

Certificate

type approval

for manufacturing of transportable pressure equipment

Certificate-No.: 01 202 642/B-190004-T

Applicant: Cixi Longfa Aluminium Jar-making Co., Ltd.
Cidong Industry Zone, Longshan Town,
Cixi City, 315311, Zhejiang Province
P. R. of China

Manufacturer: See Applicant

Applicable provisions and standards: Dir. 2010/35/EU, in compliance with ADR/RID 2019 and EN ISO 7866:2012 + AC:2014

Description of the type: Refillable seamless aluminium alloy gas cylinders for compressed and liquefied gases mentioned in EN ISO 11114-1, annexe A.4, group 1 with code 11111 or group 3 with code 11113 or group 5 with code 11110.
Volume 400 ~ 670 ml, Working Pressure 166 bar(g), Test Pressure 250 bar(g), Material 6061A, Diameter 60 mm, min. Wall Thickness 3.2 mm, Working Temperature -40 ~ +60 °C.

Drawing No.: LW60-V-166-TPED, Rev. 0, dated 2018-09-03
It is confirmed that the described type is in compliance with the requirements of the directive 2010/35/EU.

Report-No.: This approval is based on the results of the type examination report no. CHN/B-190003-T, revision 0, dated 2019-01-15

Validity: This approval is valid for a period not exceeding ten years. End of period: 2029/01

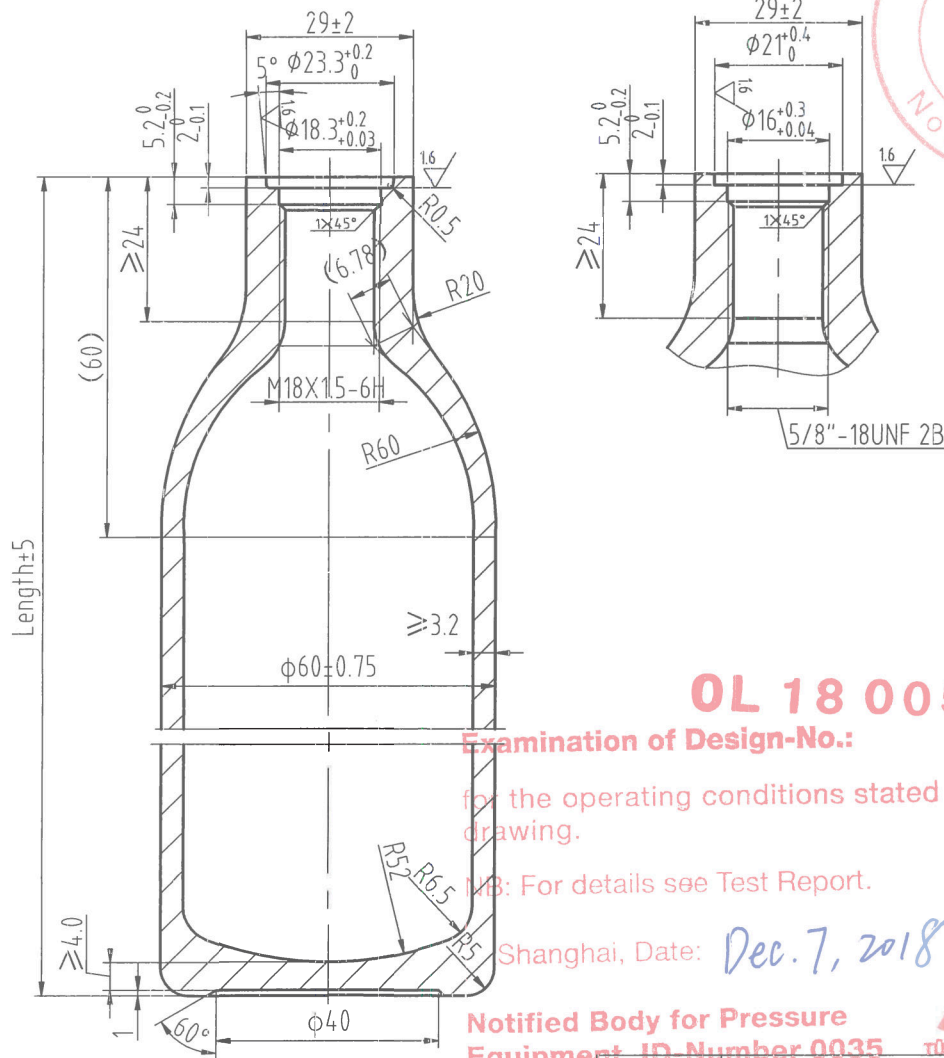
D-54295 Trier, 2019-01-31

TÜV Rheinland Industrie Service GmbH
Am Grauen Stein, D-51105 Köln


on behalf Dipl. Ing. (FH) Christof Lentz

Notified body according to dir. 2010/35/EU and ADR/RID,
accredited according to EN ISO/IEC 17020 by DAKKS and ZLS.





Technical Specification

Material	6061A					
Service Pressure	166Bar(16.6MPa)					
Testing Pressure	250Bar(25MPa)					
Min.wall thickness	3.2mm					
Volume (L)	0.40	0.47	0.485	0.535	0.60 *	0.67
Length H (mm)	240	270	280	306	332	370
Empty Weight (KG)	0.46	0.52	0.54	0.57	0.62	0.67

*Used for design verification test of this cylinder family

Technical Requirements:

1.The material is aluminium alloy 6061A ,the chemical composition is as follows:(in weight peccent) (%)

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Each	Total	Al
0.4-0.8	≤0.7	0.15-0.4	≤0.15	0.8-1.2	0.04-0.35	≤0.25	≤0.15	≤0.003	≤0.003	≤0.05	0.15	Remainder

2.All cylinders must be subjected to heat treatment the mechanical property is as follows:

Tensile strength	Yield strength	Elongation on 5.65/√So
≥330Mpa	≥280Mpa	≥ 12%

- 3.Sureface powder coating customer or standard request.
- 4.Design:EN ISO 7866 and 2010/35/EU. The test pressure 250bar.Max.working pressure 166bar.
- 5.Formability: Aluminum stick backward extrusion molding.
- 6.Heat treatment:solution treatment 530±10°C,ageing treatment 165±5°C.
- 7.Hardness: ≥HRB48.
- 8.Ambient temperature range for use of cylinders: -40~60°C.
- 9.The marking are as per Drawing No.MK-LW60-V-166-TPED.

Examination of Design-No.:

for the operating conditions stated in this drawing.

NB: For details see Test Report.

Shanghai, Date: Dec. 7, 2018

Notified Body for Pressure Equipment ID Number 0035



N/A Oliver Zhu
Inspector

					TPED-ø60-(0.4~0.67)L Aluminum Alloy Cylinder			Dwg.No.	LW60-V-166-TPED	
								Version	REV.0	
								Material	6061A	
Issure	Change the content		Name	Date	Design stage	Weight	Scale	Cixi Longfa Aluminium Jar-making Co.,Ltd.		
Designed	LU.XU	Approved	FRED.ZHU							
Checked	LITING.WANG	Date	2018/09/03	Total 1 pages	No. 1 Page					