

CYLINDER TYPE: **634/1/Q**

TECHNICAL CHARACTERISTICS

1.1 Dimensions:

Water Capacity (min.)-	2.0	litres
Minimum Wall Thickness-	6.80	mm
Diameter (external)-	102	mm
Test Pressure -	300	bar
Length (approx.)-	395	mm
Weight (Approx. Empty) -	2.54	kg

1.2 Minimum Mechanical Properties:

0.2% Proof	280 N/mm²
UTS	330 N/mm²
Elongation	12%

1.3 Material:

Aluminium alloy AA6061 is an alloy containing magnesium and silicon in proportion to form magnesium silicide, thus making the alloy heat treatable. The alloy combines medium strength, good formability and machinability with excellent corrosion resistance.

Setting the Standard Worldwide[®]

1.4 Composition:

	WT/%		
	Min		Max
Silicon	0.40	-	0.8
Iron			0.7
Copper	0.15	-	0.40
Manganese			0.15
Magnesium	0.8	-	1.2
Chromium	0.04	-	0.35
Zinc			0.25
Titanium			0.15
Lead			0.0030*
Bismuth			0.0030*
Others {Each			0.05
{Total			0.15

* Limit set by Luxfer on Suppliers

1.5 Properties (Typical):

Temper Condition	0.2% Proof N/mm ²	UTS N/mm ²	Elongation % (On $5.65\sqrt{S_0}$)
T6	315	356	14.2

1.6 Physical Constants:

Specific gravity	2.7
Electrical conductivity	43.1% IACS
Modulus of elasticity	69 Gpa

1.7 Manufacturing Process:

Luxfer manufacture seamless aluminium alloy cylinders by cold impact extrusion. The open end of the shell formed by extrusion is subsequently closed by heading (hot formed in a die) to give the characteristic cylinder profile. Solution heat treatment, quenching into cold water and artificial ageing is carried out to develop the mechanical properties. This is followed by machining of the threads, stamping of marks and inscriptions, pressure testing, internal cleaning, full inspection, painting as required and packing.

SECTION TWO STRENGTH CALCULATIONS

2.1 Calculation of Minimum Wall Thickness:

Based on wall thickness equation from the EC Directive 84/526/EC :

Cylinder Type: 634/1/Q

$$\text{Use, } a = \frac{P_h \cdot D}{\frac{20 \cdot R}{\frac{4}{3}} + P_h}$$

Where,	a	=	Minimum Wall Thickness - (mm)
	P _h	=	Hydraulic Test Pressure - (bar)
	D	=	Nominal External Diameter of Cylinder - (mm)
	R	=	Lesser of R _e or 0.85 R _m
	R _e	=	0.2% proof stress of material - (N/mm ²)
	R _m	=	Tensile strength of material - (N/mm ²)

For 634/1/Q

P _h	=	300	bar
D	=	102	mm
R _e	=	280	N/mm ²
R _m	=	330	N/mm ²
R	=	Lesser of 280 or 0.85 x 330 = 280.5 N/mm ²	

$$a = \frac{300 \cdot 102}{\frac{20 \cdot 280}{\frac{4}{3}} + 300}$$

$$\therefore a = 6.80 \text{ mm}$$

This is the value of 6.80 mm shown on the cylinder drawing.

The minimum wall thickness of 6.80 mm is greater than $\left(\frac{D}{100} + 1.5 \text{ mm} \right)$

Where D = External diameter.

i.e. min. wall of 634/1/Q is 6.80 mm $\left(\frac{D}{100} + 1.5 = 2.52 \text{ mm} \right)$

2.2 Hydraulic Burst Test

Cylinder Type: 634/1/Q

The measured burst pressure (P_r) shall be not less than:

$$P_{rt} = \frac{20a \cdot R_m}{D - a}$$

Where; P_r = Actual burst pressure measured during testing - bar
 P_{rt} = Calculated minimum theoretical burst pressure - bar
 a = Calculated minimum wall thickness - mm
 D = The nominal external diameter of the cylinder – mm
 R_m = The minimum guaranteed tensile strength – N/mm²

Applying to the 634/1/Q:

Where; a = 6.80 mm
 D = 102 mm
 R_m = 330 N/mm²

Then,

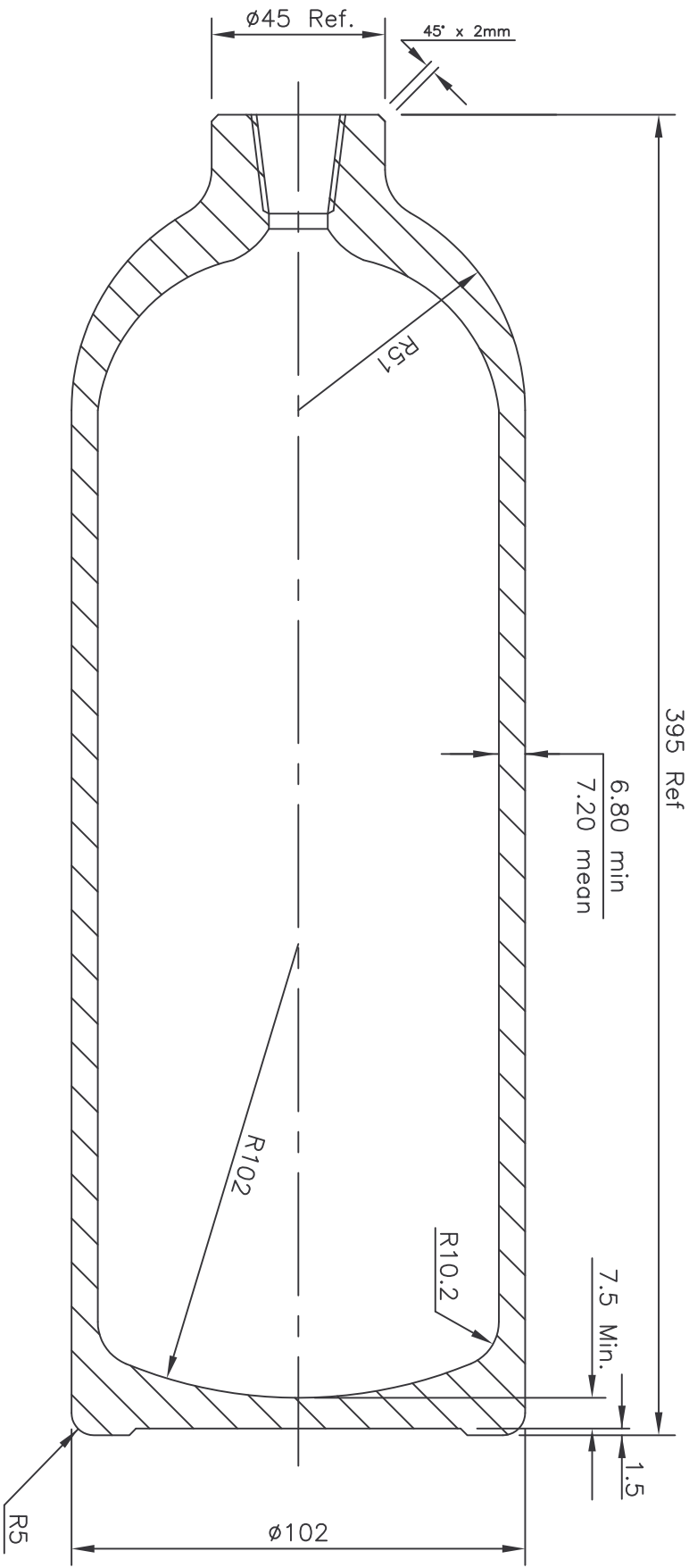
$$P_{rt} = \frac{20 \cdot 6.80 \cdot 330}{102 - 6.80}$$

∴ **$P_{rt} = 472 \text{ bar}$**

Simon Nicholson
Senior Design Engineer



Luxfer Gas Cylinders Ltd.



MATERIAL: ALUMINIUM ALLOY AA 6061 T6	WATER CAPACITY: 2.00L (Min)	CHARGING PRESSURE @15°C: 200 BAR	CHECKED	A.S.N.	© LUXFER GAS CYLINDERS LTD. 2011 The copyright of this drawing belongs to Luxfer Small Cylinders. It is supplied on the express terms that it is to be treated as confidential and is not to be copied or communicated to any other person. It is not to be used for the purpose of construction or manufacture unless expressly authorised for that purpose on each occasion that it is used.
UTS (min.): 330 N/mm ²	EMPTY WEIGHT: 2.54 Kg (Min.)	DEVELOPED PRESSURE _____	DATE	18.May.11	
0.2% PROOF STRESS: 280 N/mm ²	THREAD: 28.8 DIN477	TEST PRESSURE: 300 BAR	DESIGN:	ALL DIMENSIONS IN MM U.O.S.	
ELONGATION ON: 5.65 $\sqrt{A}$ (min.)	FILLING RATIO: _____	BURST PRESSURE: (min.) _____	E.E.C.	GENERAL TOLERANCE ±0.5	
TITLE		2.0L PERMANENT GAS CYLINDER			
L.S.C. No.: 634/1/Q		ISSUE : 2			
Taken From 423/1/Q Family Drawing		M5409			



Colwick, Nottingham, NG4 2BH, England
Tel: [44] (0)115 980 3800
Fax: [44] (0)115 980 3899
www.luxfercylinders.com

European Authorized Representative
OBELIS S.A. Bd Général Wahis 53, B-1030 Brussels, BELGIUM
Phone: +32 (0)2 732 594, Fax: +32 (0)2 732 6003
Email: mail@obelis.net
Representative: Mr. Gideon Elkayam

Certificate No. **TPED0014328**

Issue No.

Directives 2010/35/EU (TPED). 2008/68/EC

Declaration of Conformity

Customer Name

REV GAS INDUSTRIES LTD

Address

KOBANYAI UT 49
BUDAPEST 1101
HUNGARY

Customer Order Reference

BGZ23-00039-1

Sales Order / Works Order Number

508615/100270588

Manufacturer Luxfer Gas Cylinders Ltd. Colwick, Nottingham NG4 2BH. UK

Description of Pressure Equipment

Seamless aluminium alloy AA6061 high pressure gas cylinders

Conformity Assessment Procedure Followed:

ADR 6.2.2.11: Xa IS

Design Specification:

84/526/EEC

EC Type Examination Certificate Reference No.:

01/GB/230

Cylinder Type:

A634/1/Q

Manufacture Date

03/2023

Cylinder Capacity

2.0lt.

TPED Details of Valves (if fitted - if not fitted must state "Valves Not Fitted"):

Valves Not Fitted

Notified Body monitoring Luxfer's Quality Assurance System under the TPED for IS:

LRQA Nederland B.V. (0343), George Hintzenweg 77, 3068 AX Rotterdam, The Netherlands.

Cylinder Serial Numbers covered by this Declaration of Conformity:

Serial No. - M053826 - M054125

Total Number of Cylinders

300

Declaration

The above noted cylinders are in compliance with the requirements of Directive 2010/35/EU and conform to the regulation(s) and standard(s) mentioned in the EC Type examination (Module B) or in the type approval (1.8.7.2 from the ADR 2021) and with the pertinent requirements of 6.2 of ADR 2021. This declaration of conformity is issued under the sole responsibility of the manufacturer.

Signed

Simon Nicholson, Senior Design Engineer for & on behalf of Luxfer Gas Cylinders Ltd.

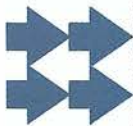
Luxfer's Official Stamp



Initials of Issuer Sign:

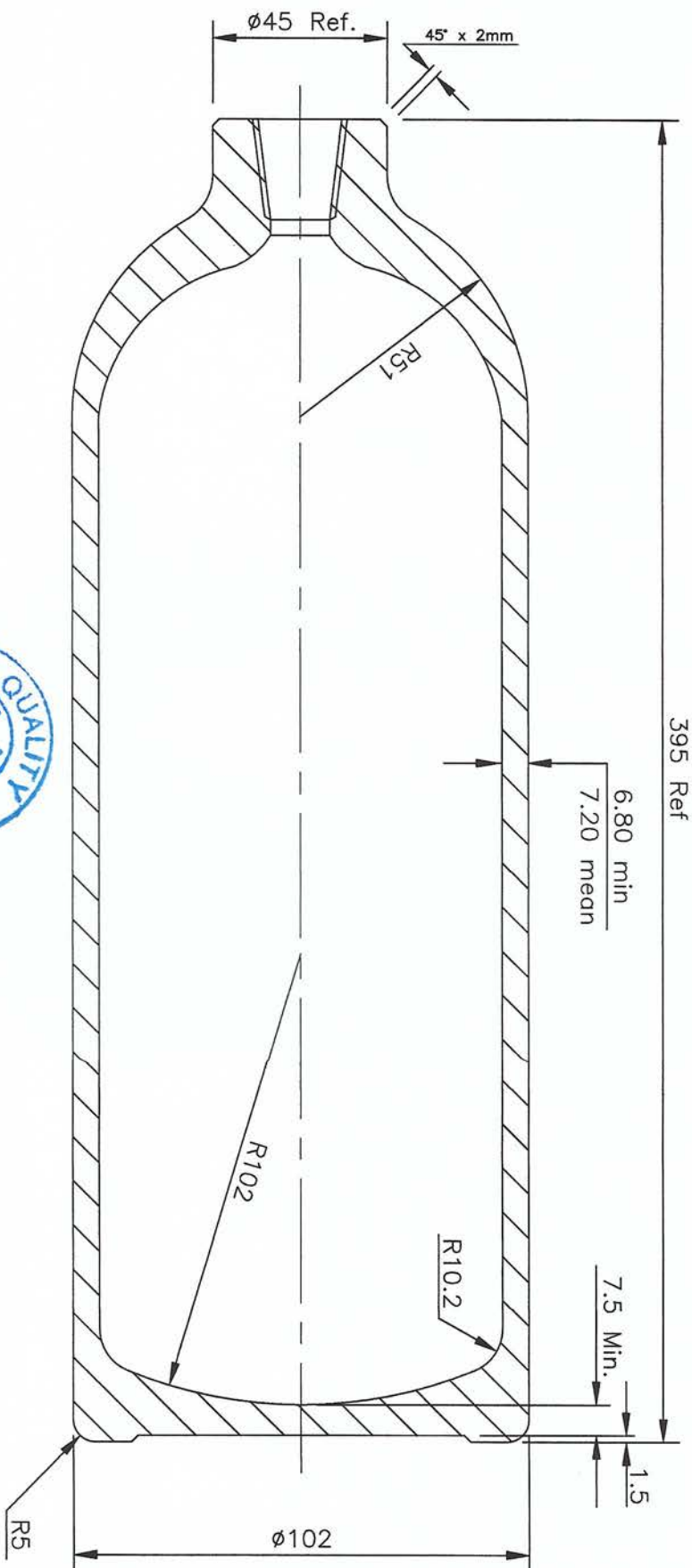
Issue Date

10/03/2023



LUXFER GAS CYLINDERS

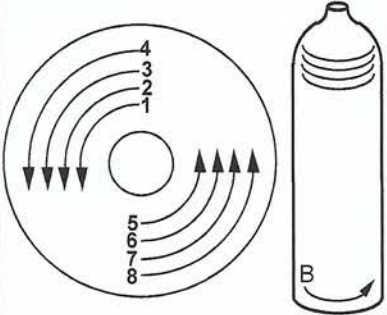
Colwick, Nottingham, NG4 2BH, England.
Tel: +44 (0) 115 980 3800
Fax: +44 (0) 115 980 3899
www.luxfercylinders.com



MATERIAL: ALUMINIUM ALLOY AA 6061 T6	WATER CAPACITY: 2.00L (min.)	CHARGING PRESSURE @15°C: 200 BAR	DRAWN CHECKED	A.S.N. P.H.	DATE DATE	22.July.2020 22.July.2020	© LUXFER GAS CYLINDERS LTD.2020 The copyright of this drawing belongs to Luxfer Gas Cylinders. It is supplied on the express terms that it is to be treated as confidential and is not to be copied or communicated to any other person. It is not to be used for the purpose of construction or manufacture unless expressly authorised for that purpose on each occasion that it is used.
UTS (min.): 330 N/mm ²	EMPTY WEIGHT: 2.54 Kg (approx.)	DEVELOPED PRESSURE _____	DESIGN: The design and manufacture of this cylinder conform to: 84/526/EEC				
0.2% PROOF STRESS: 280 N/mm ²	THREAD: 25E	TEST PRESSURE: 300 BAR	2010/35/EU (TPED)				
ELONGATION ON: 5.65 √A (min.)	FILLING RATIO: _____	BURST PRESSURE: (min.) 472 BAR	Based on Approved Type: 423/1/Q EC Approval No.: 84/526/EEC/UK18 TPED Approval Certificate: 01/GB/230				
All Dim. in mm u.o.s.							TITLE 2.0L Permanent Gas Cylinder
634/1/Q							
ISSUE : 3 M6378							

CUSTOMER MARKING INSTRUCTION SHEET

Cylinder Type	634/1/Q	Suffix:	33	Issue No:	2
Customer	REV GAS INDUSTRIES LTD.			Mod. No:	M6668
Approved For:	TPED (2010/35/EU)				
Drawn	A.S.N.	Date	06.05.22		

Stamping Positions : 	For Internal use only Cyl. Diameter : 102mm Nose ref: _____ Packing Req: _____		VALVE WEIGHT ----- KG CAGE WEIGHT ----- KG COLLAR WEIGHT ----- KG CIRCLIP WEIGHT ----- KG GAS WEIGHT ----- KG

Line	Char Size	Description
1		
2	3 mm	25E GB LUXFER 634 - 1 AA6061 T6
3	3 mm	6.8MM 2 KG 2.0 L PW200 PH300BAR
4	3 mm	 3 84/526 4 5 6
5		
6		
7		
8		
Base	3 mm	LUK 7 102Z75 8 9

Notes:

- LUXFER SERIAL NUMBER
- EMPTY WEIGHT OF CYLINDER ONLY
- IDENTIFICATION NUMBER OF TPED NOTIFIED BODY (e.g. LRQA Netherlands B.V. = 0343)
- COUNTRY OF APPROVAL OF INSPECTION BODY IN 3. (e.g. LRQA Netherlands B.V. = NL)
- NOTIFIED BODY INSPECTION STAMP (e.g. LRQA)
- YEAR FOLLOWED BY MONTH OF INITIAL TEST (e.g: 2022/05)
- BATCH NUMBER
- CAST NUMBER
- INSPECTORS MARK FOR PROOF OF CONCENTRICITY VERIFICATION





Colwick, Nottingham, NG4 2BH, England
Tel: +44 (0) 115 980 3800 Fax: +44 (0) 115 980 3899
www.luxfercylinders.com

Statement of Hydrostatic Pressure Test.

Customer: Rev Gas Industires, Kobanyai ut 49, Budapest 1101, Hungary.

Customer Order Reference: BGZ23-00039-1

Cylinders, Type **A634/1/Q** with the following Luxfer cylinder serial Nos. M053826 – M054125 as detailed on TPED Declaration of Conformity No. **TPED0014328** dated 10/03/2023, were all individually subjected to a successful Hydrostatic Pressure Test at a pressure of 300 bar held for a minimum of 60 seconds on the date stamped on the cylinders:

For & on Behalf of Luxfer Gas Cylinders Ltd:

P.S. Cameron

Certification Officer.
23/03/2023



Luxfer Gas Cylinders Colwick, Nottingham, NG4 2BH, United Kingdom

T +44 (0) 115 980 3800 www.luxfercylinders.com



Colwick, Nottingham, NG4 2BH, England
Tel: +44 (0) 115 980 3800 Fax: +44 (0) 115 980 3899
www.luxfercylinders.com

Customer Requested Manufacturing Information.

General Information:

Customer: REV GAS INDUSTRIES LTD, KOBANYAI UT 49, BUDAPEST 1101, HUNGARY

Cylinder Type A634/11/Q

Luxfer Cylinder Serial Numbers: M053826 – M054125

Original TPED Declaration of Conformity No. TPED0014328

Customer Order Number: BGZ23-00039-1

Manufacturing Information:

Hydro Test Pressure: 300 Bar for 60 seconds minimum duration.

Material Cast Code:

KID (see attached material certificates).

Batch Mechanical Test Results:

UTS: Specification minimum value = 330 MPa

0.2% Proof Stress (Yield): Specification minimum value = 280 MPa

Elongation: Specification minimum value = 12%

Burst Pressure: Specification minimum value = 472 Bar

Cylinder Type	Batch (Cast)	Serial Nos.	Yield *(MPa)	UTS *(MPa)	Burst Pressure* (Bar)	% Elong*	Hydro Test Date
A634/11/Q	7230381 (KID)	M053286 – M053956	322.1	359.7	557	16.9	MARCH 2023
A634/11/Q	7230382 (KID)	M053957 – M054082	322.4	362.1	562	16.8	MARCH 2023
A634/11/Q	7230383 (KID)	M054083 – M054125	328.9	363.4	569	15.3	MARCH 2023

*Note: 1 tensile, bend and burst test per 202 cylinders per type, per material cast and heat treatment cycle.

Manufacturers Declaration:

Luxfer Gas Cylinders Ltd in Nottingham UK, Designed & Manufactured the Gas Cylinders stated above.

The above stated information is authentic & was extracted from the Manufacturing Records for the Cylinder Serial Numbers quoted. All tests results, in process inspections & measurement were fully in accordance with the Design Specification, the Approved Design Drawing & the Transportable Pressure Equipment Directive (TPED) 2010/35/EU as was previously declared on the TPED Declaration of Conformity that was issued when the Cylinders were first delivered.

For & on Behalf of Luxfer Gas Cylinders:

Paul Cameron
Certification Officer
23/03/2023

Luxfer Gas Cylinders Colwick, Nottingham, NG4 2BH, United Kingdom

T +44 (0) 115 980 3800 www.luxfercylinders.com

Type : 634/1/Q
Drawing Issue : 3
Test Witness : TPED-D

Order No. : 100270588 / 100270587
Minimum Burst: 472
Spec : 84/526/EEC

Lot Number	Cast	Qty	Burst Batch	Burst Result	Tensile Batch	Width mm	Wall mm	Area mm ²	Proof N/mm ²	UTS N/mm ²	Elong %	Bend
23/0816	KID	135	7230381	557	7230381	18.86	7.33	138.24	322.1	359.7	16.9	PASS
23/0817	KID	131	7230382	562	7230382	18.85	7.26	136.85	322.4	362.1	16.8	PASS
23/0818	KID	183	7230383	569	7230383	18.87	7.25	136.81	328.9	363.4	15.3	PASS

Samples tested in accordance with BS EN ISO 6892-1, 10.3.2 Testing rate based on strain rate (method A)

Signed for Luxfer Gas Cylinders

Dan Toporowski

Signed for Inspection Authority



TYPE - A634-1 - Q
 GENERIC CODE - 102275

DATE - 7-3-23

INSPECTION - LRQA MOD D

QTY = 300/100

JOB ID No:

1250

1249

LUXFER ORDER No:

100270588

270587

CUSTOMER(S) - Rev Gas / MATAR

EEC
 155.3

CAST

KID

KID

KID

LOT NUMBER

23/0816

23/0817

23/0818

BURST BATCH No.

7230381

7230382

7230383

QA CHECKS ONLY

MIN WALL THICKNESS

6.8

7.16

7.20

7.12

MAX MID WALL THICKNESS

7.5

7.40

7.30

7.32

MIN BASE THICKNESS

7.5

8.11

8.14

8.07

WATER CAPACITY (L)

2.05

2.05

2.05

2.05

EMPTY WEIGHT (KG)

2.54

2.55

2.56

2.55

1472 BURST RESULT (BAR)

557

562

569

Serial No (LBB TEST)

TENSILE BATCH No.

7230381

7230382

7230383

QA CHECKS ONLY

MIN WALL THICKNESS

6.8

7.06

7.11

7.12

MAX MID WALL THICKNESS

7.5

7.36

7.35

7.36

MIN BASE THICKNESS

7.5

8.10

8.13

8.08

WATER CAPACITY (L)

2.05

2.05

2.05

2.05

EMPTY WEIGHT (KG)

2.54

2.56

2.56

2.55

COLLAR

N/A

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

QTY

BATCH

BATCH NUMBERS

COVERED

MAXIMUM 202

CYLINDERS

TOTAL QUANTITY

135

131

173

B5

MG

MG

lot

Sign on lot completion check all batches covered and are under the right cast, total the quantity in the lot

QA to sign box for correct information inputted into LOT

TOTAL 1449 0

1553 ETC





Chaussée de Vilvorde, 156
Vilvoordsesteenweg 156
B-1120 Bruxelles/Brussel
Tel.: 32 (0)2 264 03 60
Fax: 32 (0)2 268 89 58
<http://www.apragaz.com>
info@apragaz.com



084 - INSP
17020



NOTIFIED BODY TYPE APPROVAL CERTIFICATE

Issued in accordance with Pt. 1.8.7.2.4 (Renewal) of ADR 2021 agreement and following:

Directive 2010/35/EU (TPED)
Directives 2008/68/EC (Annex 1) & 2020/1833/EU

Certificate N°:

01/GB/230

Index 1 – Rev. 1

Page 1/1

Manufacturer: LUXFER GAS Cylinders Ltd.
Colwick, Nottingham, NG4 2BH
ENGLAND

Concerned Equipment: Seamless aluminium alloy refillable Gas Cylinders.

Drawing n° 834/1/Q Issue 4

Test pressure: 300 bar

Wall thickness min (Cylindrical part): 6.8 mm

Diameter (out): 102 mm

Bottom thickness min (Central part): 7.5 mm

Range of cylinders involved, according to Technical file "Cylinder Type: 423/1/Q"

	Min.	Max.
Cylinder Length (mm)	306	823.5
Water Capacity (L)	1.5	4.7

Concerned EC Directives & Standards used for this type approval (renewal):

TPED (2010/35/EU), ADR 2021 and Annex I, Parts 1 to 3 to 84/526/EEC

The conformity assessment of the concerned equipment will be performed in accordance with:

- Pt. 1.8.7.3 of ADR (Supervision of the manufacture)
- Pt. 1.8.7.4 of ADR (Initial inspection and tests)

This will be performed by a relevant body which can be either:

- A TPED - ADR notified / inspection body (Xa), See Pt 6.2. of ADR, or
- The in-house Inspection Service of the manufacturer (IS), See Pt 6.2. of ADR.

The manufacturer will be allowed to affix the **TY** mark followed by the appropriate notified body identification number to approved equipment under the conditions described in the chapter 3 of the TPED Directive (2010/35/EU).

The Certificate is valid until 12th October 2031

Approval Date: 25/02/2022

Name: B. NEVE ir

Position: General Manager

Notified body identification n°:

0029

Signature:

Notified body (Xa):

APRAGAZ

Notified body reference / Technical file: 0110/F.1390

Certificat d'analyse / Certificate of Analysis

SHA

Page: 1/4

Ref. client / Customer Ref. :

668350

Commande / Order

0010400668-10

Point d'origine / Point of Origin

SHAWINIGAN ALUMINIUM INC.

3201, Avenue de l'Aluminium

Shawinigan

Québec, Canada

G9N 0E9



Expédié à / Ship to :

LUXFER GAS CYLINDERS LIMITED

Vendu à / Sold to :

LUXFER GAS CYLINDERS LIMITED

COLWICK

COLWICK

NOTTINGHAM

NC, Great Britain

NOTTINGHAM
NC, Great Britain

NG4 2BH

NG4 2BH

KID

Paul Cameron

18.07.2022

Date d'exp. / Shipping Date:

2021-11-08

Commissairement / Bill of Lading:

2626-133422-105902

Liste d'exp. / Shiplist:

105902

Équipement / Equipment:

7423A

Alliage (AA) / Alloy (AA):

69271 (6061)

Produit / Product:

Aluminium Extrusion Ingot

Matériel Client / Customer Part:

101 X 5500 MM

Dimension:

4.0 X 216.5 IN

Analyse en % du poids / Analysis in % of weight

No d'échantillon de coulée Sample No of Drop	No Lot Lot No	Poids net (kg) Net Weight (kg)	Poids net (lb) Net Weight (lb)	Pièces Pieces	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Ga
21110101B	8427564	1,204	2,654.366	10	0.60	0.16	0.24	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101B	8427565	1,203	2,652.161	10	0.60	0.16	0.24	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101B	8427566	1,202	2,649.956	10	0.60	0.16	0.24	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101B	8427567	1,203	2,652.161	10	0.60	0.16	0.24	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101B	8427568	1,204	2,654.366	10	0.60	0.16	0.24	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101B	8427569	1,205	2,656.570	10	0.60	0.16	0.24	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101A	8427570	1,203	2,652.161	5	0.59	0.16	0.24	0.01	0.89	0.084	0.00	0.01	0.000	0.01

Paquets : 11	Poids net : 13,237 kg	Pièces : 110	Tare : 259 kg	Poids brut : 13,496 kg
Bundles :	Net Weight : 29,183 lb	Pieces :		Gross Weight : 29,754 lb

LES LINGOTS 23KG, LES LINGOTS EN FORME DE T, LES QUELQUES, LES LINGOTS DE LAMINAGE MIS AU REBUT ET AUTRES LINGOTS DE REFUSION, ONT TENDANCE A FORMER DES CAVITES SUSCEPTIBLES D'EMPRISONNER DE L'EAU, POUR ELIMINER L'HYDRIDE AVANT LEUR EMPLOI DANS TOUT PROCÉDÉ DE FUSION ET POUR PRÉVENIR LES RISQUES D'EXPLOSION, LES LINGOTS DEVRAIENT ÊTRE SOUMIS A UN SÉCHAGE INTENSIF PAR CHAUFFAGE PRÉLIMINAIRE AVANT DE LES INCORPORER A DU MÉTAL EN FUSION, NE CONTIENT PAS D'ÉLÉMENTS TRACABLES, TRACABLE 23KG INGOT, TEE INGOT, SCRAP, SCRAPPED SHEET INGOT OR OTHER INGOT FOR REMELTING ARE PROVE TO THE FORMATION OF SPHERICAL CAVITIES, DRIED BY PREHEATING BEFORE LOADING THEM INTO MOLTEN METAL, DOES NOT CONTAIN RADIOACTIVE MATERIALS.

Paul Cameron

/ Ghita Ouaziz

Paul Cameron

18.07.2022

L'EXACTITUDE DE CES ANALYSES EST DANS LES NORMES DES LIMITES COMMERCIALES. THE ANALYSES HERE ARE ACCURATE WITHIN COMMERCIAL LIMITS.

Certificat d'analyse / Certificate of Analysis

Ref. client / Customer Ref. :

668350

Commande / Order

0010400668-10

Expédié à / Ship to :

LUXFER GAS CYLINDERS LIMITED

Vendu à / Sold to :

LUXFER GAS CYLINDERS LIMITED

COLWICK

COLWICK

NOTTINGHAM

NC, Great Britain

NG4 2BH

NOTTINGHAM

NC, Great Britain

NG4 2BH

Point d'origine / Point of Origin

SHAWINGAN ALUMINIUM INC.

3201, Avenue de l'Aluminium

Shawinigan

Québec, Canada

G9N 0E9

SHA

Page 2/4



Date d'exp. / Shipping Date:

2021-11-08

Commissaire / Bill of Lading:

2626-133422-105902

Liste d'exp. / Shiplist:

105902

Équipement / Equipment:

7423A

Alliage (AA) / Alloy (AA):

69271 (6061)

Produit / Product:

Aluminium Extrusion Ingot

Matériel Client / Customer Part:

101 X 5500 MM

Dimension:

4.0 X 216.5 IN

Analyse en % du poids / Analysis in % of weight

No d'échantillon de coulée Sample No of Drop	No Lot Lot No	Poids net (kg) Net Weight (kg)	Poids net (lb) Net Weight (lb)	Pièces Pieces	Si	Na	Fe	Pb	Cu	Sn	Mn	Mg	Cr	Zn	Ti	Bi	Ga
21110101B				5	0.60	0.0000	0.16	0.001	0.24	0.00	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101A	8427572	1,204	2,654.366	10	0.59	0.0000	0.16	0.001	0.24	0.00	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101A	8427573	1,204	2,654.366	10	0.59	0.0000	0.16	0.001	0.24	0.00	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101A	8427574	1,200	2,645.547	10	0.59	0.0000	0.16	0.001	0.24	0.00	0.01	0.89	0.084	0.00	0.01	0.000	0.01
21110101A	8427575	1,205	2,656.570	10	0.59	0.0000	0.16	0.001	0.24	0.00	0.01	0.89	0.084	0.00	0.01	0.000	0.01

Paquets : 11

Poids net : kg

13,237

Pièces : 110

Tare : kg

259

Poids brut : kg

13,496

Bundles : 11

Net Weight : lb

29,183

Pieces : 110

Tare : lb

571

Gross Weight : lb

29,754

LES LINGOTS TRIL-OK 23KG, LES LINGOTS EN FORME DE T, LES QUELQUES LES LINGOTS DE LAMINAGE MIS AU REBUT ET AUTRES LINGOTS DE REFUSION, ONT TENDANCE A FORMER DES CAVITES SUSCEPTIBLES D'EMPRISONNER DE L'EAU, POUR ELIMINER L'HYDRATITE AVANT LEUR EMPLOI DANS TOUT PROCÉDÉ DE FUSION ET POUR PRÉVENIR LES RISQUES D'EXPLOSION, LES LINGOTS DEVRAIENT ÊTRE SOUMIS À UN SÉCHAGE INTENSIF PAR CHAUFFAGE PRÉLIMINAIRE AVANT DE LES INCORPORER À DU MÉTAL EN FUSION. NE CONTIENT PAS DE MATIÈRE RADIOACTIVE. TRIL-OK 23 KG INGOT, TEE, INGOT, SCRAP SHEET INGOT OR OTHER INGOT FOR REMELTING ARE PRONE TO THE FORMATION OF VACUUM CAVITIES WHICH COULD BE TRAPPED DURING MELTING. PRIOR TO USE IN ANY MELTING OPERATION, AND TO SAFEGUARD AGAINST POSSIBLE EXPLOSION HAZARDS, INGOTS SHOULD BE THOROUGHLY DRIED BY PREHEATING BEFORE LOADING THEM INTO MOLTEN METAL. DOES NOT CONTAIN RADIOACTIVE MATERIALS.

[Signature]

/ Ghita Ouaziz

Paul Cameron

18.07.2022

L'EXACTITUDE DE CES ANALYSES EST DANS LES NORMES DES LIMITES COMMERCIALES. THE ANALYSES HERE ARE ACCURATE WITHIN COMMERCIAL LIMITS.

Certificat d'analyse / Certificate of Analysis

Ref. client / Customer Ref. :

668350

Commande / Order

0010400668-10

Expédié à / Ship to :

LUXFER GAS CYLINDERS LIMITED

Vendu à / Sold to :

LUXFER GAS CYLINDERS LIMITED

COLWICK

COLWICK

NOTTINGHAM

NOTTINGHAM

NC, Great Britain

NC, Great Britain

NG4 2BH

NG4 2BH

Point d'origine / Point of Origin

SHAWINIGAN ALUMINIUM INC.

3201, Avenue de l'Aluminium

Shawinigan

Québec, Canada

G9N 0E9

SHA

Page: 3/4



Date d'exp. / Shipping Date:

2021-11-08

Commissement / Bill of Lading:

2626-133422-105902

Liste d'exp. / Shiplist:

105902

Equipement / Equipment:

7423A

Alliage (AA) / Alloy (AA):

69271 (6061)

Produit / Product:

Aluminium Extrusion Ingot

Matériel Client / Customer Part:

101 X 5500 MM

Dimension:

4.0 X 216.5 IN

Analyse en % du poids / Analysis in % of weight

No d'échantillon de coulée
Sample No of Drop

No Lot
Lot No

Poids net (kg)
Net Weight (kg)

Poids net (lb)
Net Weight (lb)

Pièces
Pieces

Si

Na

Fe

Pb

Cu

Mn

Mg

Cr

Zn

Ti

Bi

Ga

THIS IS TO CERTIFY THAT THE UT INSPECTION, EXCESS SILICON, GRAIN SIZE, HARDNESS AND HYDROGEN REQUIREMENTS HAVE ALL BEEN MET. MATERIAL COMPLIES WITH SPECIFICATION WPS GLOBAL-6061-001, ISSUE 02 CERTIFICATE IS IN ACCORDANCE WITH THE BS EN 10204-2004(E); CERTIFICATE TYPE 3.1

NO MORE THAN 2 CAST (HEAT) NUMBERS SHOULD BE SHIPPED AT THE SAME TIME/LOAD

USE HARD WOOD ONLY FOR BRACING

H.S. CODE 7601.20

ALUMINIUM ALLOYED INGOT

THIS IS TO CERTIFY THAT THE UT INSPECTION, EXCESS SILICON, GRAIN SIZE, HARDNESS AND HYDROGEN REQUIREMENTS HAVE ALL BEEN MET. MATERIAL COMPLIES WITH SPECIFICATION WPS GLOBAL-6061-001, ISSUE 02 CERTIFICATE IS IN ACCORDANCE WITH THE BS EN 10204-2004(E); CERTIFICATE TYPE 3.1

Paquets : 11 Poids net : 13,237 kg Pièces : 110 Tare : kg
Bundles : 11 Net Weight : 29,183 lb Pieces : 110 Tare : lb

Poids brut : 259 kg
Gross Weight : 571 lb

LES INGOTS TRILOK 21KG, LES INGOTS EN FORME DE T, LES GUEUSES, LES INGOTS DE LAMINAGE MIS AU REBUT ET AUTRES INGOTS DE REFUSION ONT TENDANCE A FORMER DES CAVITES SUSCEPTIBLES D'EMPRISONNER DE L'EAU, POUR ELIMINER L'HYGROSCOPICITE AVANT LEUR EMPLOI DANS TOUT PROCÉDÉ DE FUSION ET POUR PREVENIR LES RISQUES D'EXPLOSION, LES INGOTS DEVRAIENT ETRE SOUMIS A UN SECHAGE INTENSIF PAR CHAUFFAGE PRELIMINAIRE AVANT DE LES INCORPORER A DU METAL EN FUSION. NE CONTIENT PAS DE MATIERE RADIOACTIVE. TRILOK 21KG INGOT, TEE INGOT, SOVS, SCRAPPED SHEET INGOT ON OTHER INGOT FOR REMELTING ARE PRONE TO THE FORMATION OF VACUUMS. THESE INGOTS SHOULD BE THOROUGHLY DRIED BY PREHEATING BEFORE LOADING THEM INTO MOLTEN METAL. DOES NOT CONTAIN RADIOACTIVE MATERIALS.

[Signature]

/ Ghita Oueziz

[Signature]

L'EXACTITUDE DE CES ANALYSES EST DANS LES NORMES DES LIMITES COMMERCIALES. THE ANALYSES HERE ARE ACCURATE WITHIN COMMERCIAL LIMITS.

18.07.2022

Certificat d'analyse / Certificate of Analysis

SHA

Ref. client / Customer Ref. :

668350

Commande / Order

0010400668-10

Expédié à / Ship to :

LUXFER GAS CYLINDERS LIMITED

Vendu à / Sold to :

LUXFER GAS CYLINDERS LIMITED

COLWICK

COLWICK

NOTTINGHAM

NC, Great Britain

NOTTINGHAM

NC, Great Britain

NG4 2BH

NG4 2BH

Point d'origine / Point of Origin

SHAWINGAN ALUMINIUM INC.

3201, Avenue de l'Aluminium

Shawinigan

Québec, Canada

G9N 0E9

Date d'exp. / Shipping Date:

Connaissance / Bill of Lading:

Liste d'exp. / Shiplist:

Équipement / Equipment:

Alliage (AA) / Alloy (AA):

Produit / Product:

Matériel Client / Customer Part:

Dimension:

2021-11-08

2626-133422-105902

105902

7423A

69271 (6061)

Aluminium Extrusion Ingot

101 X 5500 MM

4.0 X 216.5 IN



Analyse en % du poids / Analysis in % of weight

No d'échantillon de coulée
Sample No of Drop

No Lot
Lot No

Poids net (kg)
Net Weight (kg)

Poids net (lb)
Net Weight (lb)

Pièces
Pieces

Si

Fe

Cu

Mn

Mg

Cr

Zn

Ti

Bi

Ga

NO MORE THAN 2 CAST (HEAT) NUMBERS SHOULD BE SHIPPED AT THE SAME

TIME/LOAD

USE HARD WOOD ONLY FOR BRACING

H.S. CODE 7601.20

ALUMINIUM ALLOYED INGOT

HYDROGEN VALUES: (21077401) = 0.128 (21089501) = 0.106 (21090101) = 0.13 (21100401) = 0.13 (21095101) = 0.12 (21110101) = 0.11

Paquets :
Bundles :

11

Poids net :
Net Weight :

kg
lb

13,237
29,183

Pièces :
Pieces :

110

Tare :
kg
lb

259
571

Poids brut :
Gross Weight :

kg
lb

13,496
29,754

LES INGOTS TRILOK 21KG, LES INGOTS EN FORME DE T, LES GUEUSES, LES INGOTS DE LAMINAGE MIS AU REBUT ET AUTRES INGOTS DE REFUSION ONT TENDANCE A FORMER DES CAVITES SUCCEPTIBLES DE MISE EN DANGER DE LA SURETE DES PRODUITS FINIS. POUR ELIMINER L'HUMIDITE AVANT LEUR EMPLOI DANS TOUT PROCÉDÉ DE FUSION ET POUR PREVENIR LES RISQUES DE CRACKING, LES INGOTS DEVRAIENT ETRE SOUMIS A UN SECHAGE INTENSE PAR CHAUFFAGE PRELIMINAIRE AVANT DE LES INCORPORER A DU METAL EN FUSION. NE CONTIENT PAS D'IMPURETES EN SUSSENDREMENT. CRACKED SHEET INGOT OR OTHER INGOT FOR REMELTING ARE PRONE TO THE FORMATION OF SHRINKAGE CAVITIES WHICH WILL PERMIT ENTRAPMENT OF GASES DURING REMELTING OPERATION AND TO PRECLUDE AGAINST POSSIBLE EXPLOSION HAZARDS. INGOTS SHOULD BE THOROUGHLY DRIED BY PREHEATING BEFORE LOADING THEM INTO MOLTEN METAL. DOES NOT CONTAIN RADIOACTIVE MATERIALS.

[Signature]

/ Ghita Quaziz Paul Cameron

18.07.2022

L'EXACTITUDE DE CES ANALYSES EST DANS LES NORMES DES LIMITES COMMERCIALES. THE ANALYSES HERE ARE ACCURATE WITHIN COMMERCIAL LIMITS.

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Luxfer Gas Cylinders Limited
Division of Luxfer Group Limited
Private Road 2
Colwick Industrial Estate
Nottingham
NG4 2BH
United Kingdom

Holds Certificate Number:

FM 23214

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

The design, development, manufacture, assembly and supply of aluminium alloy seamless high pressure gas cylinders, medical gas therapy devices, alternative fuel devices, and associated products and aluminium cold impact extrusion to customer order and specification requirements appropriate to the destination country



For and on behalf of BSI:

Matt Page, Managing Director Assurance - UK & Ireland

Original Registration Date: 1993-02-15

Latest Revision Date: 2022-07-19

Effective Date: 2022-05-19

Expiry Date: 2025-05-18

Page: 1 of 1



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This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract.
An electronic certificate can be authenticated [online](#).
Printed copies can be validated at www.bsigroup.com/ClientDirectory

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A Member of the BSI Group of Companies.



EC CERTIFICATE OF AUTHORISATION

In accordance with the requirements of the Transportable Pressure Equipment Directive 2010/35/EU

This is to certify that the quality system of

**Luxfer Gas Cylinders Limited
Colwick
Nottinghamshire
United Kingdom**

has been assessed against the requirements of the ADR 2021 1.8.7.6 for inspections and test, and conforms to the requirements for the products shown below:

Production, Final Inspection & Testing of Seamless Aluminium Alloy High Pressure Gas Cylinders

Approval is subject to the continued maintenance of the quality system in accordance with the requirements of the ADR 2021 and continuing to comply with the EC Type Approval Certificate(s) as listed on the attached schedule.

Authorisation is hereby given to use the LRQA Nederland B.V. Notified Body Identification Number in accordance with the requirements of the specified Directive in relation to the products as identified above.

Certificate No.:	0343/BHM/TPED/COV0612076/1
Original Approval:	14 November 2000
Current Certificate:	19 May 2022
Certificate Expiry:	18 May 2025
Notified Body No. 0343	


S. M. Williams on behalf of LRQA Nederland B.V.

EC CERTIFICATE OF AUTHORISATION

0343/BHM/TPED/COV0612076/1

**In accordance with the requirements of the Transportable Pressure
Equipment Directive 2010/35/EU**

Products	Certificate Number	Issuing Notified Body	Expiry Date
Gas Cylinder 899/1/E	0343/TPED/ROT/COV1312186/05	LRQA NL B.V. (0343)	26/06/2023
Gas Cylinder 886/1/E	0343/TPED/ROT/COV1312186/06	LRQA NL B.V. (0343)	11/02/2023
Gas Cylinder 255/1/E	0343/TPED/ROT/COV1312186/07	LRQA NL B.V. (0343)	07/04/2024
Gas Cylinder 243/1/E	0343/TPED/ROT/COV1312186/08	LRQA NL B.V. (0343)	07/04/2024
Gas Cylinder 242/1/E	0343/TPED/ROT/COV1312186/09	LRQA NL B.V. (0343)	07/04/2024
Gas Cylinder 904/1/E	0343/TPED/ROT/COV1312186/10	LRQA NL B.V. (0343)	07/04/2024
Gas Cylinder 902/1/E	0343/TPED/ROT/COV1312186/11	LRQA NL B.V. (0343)	07/04/2024
Gas Cylinder 238/1/E	0343/TPED/ROT/COV1312186/14	LRQA NL B.V. (0343)	31/08/2024
Gas Cylinder - Part No. L3380N	0343/TPED/ROT/COV1512594/1	LRQA NL B.V. (0343)	22/11/2025
Gas Cylinder - Part No. P3378N	0343/TPED/ROT/COV1512254/1	LRQA NL B.V. (0343)	18/01/2026
Gas Cylinder - Part No. P3342I	0343/TPED/ROT/COV1512059/1	LRQA NL B.V. (0343)	19/01/2026
Gas Cylinder - Part No. P3347I	0343/TPED/ROT/COV1512059/2	LRQA NL B.V. (0343)	19/01/2026
Cylinder Family P7017N	0343/TPED/ROT/COV1619370/1	LRQA NL B.V. (0343)	26/10/2026
Cylinder Family P7018N	0343/TPED/ROT/COV1619370/2	LRQA NL B.V. (0343)	26/10/2026
Gas Cylinder - Part No. P3320N	0343/TPED/ROT/COV1711146/1	LRQA NL B.V. (0343)	13/03/2027
Gas Cylinder - Part No. P7030N	0343/TPED/ROT/COV1740229/1	LRQA NL B.V. (0343)	07/06/2027
Gas Cylinder - Part No. P7031N	0343/TPED/ROT/COV1740229/2	LRQA NL B.V. (0343)	07/06/2027
Gas Cylinder - Part No 708/1/N	0343/TPED/ROT/COV1740151/1	LRQA NL B.V. (0343)	23/07/2027
Gas Cylinder - Part No. 967/1/X	0343/TPED/ROT/COV1740218/1	LRQA NL B.V. (0343)	05/09/2027
Gas Cylinder - Part No. P3389I	0343/TPED/ROT/COV1723386/1	LRQA NL B.V. (0343)	12/11/2027
Gas Cylinder - Part No. P3391I	0343/TPED/ROT/COV1723386/2	LRQA NL B.V. (0343)	12/11/2027
Gas Cylinder - Part No. 669/1/I	0343/TPED/ROT/COV1711678/1	LRQA NL B.V. (0343)	20/12/2027
Gas Cylinder - Part No. 968/1/I	0343/TPED/ROT/COV1713735/1	LRQA NL B.V. (0343)	26/02/2028
Gas Cylinder - Part No. P7028N	0343/TPED/ROT/PRJ11066776/1	LRQA NL B.V. (0343)	15/10/2028
Gas Cylinder - Part No. P7033N	0343/TPED/ROT/PRJ11066781/1	LRQA NL B.V. (0343)	15/10/2028
Gas Cylinder - Part No. P7029N	0343/TPED/ROT/PRJ11066788/1	LRQA NL B.V. (0343)	15/10/2028
Gas Cylinder - Part No. P7034N	0343/TPED/ROT/PRJ11069176/1	LRQA NL B.V. (0343)	15/10/2028
Gas Cylinder - Part No. P7036N	0343/TPED/ROT/PRJ11069441/1	LRQA NL B.V. (0343)	15/10/2028
Gas Cylinder - Part No. P7038N	0343/TPED/ROT/PRJ11074699/1	LRQA NL B.V. (0343)	15/10/2028
Gas Cylinder - Part No. P7035N	0343/TPED/ROT/PRJ11069169/1	LRQA NL B.V. (0343)	24/10/2028
Gas Cylinder - Part No. P7034I	0343/TPED/ROT/PRJ1109995753/1	LRQA NL B.V. (0343)	12/05/2029
Gas Cylinder - Part No. P7043N	0343/TPED/BHM/PRJ11091669/1	LRQA NL B.V. (0343)	21/05/2029
Gas Cylinder - Part No. P7046N	0343/TPED/BHM/PRJ11091669/2	LRQA NL B.V. (0343)	20/06/2029
Gas Cylinder - Part No. P7042N	0343/TPED/BHM/PRJ11091669/3	LRQA NL B.V. (0343)	13/08/2029
Gas Cylinder - Part No. 972/1/I	0343/TPED/ROT/PRJ1110016683/1	LRQA NL B.V. (0343)	15/01/2030
Gas Cylinder - Part No. 973/1/X	0343/TPED/ROT/PRJ11100226309/1	LRQA NL B.V. (0343)	27/01/2030
Gas Cylinder - Part No. 951/1/I	0343/TPED/BHM/PRJ11100294817/1	LRQA NL B.V. (0343)	03/02/2031
Gas Cylinder - Part No. 955/1/I	0343/TPED/BHM/PRJ11100299876/1	LRQA NL B.V. (0343)	03/02/2031
Gas Cylinder - Part No. 975/1/I	0343/TPED/BHM/PRJ11100265024/1	LRQA NL B.V. (0343)	11/02/2031
Gas Cylinder - Part No. 713/1/N	0343/TPED/BHM/PRJ11100258364/1	LRQA NL B.V. (0343)	24/02/2031
Gas Cylinder - Part No. 893/1/I	0343/TPED/BHM/PRJ11100297135/3/047	LRQA NL B.V. (0343)	18/04/2031
Gas Cylinder - Part No. 950/1/I	0343/TPED/BHM/PRJ11100297135/3/053	LRQA NL B.V. (0343)	18/04/2031
Gas Cylinder - Part No. P3305I	0343/TPED/BHM/PRJ11100297135/3/045	LRQA NL B.V. (0343)	28/04/2031
Gas Cylinder - Part No. L3355I	0343/TPED/BHM/PRJ11100297135/3/081	LRQA NL B.V. (0343)	20/05/2031
Gas Cylinder - Part No. 953/1/I	0343/TPED/BHM/PRJ11100297016/3/083	LRQA NL B.V. (0343)	03/06/2031

LRQA Nederland B.V. (Reg. no. 24247948) is a private limited company registered in the Netherlands with registered office at George Hintzenweg 77, 3068 AX Rotterdam. A subsidiary of LRQA Group Limited. LRQA Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Products	Certificate Number	Issuing Notified Body	Expiry Date
Gas Cylinder – Part No. 898/1/N	0343/TPED/BHM/PRJ11100297135/3/077	LRQA NL B.V. (0343)	23/06/2031
Gas Cylinder – Part No. 897/1/I	0343/TPED/BHM/PRJ11100297135/3/071	LRQA NL B.V. (0343)	06/07/2031
Gas Cylinder – Part No. L3107N	0343/TPED/BHM/PRJ11100297135/3/121	LRQA NL B.V. (0343)	03/08/2031
Gas Cylinder – Part No. P3359YI	0343/TPED/BHM/PRJ11100297135/3/148	LRQA NL B.V. (0343)	12/09/2031
Gas Cylinder – Part No. L3104N	0343/TPED/BHM/PRJ11100297135/3/124	LRQA NL B.V. (0343)	13/09/2031
Gas Cylinder – Part No. 272/1/N	0343/TPED/BHM/PRJ11100297135/3/134	LRQA NL B.V. (0343)	13/09/2031
Gas Cylinder – Part No. 941/1/I	0343/TPED/BHM/PRJ11100297135/3/144	LRQA NL B.V. (0343)	13/09/2031
Gas Cylinder – Part No. L3121N	0343/TPED/BHM/PRJ11100297135/3/118	LRQA NL B.V. (0343)	16/09/2031
Gas Cylinder – Part No. 875/1/N	0343/TPED/BHM/PRJ11100297135/3/136	LRQA NL B.V. (0343)	23/09/2031
Gas Cylinder – Part No. P3320I	0343/TPED/BHM/PRJ11100297135/3/142	LRQA NL B.V. (0343)	23/09/2031
Gas Cylinder – Part No. P2806Z	01/GB/218 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. P2871Z	01/GB/219 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. L3067Z	01/GB/220 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. P2810Z	01/GB/221 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. P2851Z	01/GB/222 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. L2889Z	01/GB/223 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. L2815Z	01/GB/224 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. P3136Z	01/GB/225 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. P3068Z	01/GB/226 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. L3178Z	01/GB/227 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. 285/1/Q	01/GB/228 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. 834/1/Q	01/GB/230 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. 424/1/Q	01/GB/231 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. L2922G	01/GB/232 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. 605/1/Q	01/GB/234 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. P2802Z	01/GB/235 Index 1 – Rev. 0	Apragaz (0029)	12/10/2031
Gas Cylinder – Part No. 818/1/Q	01/GB/297 Index 1 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. 868/1/Q	02/GB/318 Index 1 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. 656/1/Q	02/GB/320 Index 1 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. L2921G	03/GB/567 Index 1 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. L3055G	03/GB/691 Index 1 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3325N / P3325I	09/GB/1765 Index 3 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3337N / P3337I	09/GB/1863 Index 2 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3338N / P3338I	09/GB/1864 Index 3 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3339I / L3379I, P3382N	09/GB/1865 Index 4 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3340N / P3340I, P3394I	09/GB/1866 Index 3 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. L3347N / P3341I, P3341N	09/GB/1867 Index 3 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3342N / P3342I	09/GB/1868 Index 2 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3330N / P3330I	09/GB/1872 Index 2 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3332N / P3332I	09/GB/1873 Index 2 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3333N / P3333I	09/GB/1874 Index 2 – Rev. 0	Apragaz (0029)	25/10/2031
Gas Cylinder – Part No. P3230N	0343/BHM/TPED/PRJ11100315925/2	LRQA NL B.V. (0343)	16/01/2032
Gas Cylinder – Part No. P3124N	0343/BHM/TPED/PRJ11100315933/2	LRQA NL B.V. (0343)	16/01/2032

Schedule Issue:

02

Date of Schedule Issue:

19 May 2022

Notified Body No. 0343

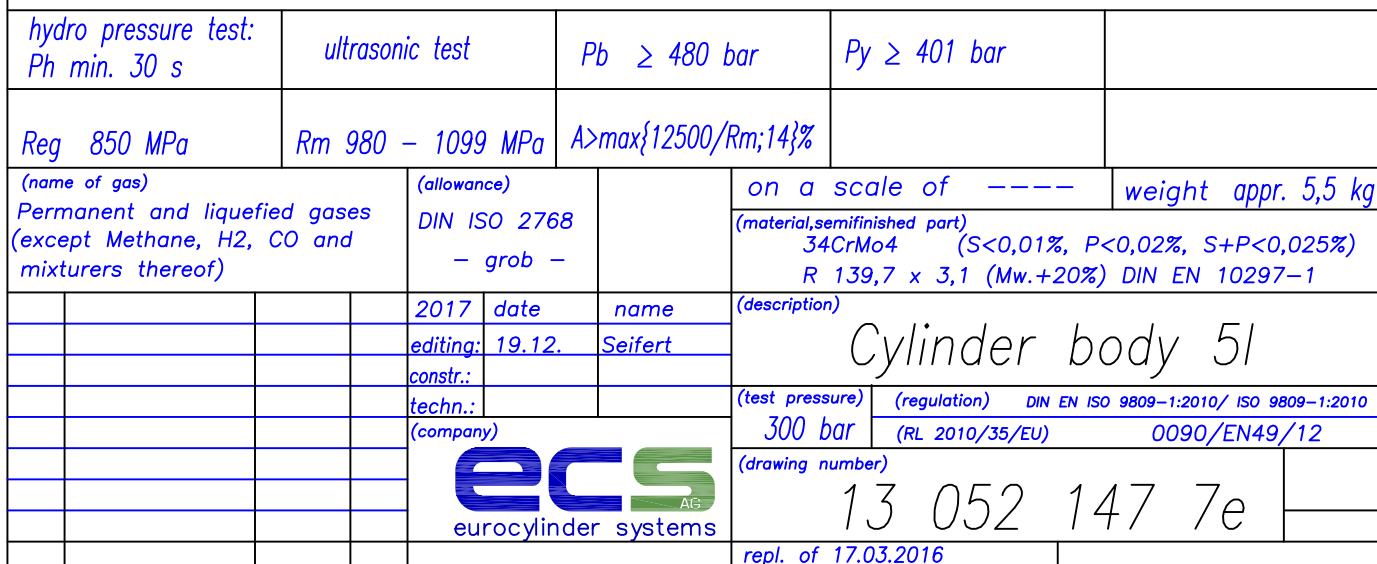
S. M. Williams
S. M. Williams on behalf of LRQA Nederland B.V.

LRQA Nederland B.V. (Reg. no. 24247948) is a private limited company registered in the Netherlands with registered office at George Hintzenweg 77, 3068 AX Rotterdam. A subsidiary of LRQA Group Limited. LRQA Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Technical drawing of a mechanical part, likely a pressure vessel or boiler component, showing a cross-section with various dimensions and tolerances.

Dimensions and Tolerances:

- Top flange: 6,3 (thickness), 4,5 (radius), 45° (angle).
- Top cylindrical section: 95 ± 10 (height), R60 ± 10 (radius).
- Central cylindrical body: 398 ± 15 (height), 435 ± 5 (total height).
- Bottom flange: 16,8 + 5 (thickness), ≥ 7,4 (height), 10,5 + 5 (height), R ≥ 10,5 (radius), ≥ 10 (height), ≥ 4,5 (width).
- Overall diameter: $\varnothing 139,7 \pm 1,4$.
- Internal diameter: $\geq \varnothing 105$.
- Surface finish: metallic shiny, mech. process.
- Hardness: 344-399 HBW.
- Surface texture: $\sqrt{R_a} 1,0$, $\sqrt{R_a} 1,4$.
- Minimum wall thickness: $\geq 3,0$.



Front:

25E D ecs ABC123 UT
3.0MM . . , .KG 5L PW200PH300BAR
π0090 ENISO9809-1 D ^{AP}₁₄ 2022/ __

Back:

	17.03.2022	Marking
	Mund	REV 5L 57027
		Revision 0

Konformitätserklärung

Conformity declaration / Déclaration de conformité / Dichiarazione di conformità

**Folgende Stahlflaschen wurden in Übereinstimmung mit der
Richtlinie 2010/35/EU hergestellt.**

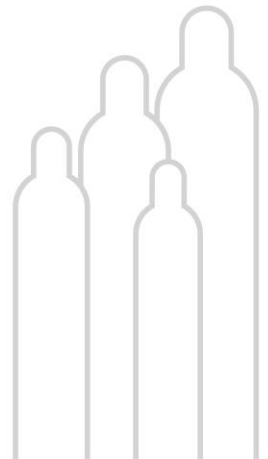
The following steel cylinders were manufactured acc. directive 2010/35/EU.
Les bouteilles en acier suivantes ont été fabriquées en conformité avec la directive
2010/35/UE. Le bombole sono state prodotte secondo la direttiva 2010/35/UE.

Auftragsnummer:	22/57027/1
Order no / M. de commande / Ordine no:	
Kunde:	Rév Gas Industries Ltd.
Customer / Cliente / Client:	
Stückzahl:	200
Quantity / Quantité / Quantità:	
Fassungsraum:	5 l
Volume / Volume / Volume:	
Prüfdruck:	300 bar
Test pressure / Pression d'épreuve / Pressione Prova:	
Herstellernummern:	LWL101-LWL190, LWM001-LWM111
Manufacturer's no. / No. di série / Numero de serie:	(excl.LWM024)
Kundennummern:	-
Customer no / No. di cliente / Numero client:	
Vorschrift:	EN ISO 9809 - 1 : 2010
Rule / Règlementation / Regola:	
Zulassungsnummer:	0090/EN49/12
Approval no / Numéro de agrément / Approvazione no:	
Konformitätszeichen:	π
Conformity mark / No de conformité / Conformità no:	
Kennnummer:	0090
Reference no / Numéro d'identification / Riferimento no:	

Apolda, 16.09.2022

i.A./pp. Förtsch
(ecs AG)

F10 Ausgabe 2 / 01.06.2022



Die Kennzeichnung mit P15Y durch die eurocylinder systems AG erfolgt im Auftrag nach den Vorgaben des Kunden. Die eurocylinder systems AG überprüft nicht, ob die rechtlichen Voraussetzungen für eine Kennzeichnung P15Y vorliegen. Es ist die ausschließliche Pflicht des Kunden und allen folgenden Eigentümern zu überprüfen, dass die einschlägigen Vorschriften der ADR/RID P200 eingehalten werden. Die eurocylinder systems AG ist nicht verantwortlich sicherzustellen, ob der Kunde und alle folgenden Eigentümer zu einer Kennzeichnung mit P15Y autorisiert sind oder ob die Voraussetzungen für die Kennzeichnung P15Y vorliegen.

The labeling with P15Y by eurocylinder systems AG is carried out in the order according to the customer's specifications. Eurocylinder systems AG does not check whether the legal requirements for a P15Y label are met. It is the sole responsibility of the customer and any subsequent owners to check that the relevant provisions of ADR/RID P200 are complied with. Eurocylinder systems AG is not responsible for ensuring whether the customer and all subsequent owners are authorized to label with P15Y or whether the requirements for labeling P15Y are met.

Le marquage avec P15Y par eurocylinder systems AG est effectué à la commande selon les spécifications du client. eurocylinder systems AG ne vérifie pas si les exigences légales pour une étiquette P15Y sont remplies. Il est de la seule responsabilité du client et des éventuels propriétaires ultérieurs de vérifier que les dispositions pertinentes de l'ADR/RID P200 sont respectées. eurocylinder systems AG n'est pas responsable de s'assurer que le client et tous les propriétaires ultérieurs sont autorisés à étiqueter avec P15Y ou si les exigences d'étiquetage P15Y sont remplies.

La marcatura con P15Y da parte di eurocylinder systems AG viene effettuata per conto del cliente secondo le specifiche del cliente. Eurocylinder systems AG non verifica se i requisiti legali per una marcatura P15Y sono soddisfatti. È dovere esclusivo del cliente e di tutti i successivi proprietari verificare che siano rispettate le disposizioni pertinenti dell'ADR/RID P200. Eurocylinder systems AG non è responsabile di garantire se il cliente e tutti i successivi proprietari sono autorizzati a etichettare P15Y o se i requisiti per la marcatura P15Y sono soddisfatti.

F10 Ausgabe 2 / 01.06.2022



ZERTIFIKAT

CERTIFICATE / CERTIFICAT

über die Konformität der Herstellung gemäß RL 2010/35/EU, ADR/RID 2021, 1.8.7.4
of conformity of manufacture acc. to dir. 2010/35/EU ADR/RID 2021, 1.8.7.4
de conformité de la fabrication selon la dir. 2010/35/EU ADR/RID 2021, 1.8.7.4

Zertifikat-Nr., Certificate No., N° de certificate : II / LWL / 1123 / 2022

Name und Anschrift des Herstellers / Fertigungsstätte: **eurocylinder systems AG**
Name and address of manufacturer/place of manufacture **Auenstraße 21**
Nom et adresse du fabricant / Lieu de fabrication: **99510 Apolda**

Hiermit wird bescheinigt, dass die ortsbeweglichen Druckgeräte die Anforderungen der RL 2010/35/EU und des ADR/RID 2021 erfüllen. Die Druckgeräte entsprechen den zur Baumusterzulassung eingereichten Unterlagen und sind mit dem abgebildeten Zeichen gekennzeichnet. This is to certify, that the transportable pressure equipment listed below meet the requirements of the Transportable Pressure Equipment Directive 2010/35/EU and the ADR/RID 2021. The pressure equipment complies the documents submitted for type approval and is marked with the following symbol. Nous certifions ci-joint que les appareils à pression mobiles sur différents lieux répondent aux exigences conformément à la directive 2010/35/EU et à la directive ADR/RID 2021. Les appareils à pression répondent aux contrôles des prototypes CE et sont caractérisés par les sigles représentés.

π 0090

Die Druckgeräte sind mit einem Ventil mit PI-Kennzeichnung auszurüsten.
The pressure devices are to be fitted with a valve with PI-marking.
Les appareils à pression sont équipés d'une vanne avec le caractère PI.

Geprüft nach Richtlinie 2010/35/EU, ADR/RID 2021:

Tested under Directive 2010/35/EU, ADR/RID 2021 :
Contrôlé selon la directive 2010/35/EU, ADR/RID 2021:

Erstmalige Prüfung

Initial inspection and test
Contrôle et épreuves initiaux

Prüfbericht-Nr.:

Test report No.:
Nr. de rapport de contrôle:

LWL / 2022

Herstell-Nr.:

Manufacturer's serial No.:
Nr. du fabricant:

LWL001 – LWL190, außer 043, 052, 056, 060, 081, 092

Beschreibung des Druckgerätes:

Description of pressure equipment:
Description de l'appareil à pression:

Nahtlose Stahlflaschen Familie EN 49 / 5,0 l

Seamless steel cylinder family / l
Surface en acier sans raccords Famille / l

Norm:

Standard:
Standard:

EN ISO 9809 – 1 : 2010

Zertifikat-Nr. des Baumusters:

Type certificate No.:
Nr. de certificat du prototype:

0090 / EN49 / 12

Tropschug

Apolda, 15.09.2022

(Ort, Datum) (place, date)

Betriebseigener Prüfdienst der eurocylinder systems AG
Inhouse inspection service of eurocylinder systems AG,
Service de contrôle interne de eurocylinder systems AG

Prüfberichts-nr.
Report-nr.
Rapport-n°

L W L/2022

Zertifikat-nr.
Certificate-nr.
N° de certificat

π / L W L / 1123 / 2022
CE / / /

Glühlos/batch-nr./lot / Jahr/year/an

Volumen
Volume
Volume
5,0 dm³
dm³
dm³
Zulassungs-Nr.
Approved-nr.
N° d'homologation
0090/EN49/12
Prüflosgröße
Inspection lot size
Volume du lot de contrôle
202 Stück
pieces
pieces

Prüfdruck
Test pressure
Pression d'épreuve
300 bar
bar
bar
Zeichnungs-Nr.
Drawing-nr.
Plan-n°
130521477
Werkstoff
Material
Matière
34CrMo4

Abmessung

Dimensions
Dimensions
139.7 × 3.1

Gütepasse

Material certificate
Certificat matière
14 / 2022

Chargen-Nr.

Charge-nr.
Charge-n°
209965

Chargen-Kennzeichnung

Charge identification
Identification de la charge
grau

1. Angaben zur Wärmebehandlung

Information to the heat treatment
Informations concernant le traitement thermique

Vergüten/Quenching and tempering/Trempe et revenu

Austenitisieren
Austenising
Austénisation
880 °C
10 min

Badtemperatur
Bath temperature
Température du bain
25 - 38 °C

Polymerkonzentration
Polymer concentration
Polymère concentration
5,5 % Kontrollwert
% Check value
% Valeur contrôlée
5,45 %

Anlassen
Tempering
Revenu
565 °C
50 min

Arbeitsvorbereiter
Operations sheduler
Préparateur du travail

[Signature]
18.07.22
Unterschrift signing signature / Datum date date

2. Bestätigung über die Einhaltung der technologischen Parameter

Compliance with technical parameters
Conformité des caractéristique techniques

Härter

Hardener
Trempeur
[Signature]
16.08.2022
Unterschrift signing signature / Datum date date

3. Ergebnis der Werkstoffprüfung (einschl. Berst-/Härteprüfung)

Result of the material test (inclusive bursting test/ hardness test)
Résultat du contrôle matière (incluse essai de rupture/test de dureté)

Vorgabewerte
Allowed values
Valeurs autorisées
erreicht / nicht erreicht
are / are not reached
sont / ne sont pas atteintes

BEPD-WP
Inhouse inspection service
Service de contrôle interne

[Signature]
18. Aug. 2022
Unterschrift signing signature / Datum date date

22/

BEPD Tropeschug

Betriebseigener Prüfdienst der ecs AG

Inhouse inspection service of ecs AG

Service contrôle interne de ecs AG

LWL

18. Aug. 2022

100 90 80 70 60 50 40 30 20 10 0

42410

Werkstoffprüfbericht/Material Test Report/Procès-verbal de contrôle matière

Dieser Prüfbericht gehört zur Glühlos - Nr. LWL/2022 und dem dazugehörigen Kontrollbericht.

This test report is part of heat treatment batch- nr. _____ and the corresponding inspection report.

Le présent procès-verbal fait partie de no. de lot de traitement thermique _____ et du procès-verbal de contrôle.

Volumen/Volume/Volume: 5,0 dm³ Zulassung/Approval/Permission: 0090/EN49/12

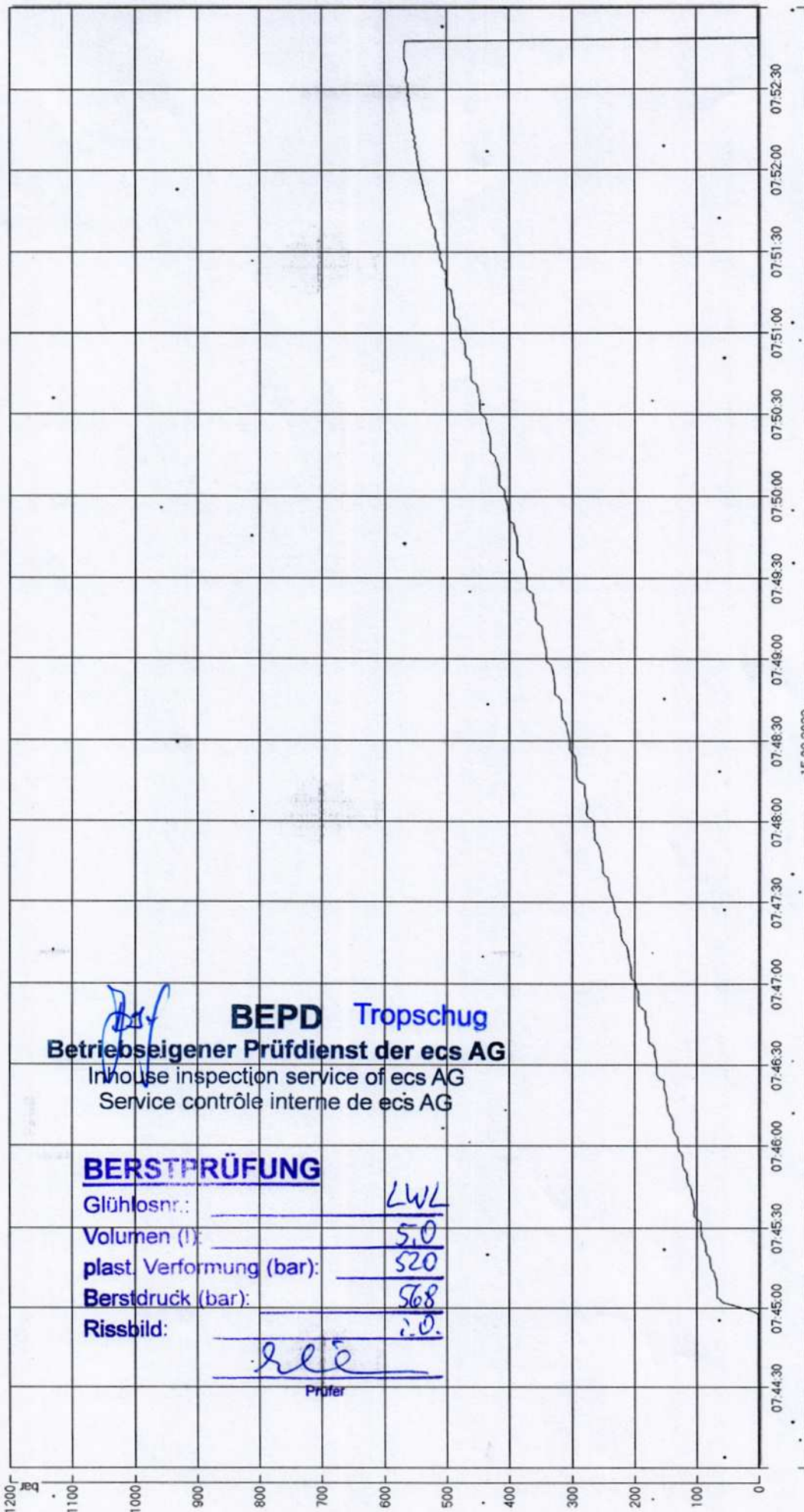
Ergebnisse der Werkstoffprüfung/Results of the material test/ Résultat du contrôle matière:

nach DIN EN ISO 9809 – 1 : 2010 / nach DIN EN ISO 9809 – 2 : 2010

Zugversuch Tensile test Essai de traction	Abmessungen Dimensions Dimensions nach DIN EN ISO 6892 – 1 : 2017 B nach DIN EN ISO 6892 – 2 : 2017 B				Kraft Force Force N	Δl mm	Härte an Prüfflasche Hardness of the test cylinder Dureté de la bouteille d'essai nach DIN EN ISO 6506-1:2015 [HB 30]
Prüftemp. Test temp. Temp. d'épreuve [°C]	Breite Width Largeur [mm]	Dicke Thickness Epaisseur [mm]	Fläche Area Surface [mm²]	Messlänge Measuring length Longueur de mesure [mm]	Streck- grenze Yield point Limite apparente d'élasticité [N/mm²]	Zugfestig- keit Tensile strength Résistance à la traction [N/mm²]	Dehnung Elongation Allongement [%]
20	20,0	3,5	70,0	45	67500 964	73000 1043	7,6 16,9
Kerbschlagbiegeversuch/ Impact test/ Essai de résilience nach DIN EN ISO 148 – 1 : 2011							Biegeversuch Bend test/ Essai de pliage nach DIN EN ISO 7438 : 2012 (D= 6 s ; 180°) 4 × ohne Anriss
Proben-Nr. Sample no. Numero d'échantillon	Breite Width Largeur [mm]	Höhe Height Hauteur [mm]	Fläche Area Surface [cm²]	Arbeit Work Travail [J]	Kerbschlag- zähigkeit Impact value Résilience [J/ cm²]	Mittelwert Mean value Valeur moyenne [J/ cm²]	
LWL.1	3,6	8,0	0,288	37,0	128	122	Hals – und Bodenprüfung Neck and bottom test Contrôle de col et fond
LWL.2	3,6	8,0	0,288	33,5	116		
LWL.3	3,6	8,0	0,288	35,5	123		
Berstprüfung Bursting test/Essai de rupture							568 bar
Probelage: Position of the sample/ Position de flexion Längs / longitudinal Prüftemperatur: Test temperature/ Temperature d'épreuve -50°C Kerbform: Form of the notch/ Form de l'entaille V nach DIN EN ISO 148 – 1 : 2011 Kerbrichtung: Direction of the notch/ Direction de l'entaille Senkrecht / perpendicular Prüfmaschine : Test machine/ Machine d'essai PS 30							Prüfer/ tester/ contrôleur BEPD-WP Apolda, <u>18.08.2022</u>

Messwerte / Trend
 Geräte name: Berstprüfung (Seriennummer J500F904428)
 Zeitbereich: 15.09.2022 07:44:00 bis 15.09.2022 07:53:00

Vorlage: 2022-09
 Glühlos LWL
 Manometer Nr. 082502279



Parameter :lwl-5-0 29.01.13 - 00:06

Chargen-Nr.
 SB-Nr.
 Volumen
 Fl.-Beh.-Typ
 Schicht
 Anlagenfahrer
 Prüfmethode
 Härteminimum
 Härtemaximum

LWL
 5,0
 1
 Felsberg
 HB 30
 344
 399

Meßwerte/Flasche
 Meßwerte gesamt
 Losanzahl
 Anzahl Klassen
 Anzahl Härteverlauf

1
 200
 200
 5
 100

Statistikwerte :[HB 30]

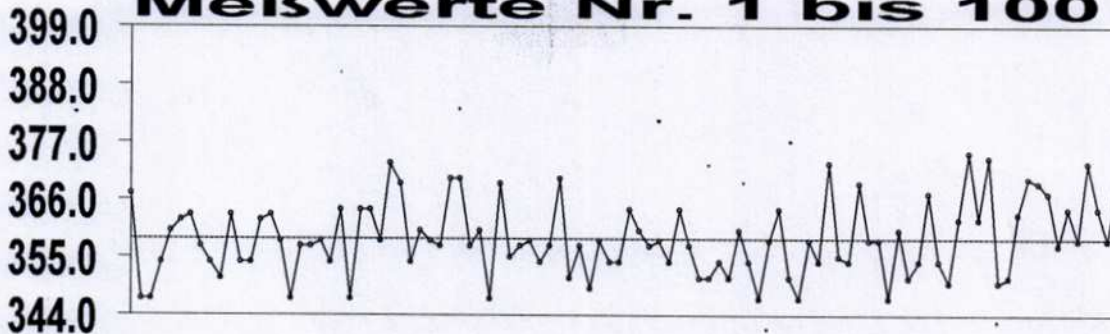
Gesamtanzahl : 200
 Anzahl in Grenzen : 200
 Anzahl zu weich : 0
 Anzahl zu hart : 0
 Anzahl ST : 200
 kleinster Wert : 347.0
 größter Wert : 375.0
 Xquer : 358.380
 Standardabweichung : 6.434

Histogramm :

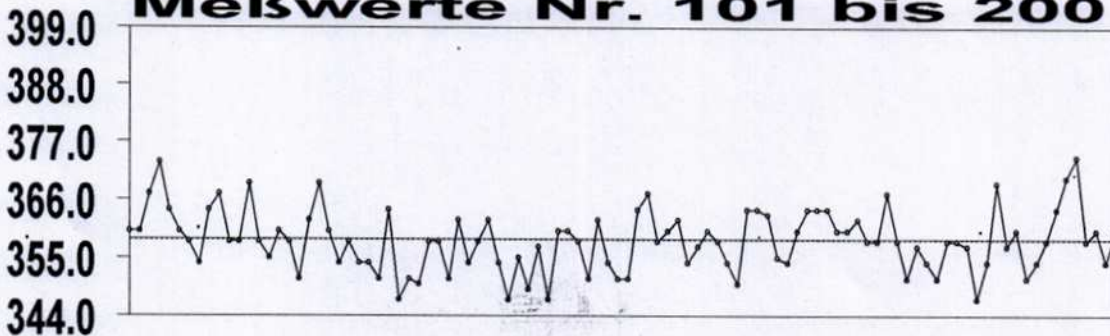
		0.00 %
399.0		0.00 %
388.0		0.00 %
377.0		0.00 %
366.0		13.50 %
355.0		53.50 %
344.0		33.00 %
		0.00 %

Härteverlauf :[HB 30]

Meßwerte Nr. 1 bis 100



Meßwerte Nr. 101 bis 200



BEPD Tropschug
 Betriebseigener Prüfdienst der ecs AG
 Inhouse inspection service of ecs AG
 Service contrôle interne de ecs AG

Datum: 15. Sep. 2022

Unterschrift:

Datum des Ausdrucks: 14.09.2022 20:24:54

Prüflose-Nr. LWL
Abmessung 139,7x3,0
Werkstoff 34CrMo4
Charge 209965
Prüfspezifikation ENISO 9809-1

letztes Pruefdatum: 14.09.2022 20:22:45

Pruefdaten:

Programm: 140-5-130521477.dat(0.TE)

Parameter-Auswahl:

USEL: 140x3,0.usel(0.TE)

DAV: 600.dav(0.TE)

Ultraschall

Ultraschall1

Ultraschall2

Ultraschall3

Ultraschall4

Ultraschall5

Statistik:

	Stueck	%	Laenge [m]	%
Gesamt:	192	100.00	417.26	100.00
Gut:	192	100.00	417.26	100.00
auffällig/Wiederholungsprü.	0	0.00	0.00	0.00
unsichere Kopplung	0	0.00	0.00	0.00

 **BEPD Tropschug**
Betriebseigener Prüfdienst der ecs AG
Inhouse inspection service of ecs AG
Service contrôle interne de ecs AG

Unterschrift:



Bescheinigung über die Durchführung der Wasserdruckprüfung

Certificate about the realisation of the hydraulic test

Certificat sur la mise en œuvre de l'examen de pression hydraulique

LOS / Batch / Lot: LWL

Prüfdruck / Test pressure / Pression d'essai: 300 bar (Manometer Nr.: 121502075)

Stückzahl / Piece no. / No. de pièces: 200 gut / good / bonnes: 198 schlecht / defect / rebut: 2

Die Stahlflaschen wurden mit dem Prüfdruck beaufschlagt. Bei den für gut befundenen Stahlflaschen zeigten sich keine Undichtigkeiten und keine bleibenden Verformungen.

The cylinders have been impinged with the test pressure. In case of the as good considered steel cylinders were no leakages and permanent deformations. / Les bouteilles en acier ont été soumises à la pression d'essai. Les bouteilles en acier considérées comme bonnes ne présentent aucune fuite ni aucune déformation permanente.

Volumenermittlung / Determination of volume / Détermination du volume

Bei 10 % der Stahlflaschen des Loses wurde das Volumen ermittelt.

The volume of 10 % of the steel cylinders from the lot was determined. / Le volume de 10 % des bouteilles en acier a été déterminé.

Volumen (min.) / Volume (min.): 5,0 l

Lfd.Nr./	Serial no./No.cour.	Volumen(l)/	Volume(l)	Lfd.Nr./	Serial no./No.cour.	Volumen(l)/	Volume(l)
	01	5,1			11	5,1	
	02	5,1			12	5,1	
	03	5,1			13	5,1	
	04	5,1			14	5,1	
	05	5,1			15	5,1	
	06	5,1			16	5,1	
	07	5,1			17	5,1	
	08	5,1			18	5,1	
	09	5,1			19	5,1	
	10	5,1			20	5,1	

Der Prüfer bestätigt die Prüfung und Einhaltung der Anforderungen nach Kontrollvorschrift KV011_01 bezüglich Sichtprüfung der Außenseite, Innenbesichtigung, Gewindeprüfung, Maßkontrolle und Fußringsitz. / The tester confirm the check and the compliance in terms of the requirements to test direction KV011_01 regarding external visual testing, internal visual testing, thread test, dimensional inspection and base ring fit.

L'inspecteur confirme la vérification et la conformité avec les exigences de contrôle KV011_01 concernant l'inspection visuelle à l'extérieur et à l'intérieur, contrôle de taraudage, contrôle dimensionnel et que la bague de pied convient.

BEPD-WPS/US
inhouse inspection service
service de contrôle interne

Unterschrift signing signature / Datum date date

A. Kaiser 14.09.2022

Leitung BEPD
direction inhouse inspection service
service de contrôle interne

Unterschrift signing signature / Datum date date

BEPD Tropschug
Betriebseigener Prüfdienst der ecs AG
Inhouse inspection service of ecs AG
Service contrôle interne de ecs AG

SB-NR.: LWL

ORIGINALLISTE/ORIGINAL LIST/RELEVÉ ORIGINAL

SEITE :1



Auftrag/order/commande: 22-57123-1

Kunde/customer/client : Sauerstoffw. Gu

Volumen/volume/volume V/l:

5 l

Prüfdruck/test pressure/pression d epreuve:

300 bar

Gasart/kind of gas/sorte du gaz:

Sauerstoff

Fülldruck/filling pressure/pression d service:

200 bar

Masse Anbauteile/mass of add-on pieces/poids pieces montretees:

0 Kg

Behälter/ cylinder/ bouteille Nr./No.	Leermasse/ empty weight/ poids vide m/kg	Kunde/ customer/ client Nr./No	Tara m/kg	Volumen/ volume/ volume V/l	Bemerkungen/ Remarks/ notes
LWL001	7.05	527322			
LWL002	7.06	527323			
LWL003	7.05	527324			
LWL004	7.06	527325			
LWL005	7.05	527326			
LWL006	7.06	527327			
LWL008	7.06	527329			
LWL009	7.06	527330			
LWL007	7.07	527328			
LWL010	7.07	527331			
LWL011	7.07	527332			
LWL012	7.09	527333			
LWL013	7.07	527334			
LWL014	7.06	527335			
LWL015	7.07	527336			
LWL016	7.06	527337			
LWL017	7.05	527338			
LWL018	7.06	527339			
LWL019	7.06	527340			
LWL020	7.05	527341			
LWL021	7.04	527342			
LWL022	7.03	527343			
LWL023	7.03	527344			
LWL024	7.08	527345			
LWL025	7.02	527346			
LWL026	7.01	527347			
LWL027	7.02	527348			
LWL028	7.02	527349			
LWL029	7.09	527350			
LWL030	7.06	527351			
LWL031	7.03	527352			
LWL032	7.02	527353			
LWL033	7.03	527354			
LWL034	7.07	527355			
LWL036	7.07	527357			
LWL035	7.06	527356			
LWL038	7.02	527359			
LWL037	7.02	527358			
LWL039	7.08	527360			
LWL040	7.07	527361			

40 STÜCK / PIECES / PIECES VON INSGESAMT/ OF TOTAL/ D AU TOT/

100

APOLDA, 16.09.2022

Ohne Unterschrift gültig. Valid without signature. Valable sans signature.



Auftrag/order/commande: 22-57123-1

Kunde/customer/client : Sauerstoffw. Gu

Volumen/volume/volume V/l:

5 l

Prüfdruck/test pressure/pression d epreuve:

300 bar

Gasart/kind of gas/sorte du gaz:

Sauerstoff

Fülldruck/filling pressure/pression d service:

200 bar

Masse Anbauteile/mass of add-on pieces/poids pieces montretees:

0 Kg

Behälter/ cylinder/ bouteille Nr./No.	Leermasse/ empty weight/ poids vide m/kg	Kunde/ customer/ client Nr./No	Tara m/kg	Volumen/ volume/ volume V/l	Bemerkungen/ Remarks/ notes
LWL041	7.02	527362			
LWL042	7.03	527363			
LWL043	6.84	527364			
LWL044	6.86	527365			
LWL045	6.90	527366			
LWL046	7.06	527367			
LWL047	6.98	527368			
LWL048	7.02	527369			
LWL049	7.01	527370			
LWL050	7.01	527371			
LWL051	7.03	527372			
LWL052	7.07	527373			
LWL053	7.06	527374			
LWL054	7.05	527375			
LWL055	7.02	527376			
LWL056	7.02	527377			
LWL057	7.06	527378			
LWL058	7.03	527379			
LWL059	7.05	527380			
LWL060	7.09	527381			
LWL061	7.06	527382			
LWL062	7.00	527383			
LWL063	7.05	527384			
LWL064	7.06	527385			
LWL065	7.06	527386			
LWL066	7.01	527387			
LWL067	7.07	527388			
LWL068	7.03	527389			
LWL069	7.03	527390			
LWL070	7.03	527391			
LWL071	7.06	527392			
LWL072	7.07	527393			
LWL073	7.06	527394			
LWL074	7.03	527395			
LWL075	7.04	527396			
LWL076	7.04	527397			
LWL077	7.03	527398			
LWL078	7.02	527399			
LWL079	7.02	527400			
LWL080	7.01	527401			

36/ 40 STÜCK / PIECES / PIECES VON INSGESAMT/ OF TOTAL/ D AU TOT/

100

APOLDA, 16.09.2022

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SB-NR.: LWL

ORIGINALLISTE/ORIGINAL LIST/RELEVÉ ORIGINAL

SEITE :3



Auftrag/order/commande: 22-57123-1

Kunde/customer/client : Sauerstoffw. Gu

Volumen/volume/volume V/l:

Prüfdruck/test pressure/pression d epreuve:

Gasart/kind of gas/sorte du gaz:

Fülldruck/filling pressure/pression d service:

Masse Anbauteile/mass of add-on pieces/poids pieces montretees:

5 l

300 bar

Sauerstoff

200 bar

0 Kg

Behälter/ cylinder/ bouteille Nr./No.	Leermasse/ empty weight/ poids vide m/kg	Kunde/ customer/ client Nr./No	Tara m/kg	Volumen/ volume/ volume V/l	Bemerkungen/ Remarks/ notes
LWL081	7.02	527402			
LWL082	7.02	527403			
LWL083	7.03	527404			
LWL084	6.89	527405			
LWL085	7.00	527406			
LWL086	7.01	527407			
LWL087	7.04	527408			
LWL088	7.07	527409			
LWL089	7.08	527410			
LWL090	7.10	527411			
LWL091	6.91	527412			
LWL092	6.85	527413			
LWL093	7.06	527414			
LWL094	7.04	527415			
LWL095	7.01	527416			
LWL096	7.04	527417			
LWL097	7.02	527418			
LWL098	6.86	527419			
LWL099	7.07	527420			
LWL100	7.07	527421			

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20 STÜCK / PIECES / PIECES VON INSGESAMT/ OF TOTAL/ D AU TOT/
APOLDA, 16.09.2022

100

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SB-NR.: LWL

ORIGINALLISTE/ORIGINAL LIST/RELEVÉ ORIGINAL

SEITE :1



Auftrag/order/commande: 22-57027-1

Kunde/customer/client : Rev Gas Industr

Volumen/volume/volume V/l:

5 l

Prüfdruck/test pressure/pression d epreuve:

300 bar

Gasart/kind of gas/sorte du gaz:

verd. Gas

Fülldruck/filling pressure/pression d service:

200 bar

Masse Anbauteile/mass of add-on pieces/poids pieces montretees:

0 Kg

Behälter/ cylinder/ bouteille Nr./No.	Leermasse/ empty weight/ poids vide m/kg	Kunde/ customer/ client Nr./No	Tara m/kg	Volumen/ volume/ volume V/l	Bemerkungen/ Remarks/ notes
LWL101	7.06	1			
LWL102	7.04	2			
LWL103	7.06	3			
LWL104	7.05	4			
LWL105	7.07	5			
LWL106	7.07	6			
LWL107	7.07	7			
LWL108	7.08	8			
LWL109	7.04	9			
LWL110	7.00	10			
LWL111	7.07	11			
LWL112	7.06	12			
LWL113	7.06	13			
LWL114	7.07	14			
LWL115	7.08	15			
LWL116	7.05	16			
LWL117	7.06	17			
LWL118	7.06	18			
LWL119	7.02	19			
LWL120	7.05	20			
LWL121	7.06	21			
LWL122	7.06	22			
LWL123	7.07	23			
LWL124	7.07	24			
LWL125	7.07	25			
LWL126	7.03	26			
LWL127	7.04	27			
LWL128	7.04	28			
LWL129	7.02	29			
LWL130	7.02	30			
LWL131	7.02	31			
LWL132	7.04	32			
LWL133	7.04	33			
LWL134	7.05	34			
LWL135	7.07	35			
LWL136	7.02	36			
LWL137	7.06	37			
LWL138	7.05	38			
LWL139	7.05	39			
LWL140	7.05	40			

40 STÜCK / PIECES / PIECES VON INSGESAMT/ OF TOTAL/ D AU TOT/

200

APOLDA, 14.09.2022

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SB-NR.: LWL

ORIGINALLISTE/ORIGINAL LIST/RELEVÉ ORIGINAL

SEITE :2



Auftrag/order/commande: 22-57027-1

Kunde/customer/client : Rev Gas Industr

Volumen/volume/volume V/l:

5 l

Prüfdruck/test pressure/pression d epreuve:

300 bar

Gasart/kind of gas/sorte du gaz:

verd. Gas

Fülldruck/filling pressure/pression d service:

200 bar

Masse Anbauteile/mass of add-on pieces/poids pieces montretees:

0 Kg

Behälter/ cylinder/ bouteille Nr./No.	Leermasse/ empty weight/ poids vide m/kg	Kunde/ customer/ client Nr./No	Tara m/kg	Volumen/ volume/ volume V/l	Bemerkungen/ Remarks/ notes
LWL141	7.04	41			
LWL142	7.02	42			
LWL143	7.05	43			
LWL144	7.06	44			
LWL145	7.05	45			
LWL146	7.05	46			
LWL147	7.03	47			
LWL148	7.06	48			
LWL149	7.07	49			
LWL150	7.07	50			
LWL151	7.05	51			
LWL152	7.05	52			
LWL153	7.09	53			
LWL154	7.07	54			
LWL155	7.05	55			
LWL156	7.04	56			
LWL157	7.07	57			
LWL158	7.07	58			
LWL159	7.03	59			
LWL160	7.04	60			
LWL161	7.05	61			
LWL162	7.02	62			
LWL163	7.03	63			
LWL164	7.08	64			
LWL165	7.08	65			
LWL166	7.08	66			
LWL167	7.07	67			
LWL168	7.08	68			
LWL169	7.05	69			
LWL170	7.08	70			
LWL171	7.08	71			
LWL172	7.07	72			
LWL173	7.07	73			
LWL174	7.04	74			
LWL175	7.07	75			
LWL176	7.05	76			
LWL177	7.06	77			
LWL178	7.07	78			
LWL179	7.04	79			
LWL180	7.08	80			

40 STÜCK / PIECES / PIECES VON INSGESAMT/ OF TOTAL/ D AU TOT/
APOLDA, 14.09.2022

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SB-NR.: LWL

ORIGINALLISTE/ORIGINAL LIST/RELEVÉ ORIGINAL

SEITE :3



Auftrag/order/commande: 22-57027-1

Kunde/customer/client : Rev Gas Industr

Volumen/volume/volume V/l:

Prüfdruck/test pressure/pression d epreuve:

Gasart/kind of gas/sorte du gaz:

Fülldruck/filling pressure/pression d service:

Masse Anbauteile/mass of add-on pieces/poids pieces montretees:

5 l

300 bar

verd. Gas

200 bar

0 Kg

Behälter/ cylinder/ bouteille Nr./No.	Leermasse/ empty weight/ poids vide m/kg	Kunde/ customer/ client Nr./No	Tara m/kg	Volumen/ volume/ volume V/l	Bemerkungen/ Remarks/ notes
LWL181	7.04	81			
LWL182	7.06	82			
LWL183	7.02	83			
LWL184	7.04	84			
LWL185	7.06	85			
LWL186	7.05	86			
LWL187	7.05	87			
LWL188	7.05	88			
LWL189	7.09	89			
LWL190	7.06	90			

10 STÜCK / PIECES / PIECES VON INSGESAMT/ OF TOTAL/ D AU TOT/
APOLDA, 14.09.2022

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Geanta pentru depozitarea si transportul buteliei de oxigen TB 100



Descriere:

Geanta de oxigenoterapie Versapak TB 100 este special conceputa pentru a transporta butelii de oxigen de până la 5 litri (inclusiv reductorul de presiune), precum și toate materialele necesare pentru a aplica terapia cu oxigen, adică Pipe Guedel, sonde endotraheale, laringoscop, masca oxigen, kit de resuscitare, etc. Geanta este inscripționată de jur împrejur cu benzi reflectorizante pentru a putea fi reperată cu ușurință pe timp de noapte. Geanta este prevăzută cu o fereastră transparentă pentru a putea vizualiza presiunea oxigenului fără a fi necesară scoaterea buteliei din geanta.

Caracteristici tehnice:

- Dimensiune: 65 x 22 cm
- Capacitate: 25,28 L
- Greutate: 1.58 kg
- Material: 600D Polyester
- Colour EB02.016: Rosu
- Capacitate incarcare: 15 kg

VERSAPAK CONTACT

Loc. Macău FN, Com. Aghireșu,
jud. Cluj, România

Email: sales@versapak.ro
office@versapak.ro

Telefon: 0743.088.323
0264/284140

Fax: 0264/284136