

Design Data			
Design & Manufacturing Code	ASME Sec. VIII, Div. 1		
Service Medium	Liquid Nitrogen		
Fluid to be cooled	Gaseous Helium		
Capacity of inner vessel	1.2 m <sup>3</sup> (or, to be specified by the party, to be finalised during DER)		
MEOP of inner vessel	0.4 MPa		
MAWP of inner vessel	0.5 MPa		
Working Temperature	70–320 K		
Design Temperature	350 K		
Equipment Tag number	IHX-S-3702		
Coil Pressure	23 MPa		
Coil inlet temperature	313 k		
Coil outlet temperature	82 k		
Type	Vertical Cylindrical Vessel with 2:1 Semi-Ellipsoidal Dish End		

Nozzle Designation and Size

Sl. No.	Designation	Service	Size
1	N1	Nozzle for fluid filling/ draining	DN25, 10S
2	N2	Nozzle for tapping (top) of level / pressure transmitter	DN15, 10S
3	N3	Nozzle for tapping (bottom) of level /pressure transmitter	DN15, 10S
4	N4	Nozzle for Helium inlet	DN15, 10S
5	N5	Nozzle for Helium outlet	DN15, 10S
6	N6	Nozzle for Safety Devices	DN 50, 10S
7	N7	Nozzle for Pressurization Vent	DN 50, 10S
8	N8*	Nozzle for Temperature Transmitter and level switch array	DN 100, 10S

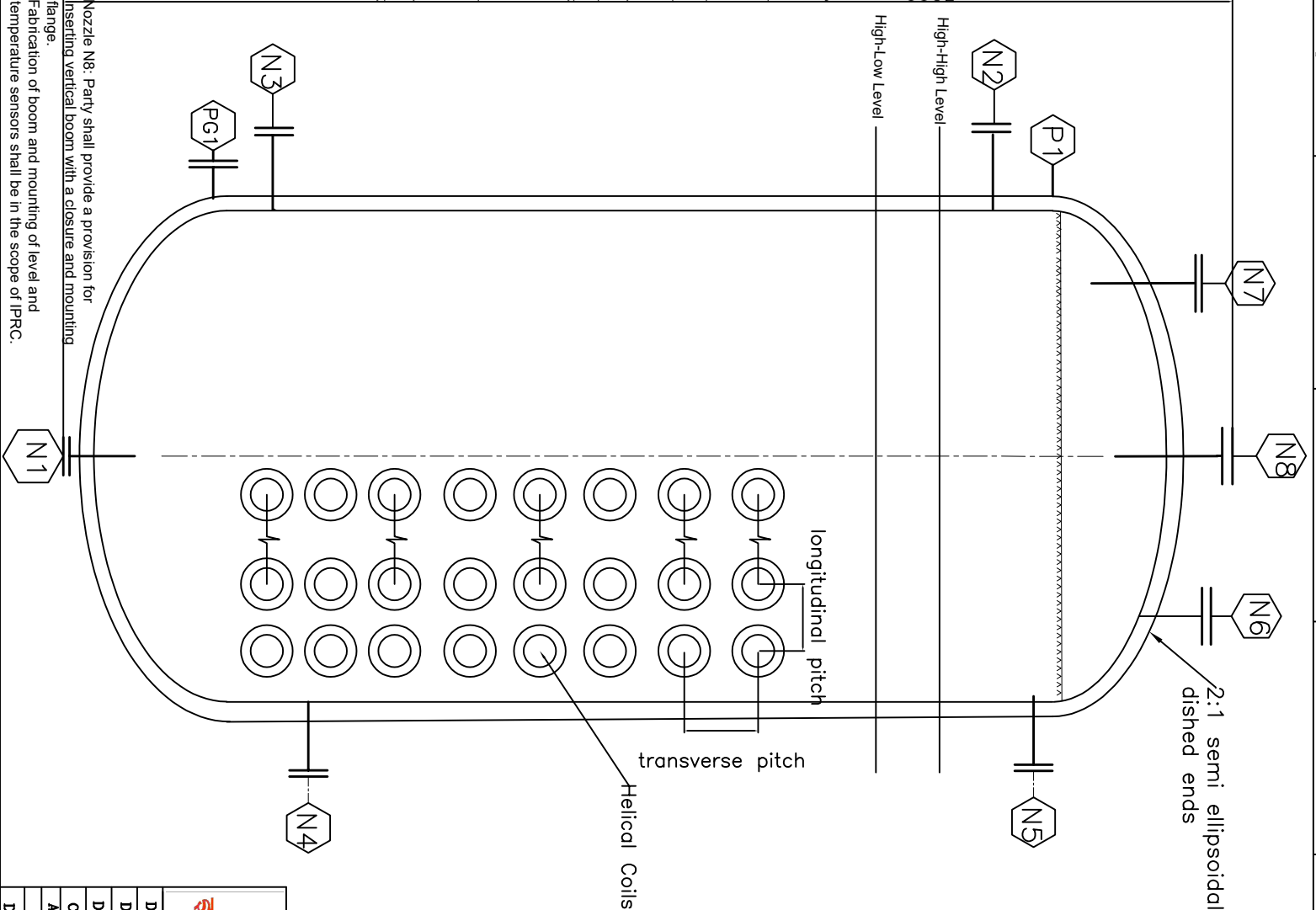
Port Designation

Sl. No.	Designation	Service	Size
1	P1	Vacuum pump-out port cum seal-off valve	DN25, 10S
2	PG1	Pirani Gauge with valve & vacuum display unit	DN15, 10S

	<b>TITLE</b> General Arrangement Drawing for LN2 Bath Type Heat Exchanger		<b>INDEX</b>	

DGN.		<b>GOVERNMENT OF INDIA</b> <b>INDIAN SPACE RESEARCH ORGANISATION</b> <b>ISRO PROPUSSION COMPLEX (IPRC)</b> <b>MAHENDRAGIRI</b>	<b>DRG.No.</b>	<b>FORMAT</b> <b>A4</b>
D.CHD.				
DRN.				
CHD.				
APPD.				

<b>NAME</b>	<b>SIGN.</b>	<b>SCALE: not to scale</b>	<b>SHEET 1 OF 1</b>	
<b>DATE</b>				



\* Nozzle N8: Party shall provide a provision for inserting vertical boom with a closure and mounting flange.

\* Fabrication of boom and mounting of level and temperature sensors shall be in the scope of IPRC.