



REACTOR OPERATION

1. MAKE SLURRY WITH AlCl₃
2. ADD ETHYLENE TO 440 PSI. PRESSURE
3. HEAT TO 150°F.
4. ALLOW TEMPERATURE TO RISE TO 356°F. (515 PSI)
5. COOL QUICKLY TO 248°F.
6. ADD ETHYLENE FROM LINE UNTIL AUTOCLAVE IS LIQUID FULL. CONTROL TEMPERATURE AT 248°F BY COOLING JACKET
7. TOTAL TIME/BATCH = 12-14 HOURS.

POLYMERIZATION REACTORS

4. AUTOCLAVES 3'-11 1/4" DIA. X 32'-9 1/2" H. CAPACITY EACH 7186 GALLONS
6. AUTOCLAVES 5186 GALLONS EACH

FIGURE XXVIII

FLOW DIAGRAM SECTION 3. LINDE LOW TEMP. FRACTIONATING PLANT - LEUNA WORKS.
 2 PARALLEL PLANTS OPERATED FOR THEIR PUT SHOWN HEAT EXCHANGE SYSTEM IS APPROXIMATE POLYMERIZATION REACTORS