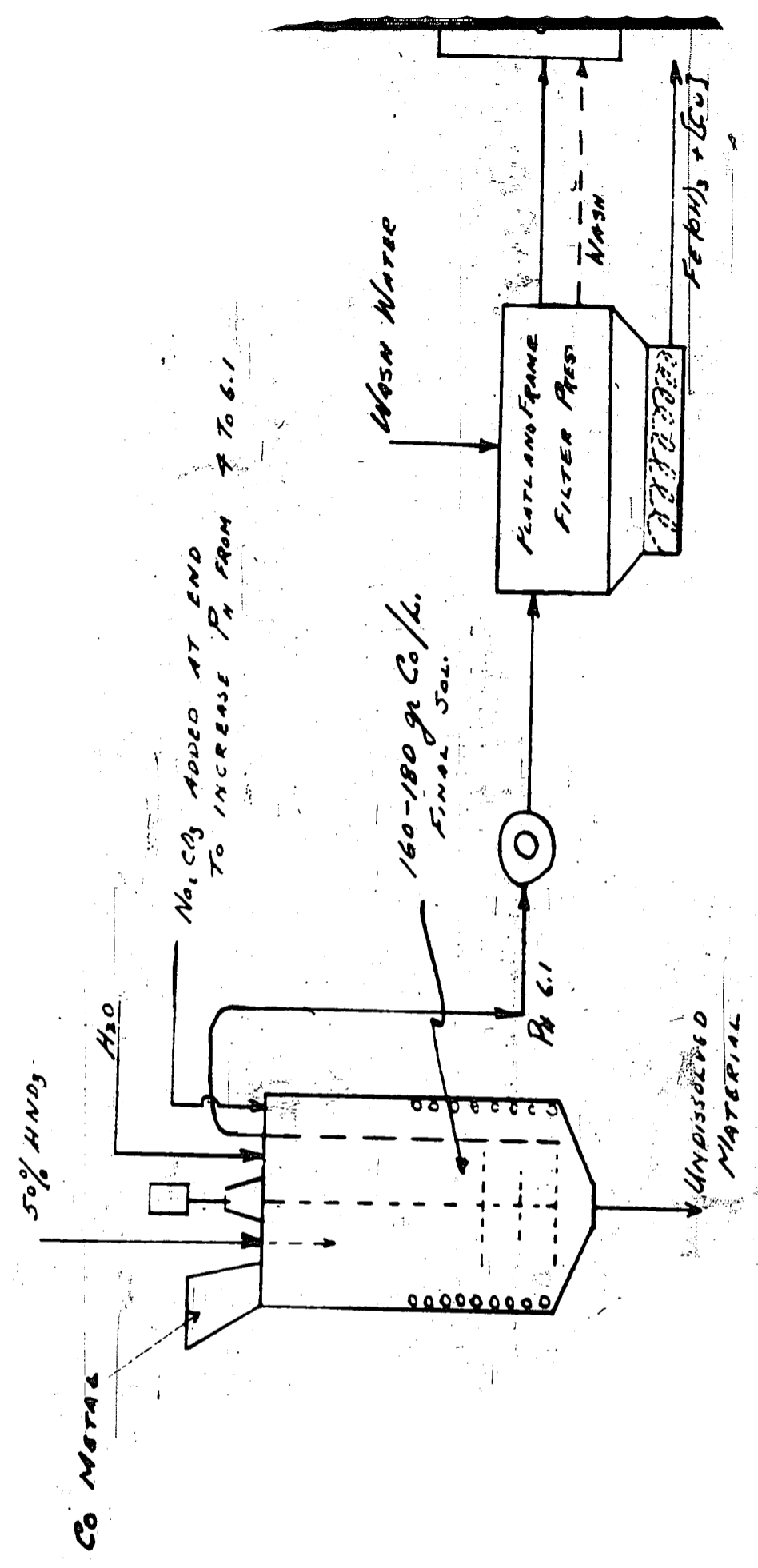
CRANE LIFTING MATERIAL  
TO DISSOLVING STEP.

SKIP.  
HOLDS ONE  
OVER CHARGE  
3 TONNES

A - STEP  
TO DISSOLVING



# II FRESH COBALT DISSOLVING



NOTE: START DISSOLVING WITH  
 2 PH H2O - 1 PH HNO3  
 (8m<sup>3</sup>)

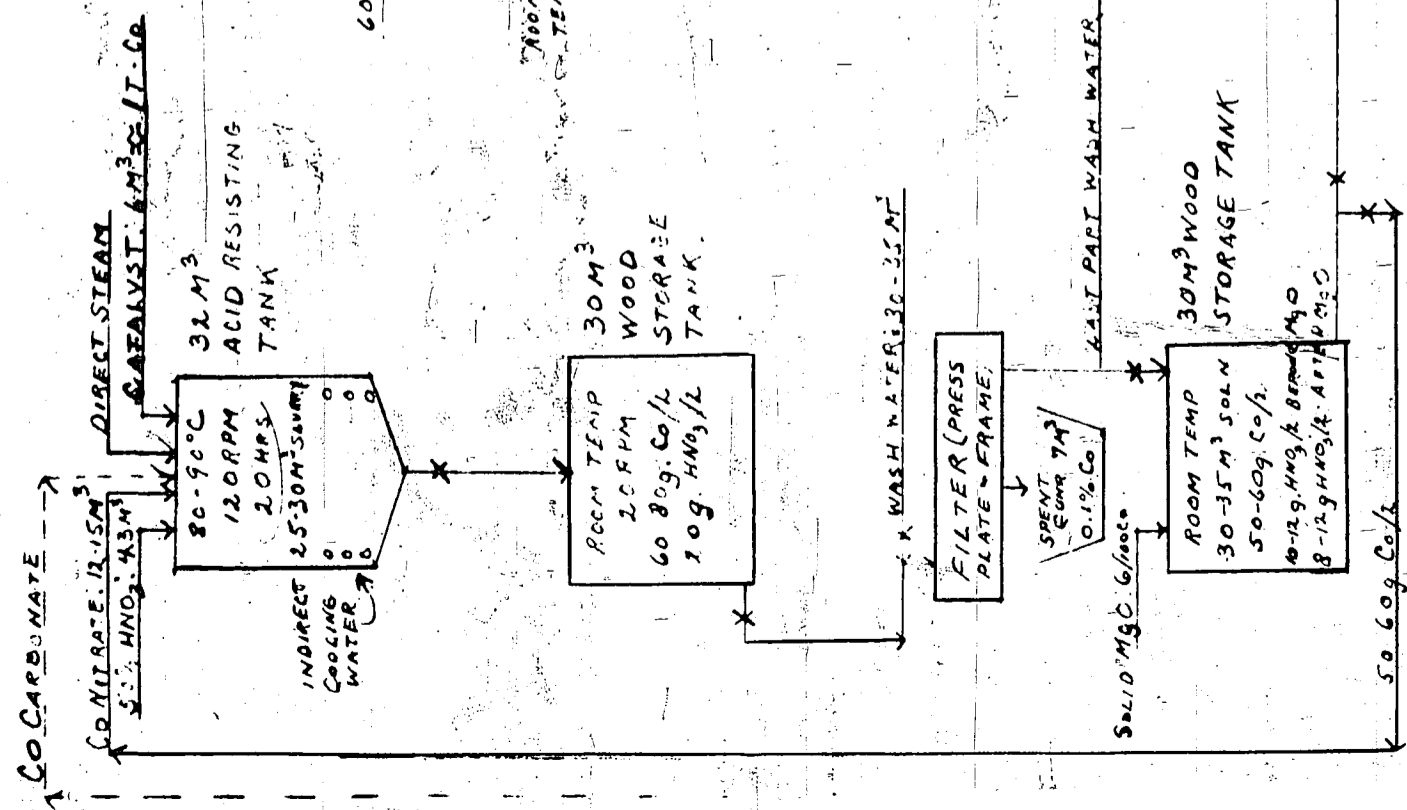


III

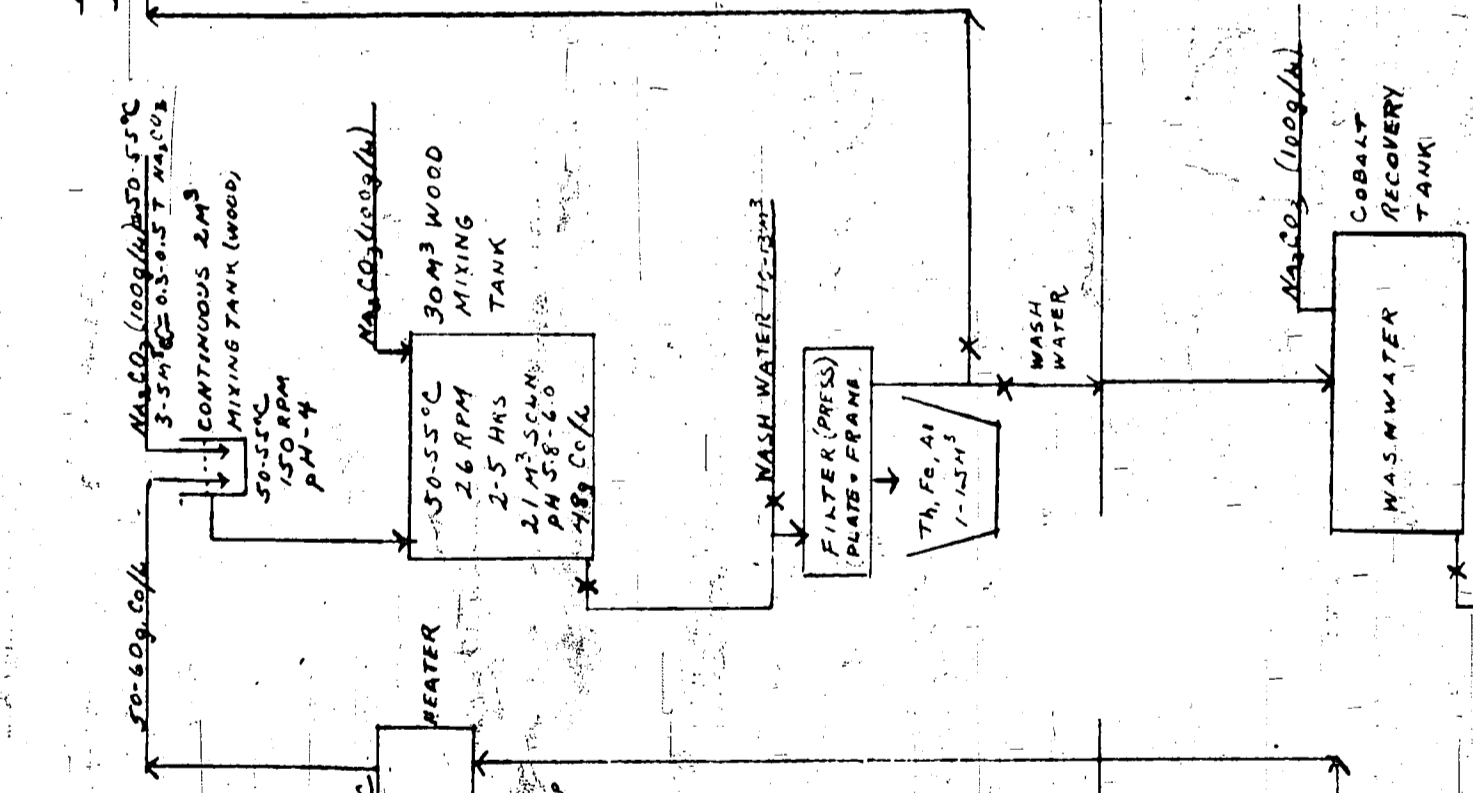
SOLUTION AND PURIFICATION OF OXIDIZED CATALYST

BASIS: 1000 KG. COBALT METAL

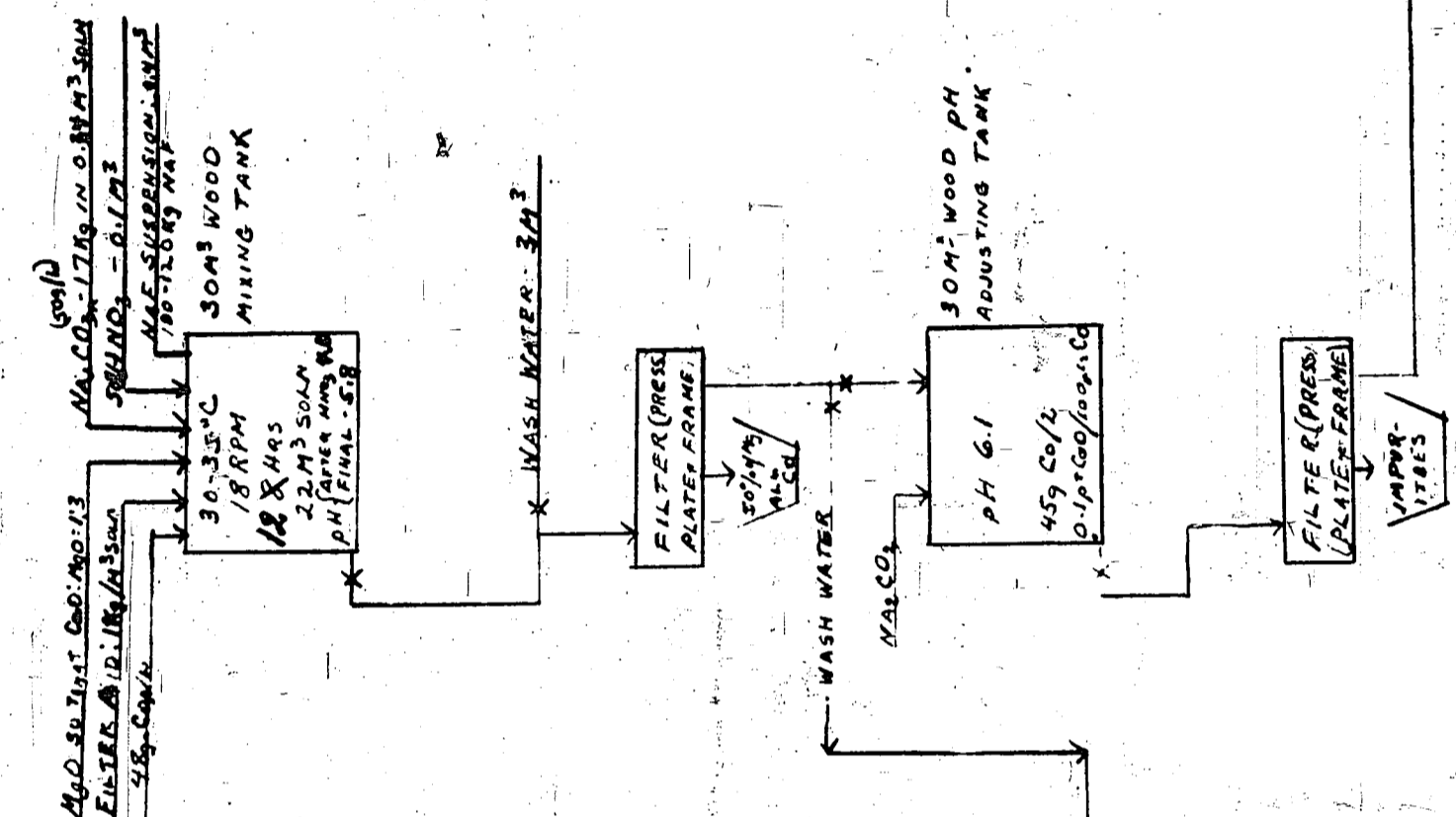
DISSOLVING



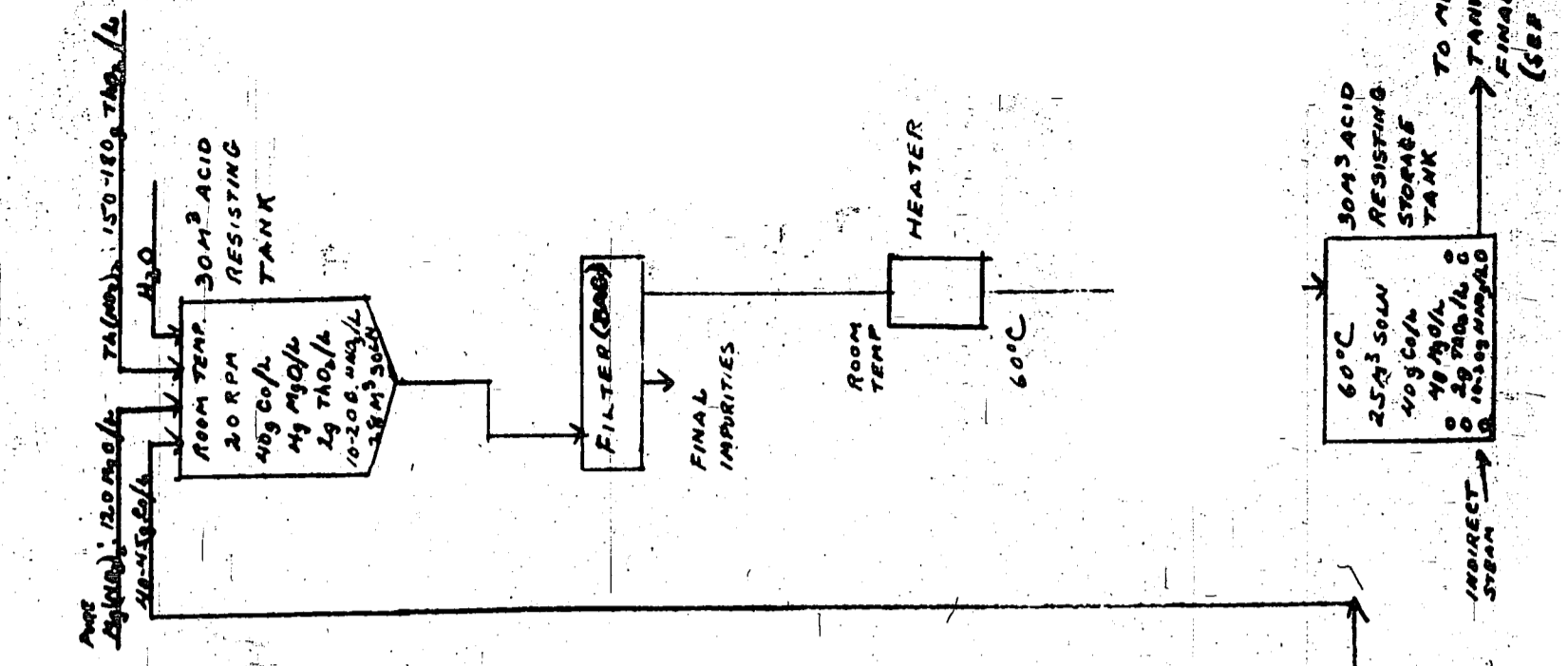
FIRST PURIFICATION



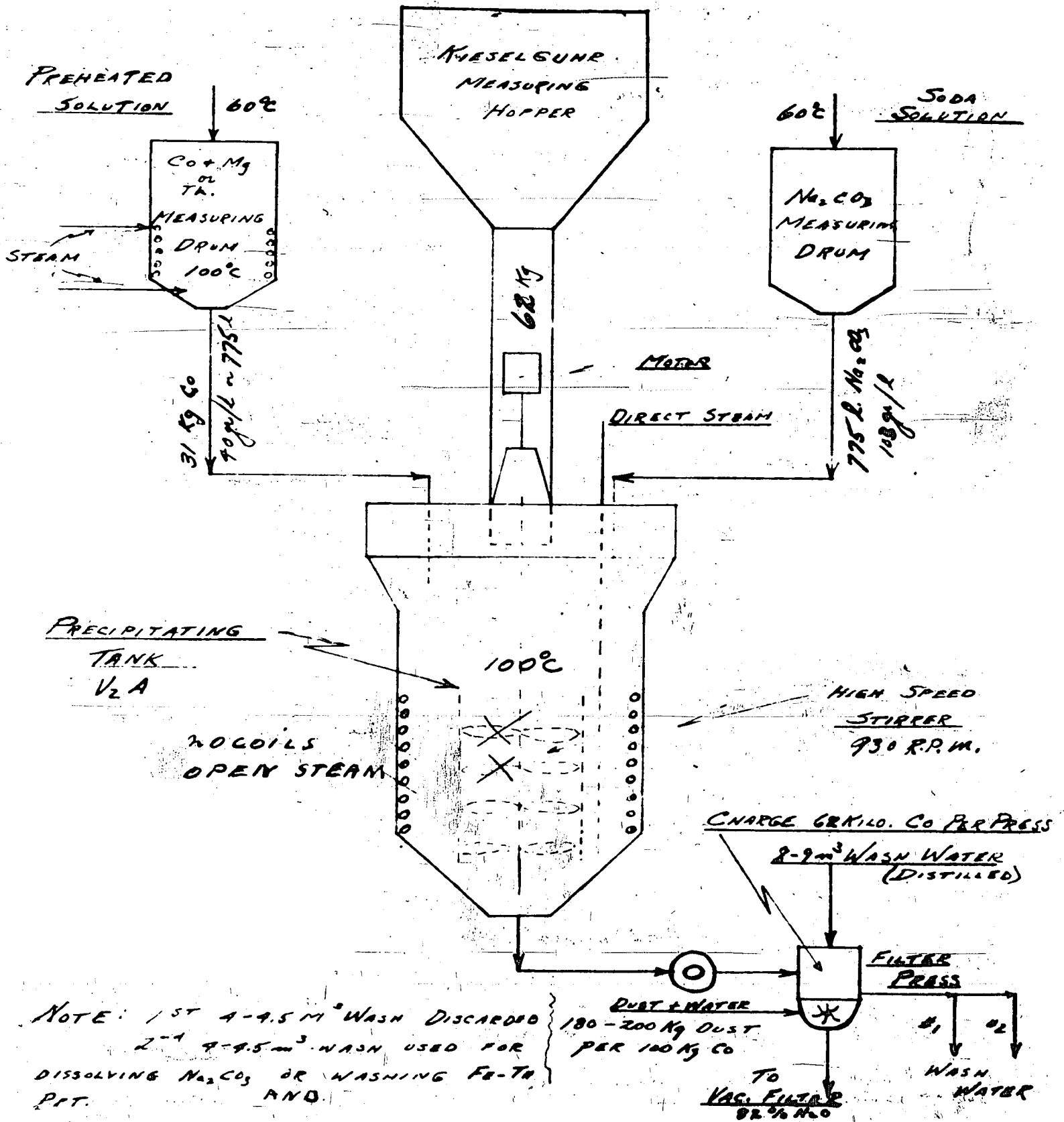
SECOND PURIFICATION



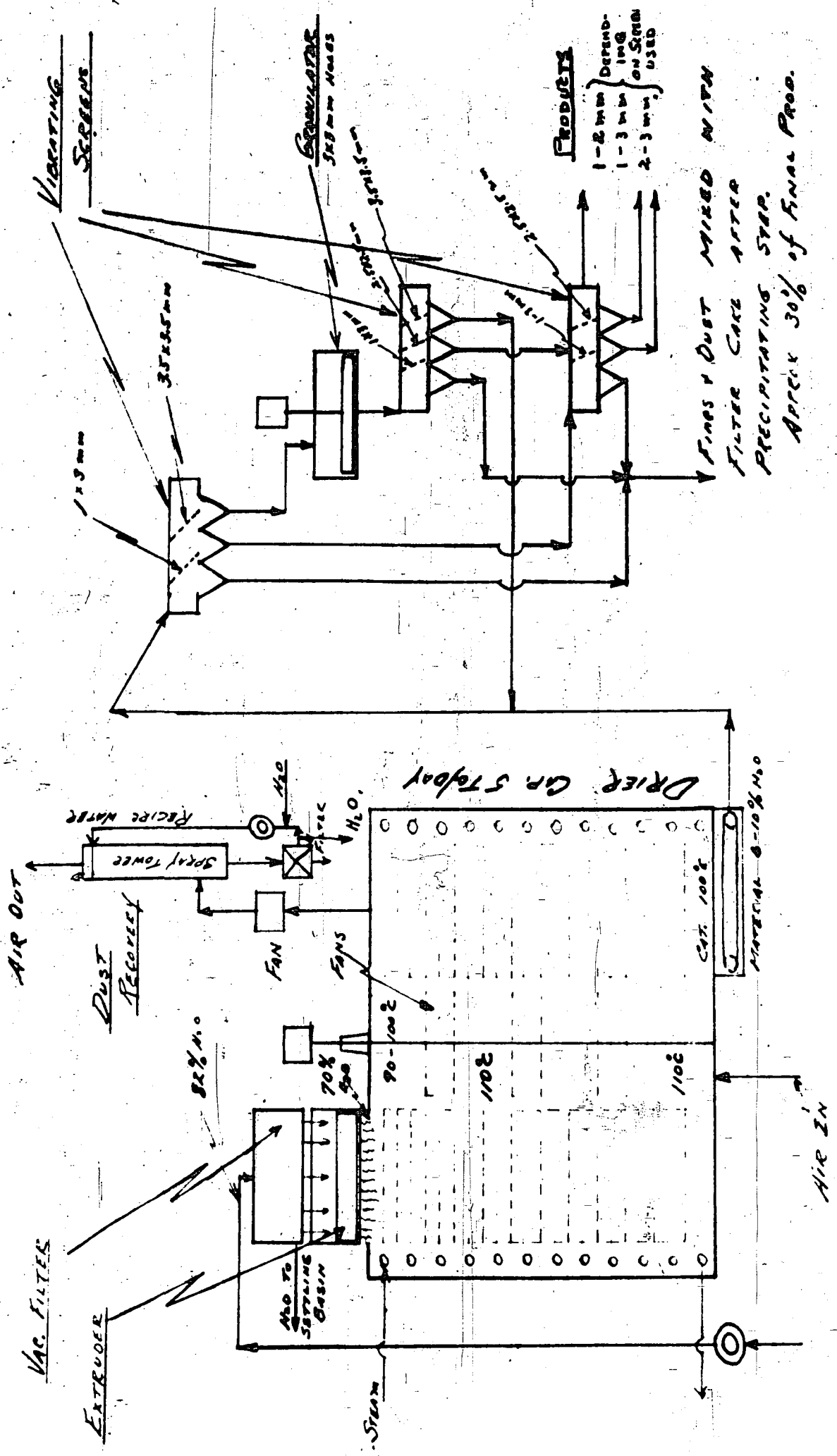
ADJUSTING



IV  
PRECIPITATING STEP.



I  
DRYING AND FORMING



ANNEX C

CATALYST REDUCTION.

VII.

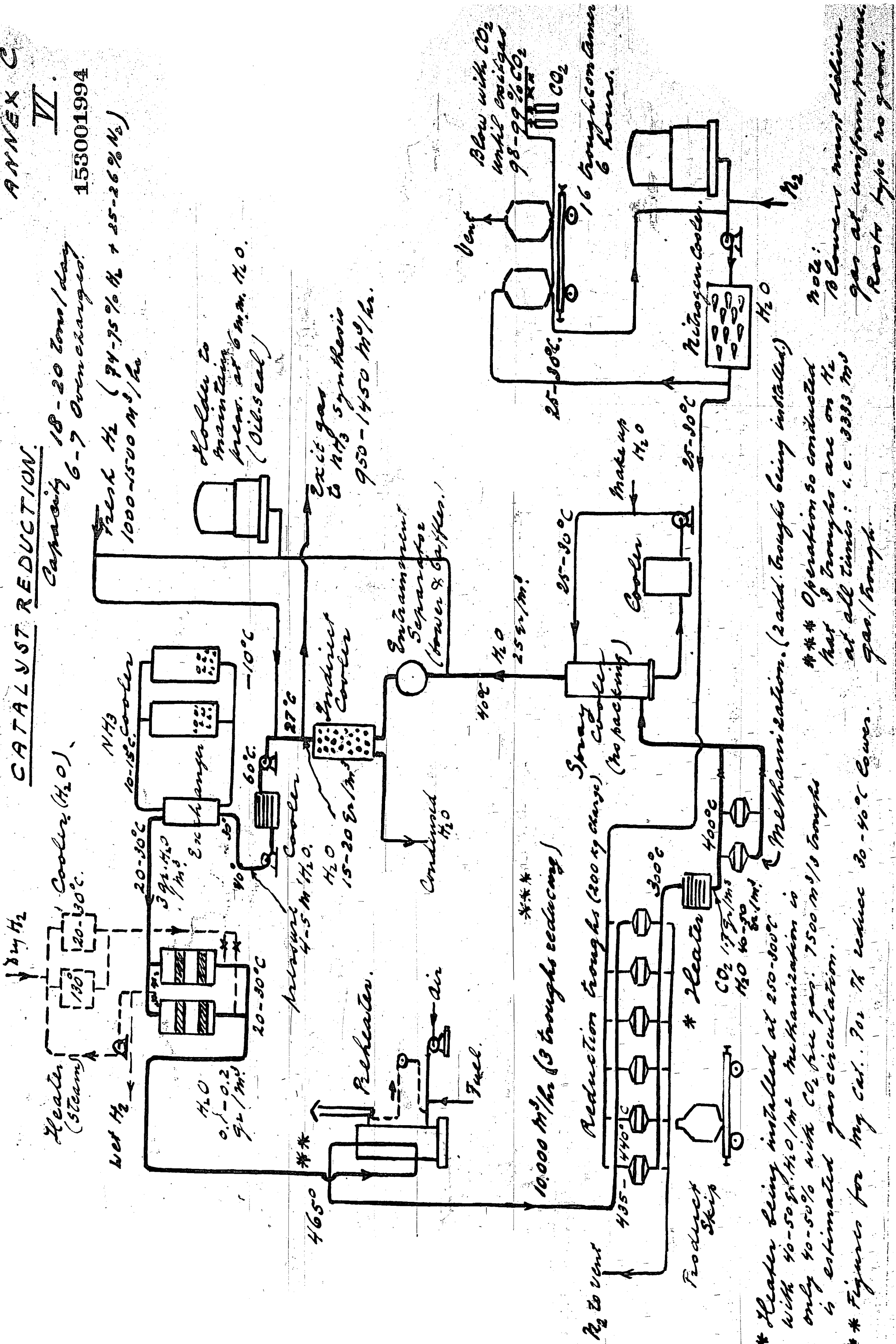
Capacity 18-20 tons/day  
6-7 Ovens charged.

153001994

Fresh H<sub>2</sub> (94-95% H<sub>2</sub> + 25-26% N<sub>2</sub>)  
1000-1500 M<sup>3</sup>/hr

Holder to maintain press. at 6 atm. H<sub>2</sub>. (Oil-seal)

Exit gas to NH<sub>3</sub> synthesis  
950-1450 M<sup>3</sup>/hr.



\*\*\* Heater being installed at 250-300°C with 40-50 gr. H<sub>2</sub>O/m<sup>3</sup> Methanization is only 40-50% with CO<sub>2</sub> free gas. 7500 M<sup>3</sup>/hr troughs is estimated gas circulation.

\*\*\* Figures for dry cat. 70% H<sub>2</sub> reduce 30-40°C lower.

\*\*\* Operation so conducted that 3 troughs are on H<sub>2</sub> at all times: i.e. 3333 M<sup>3</sup> gas/trough.

\*\*\* Methanization. (2 add. troughs being installed)

Note: Towers must deliver gas at uniform pressure. Racks type no good.

VII  
PREPARATION OF ORGANIC SULFUR REMOVAL CATALYST  
BASIS ONE TONNE

