

LIQUID NITROGEN TANK

The Petrotesting Cryogenic tanks are insulated, vacuum-jacketed pressure vessels. They come equipped with safety relief valves and rupture discs to protect the cylinders from pressure buildup.

Container is cleaned for liquid nitrogen service. Tank pressurized with clean, dry, oil-free nitrogen gas. The annular space between the inner and outer tanks has been evacuated to the desired vacuum.



NITROGEN TANK

Specifications

Model no	:	CVA – 2.2k – 45 – os
Serial no	:	20104
Year of manufacture	:	2005
Pressure vessel code	:	ASME sect viii div.1
MAWP	:	45psi, 3.10 BARG
Test pressure	:	83 psi, 5.72 barG
Design temperature range	:	-320°f to +100°f
	:	- 196°c to + 38°c
Insulation system	:	vacuum and multi – layer insulation
Inner vessel material	:	SA – 240 – 304 stainless steel
Outer vessel material	:	heads – SA – 36 carbon steel.
	:	shell – A10111, HSLAS GR50 CL1 carbon steel
Equivalent thickness ref steel	:	4.50 mm.
Water capacity at 20°C	:	8,404 litres , 2220 gal
Max.permmissible gross mass (MPGM)	:	11,940 kg , 25000lb
Unladen (tare) mass	:	4,282 kg , 9440 lb.

Hold times per IMD G/49 CFR 178.277 -5 psi to 45 psi,(1.34 to 3.10 bar) @30°C

Nitrogen, refrigerated liquid – UN 1977; 13,285 lbs (6.026 kg), 22 days

Heat influx rate : 73.3 watts for nitrogen, refrigerated liquid