

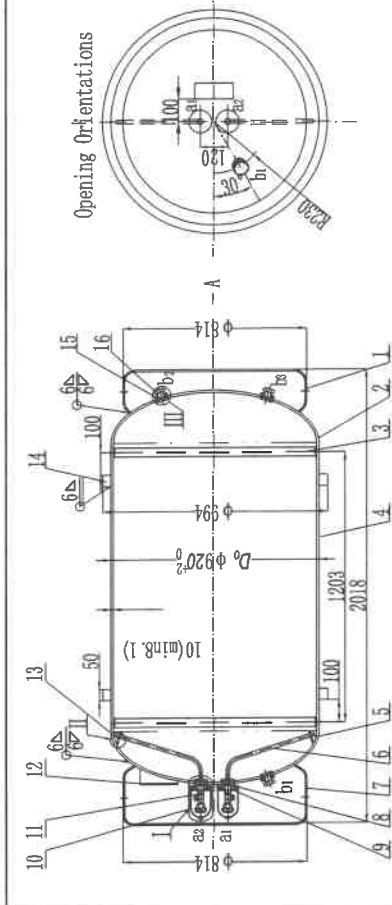
Technical requirements

- The drum is designed, manufactured, inspected and tested according to EN 14208:2004, Transportable gas cylinders-Specification for welded pressure drums up to 1000 litre capacity for the transport of gases, and shall be conform to ADR/RID and TPD 2010/35/EU;
- The gas to be filled shall be compatible with the materials of the drum as per ISO 11114-1.
- e.g.: He (UN1046), Ar (UN1006), LPG (UN1075), R22 (UN3252), R22 (UN1018) etc.;
- Material supplied for shell and head pressing shall conform to EN10028-5, steel name P355ML1, chemical composition:

C	Si	Mn	P	S	Alt	N	Mo
≤0.14	≤0.50	≤1.60	≤0.020	≤0.015	≤0.015	≤0.015	≤0.20
Nb	Ni	Ti	V	Mo+Cu	V+Nb+Ti		
≤0.05	≤0.50	≤0.05	≤0.10	≤0.60	≤0.15		

- The drum is welded in accordance with the clause 7 and 9 of EN 14208, the tensile strength of the welding material shall not be less than the lower limit of the predetermined value of the tensile strength of the base material. The WPQR shall be conform to EN 15614-1, the WPQ shall be conform to EN ISO 9606-1 and EN ISO 14732.
- The nozzle orientation shall meet the chart, the two pipes of No.9 should be arranged at 180°;
- The entire longitudinal and circumferential welds shall be examined by X-ray according to clause 14.5 of EN 14208, the method shall be in accordance with EN ISO 17636-1. Acceptance criteria shall be as specified to Level C in EN ISO 5817 or Level 2 in EN 12517-1. The weld seam between the shroud and the head should undergo 100% visual inspection and 10% PT;
- Each steel drum must undergo heat treatment to relieve stress. The heat treatment temperature is 620±20°C, The insulation time is no less than 24 minutes;
- Mechanical properties of the drum:
- After heat treatment, the steel drum shall undergo a 48 bar air pressure test for at least 10 minutes in accordance with clause 14.8 of EN 14208;
- Each drum shall be subjected to a leak test at a minimum pressure of 6 bar in accordance with EN 14208.
- The quantity of drum shall be less than 50 in one batch. Test plate for mechanical test shall be performed with the product. For the first 40 new design, test plates shall be provided for 1 in every 10 drums. The test results should meet the EN 14208;
- The paint for drum shall be at least in one layer, paint and word color shall in accordance with the request of customer;
- The marking for drum shall be made on a plate securely fixed to the by the nameplate fixed on the shroud or suitable location;
- This drum design is only for horizontal use.

Tensile Strength	Yield strength	Elongation	Impact value
450≤Rm≤610	ReH≥355	≥22%	≥27(-40°C)



Examination of Design-No: 0 L 2 5 0 0 1 0

for the operating conditions stated in this drawing.

NB: For details see Test Report.

Shanghai, Date: 3 June, 2005

Notified Body for Pressure Equipment ID-Number 0035



TUV Rheinland

Shell Longitudinal Seam

No Scale

0.1

60° ±5°

60° ±5°

60° ±5°

60° ±5°

60° ±5°

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N/A Oliver Zhu

Inspector

Technical properties

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