

## VI. APPARATUS USED

A description of the reactors used by the various laboratories is included in the following Table III.

TABLE III  
Reactors Used

Beacon Unit #7 (Stirred)

Reactor 1-5/8" I.D. Reaction Space 20" Lg.  
Stirrer shaft 5/8" O.D. Jacket Cooled

Beacon Unit #8 (Fixed baffles)

Reactor 3/4" I.D. by 9 ft. lg.

HRI H Unit:

Reactor 11.5" I.D. x 18-1/2' lg. See HRI Summary Table IA for Dow therm cooling surface and other data. Expanded section above reactor 24" long. Filters used for catalyst separation.

HRI 14 Unit:

Reactor 4.5" I.D. x 18' lg. See HRI Summary Table IA for Dow-therm cooling surface and other data.

HRI 15 Unit:

Reactor same as 14 Unit except catalyst circulated through stand-pipe outside reactor. See HRI Summary for Dowtherm cooling surface.

Laboratory A:

Reactor - 9 ft. lgt. of 2" std. pipe expanded to a settling zone consisting of a 30" lgt. of 6" std. pipe. Dowtherm jacket cooled.

Laboratory B:

Reactor - 10" diam. by 40 ft. lg. overall top 10 ft. expanded to about 16" diam. Dowtherm jacket cooled with cyclones inside expanded area.

Stanolind Pilot Unit:

8" Reactor - jacket dowtherm cooling.