

CERTIFICATE / CERTIFIKÁT

Reg. No. / Evidenční č. QC-20200314-01

of conformity of the manufacture, supervision of manufacture, initial inspection and tests issued by In-house inspection service body identified as CZ AA certificate No. 11.716.194 and acting under supervision of TÜV SÜD Czech s.r.o. (NB No.: 1017, inspection body No.: 4002 accredited by ČIA)

Inspection of transportable pressure receptacles for substances of class 2 and substances according to Annex I of Directive 2010/35/EU

o shodě výroby, dohledu nad výrobou a první inspekci a zkouškách, vydaný vlastní inspekční službou, která má přidělenou zkušební značku CZ AA, certifikát VIS č. 11.716.194 a vykonávající svoje činnost pod dozorem TÜV SÜD Czech s.r.o. (NB č.: 1017, inspekční organ č.: 4002 akreditován ČIA)

Inspekce přepravitelných tlakových nádob pro látky třídy 2 a látky dle přílohy I, Směrnice 2010/35/EU.

Type of pressure receptacles / Druh tlakových nádob	UN composite cylinder / UN kompozitní lahev		
Serial Numbers / Výrobní čísla	According to list of cylinders attached		
Type / Typ	COMPANION G2	No. of pcs / Počet ks	496

Applied normative documents and procedures. / Použité normy a postupy.

- ADR/RID 2021
 Regulations for UN pressure receptacles
Applied standard / Použita norma
- TPED (Directive 2010/35/EU)
 Inspection procedures of HPC Research s.r.o.
ISO 11119-3:2013
- NV 208/2011

Manufacturer / Výrobce	HPC Research s.r.o.	Customer / Zákazník	TOMEGAS s.r.o.
Production site / Místo výroby	Horní Bříza, Czech Republic		
Production Order No. / Zakázka výroby	20210012	Customer Order No/ Objednávka č.	e-mail

Type approval No. / Schválení typu č.	CZ-11.997.342	Drawing No. / Výkres č.	9366
Stock receptacle assembly No. / Skladové číslo sestavy	9775 CG2/24/TOMEGAS/G.54		
Color code / Barevný kód	T-3000/M-3000/B-3000/H-3000		

Receptacle technical specifications / Základní technické údaje

Shell material / Materiál nádoby	Glass fibre reinforced plastic with PET lining / Sklolaminát s PET výstelkou		
Country of manufacturing and approval / Stát výroby a první inspekce	CZ / Česká republika		
Year of production / Rok výroby	2020		
Working temperature / Pracovní teplota	min. -40 / max. 65 °C		
Test pressure / Zkušební tlak	30 bar		
Working pressure / Pracovní tlak			<input checked="" type="checkbox"/> N/A
Water capacity / Vodný objem	24.4L		<input type="checkbox"/> N/A
Filling ration/ Stupeň plnění	Instruction P200 clause 4.1.4.1 ADR 2021/ Instrukce P200 kapitola 4.1.4.1 ADR 2021		<input type="checkbox"/> N/A
Minimum guaranteed wall thickness/Minimální garantovaná tloušťka stěny			<input checked="" type="checkbox"/> N/A
Boss thread / Zavit	25E ISO 11363-1		
Design Life / Životnost	Non – limited		
First inspection date / Datum první inspekce (MM/YYYY)	03/2020		
Next inspection date / Datum příští inspekce (MM/YYYY)	03/2030		

N/A – not applicable / nevztahuje se

Additional marking / Dodateční značení.

- 11.716.194 applied / použitý not applied / nepoužitý  applied / použitý not applied / nepoužitý
- “-40 °C” applied / použitý not applied / nepoužitý  applied / použitý not applied / nepoužitý

Remark / Poznámka: Maximum torque 170 Nm. Cylinder must not be subjected to a vacuum. / Maximální krouticí moment 170 Nm. Nevakuovat.

The use for / Použití pro	gases class 2 / plyny třídy 2
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Vyhodnocení / Evaluation:

We hereby certify the conformity of manufacture and executed inspections and tests of the pressure vessels with the requirements of the above specifications and the type described in the Certificate of type approval.

Tímto osvědčujeme shodu výroby a provedených inspekci a zkoušek tlakových nádob s požadavky výše uvedených specifikací a typem popsaným v certifikátu typu.

At / V Horní Bříza, Czech Republic



Inspector / Inspektor
Ing. Stanislav Dubinin PhD.



March 14, 2020

Stamp, date / Razítko, datum

HPC Research s.r.o. 

U Stadionu 615. 330 12 Horní Bříza
IČ: 29132908. DIČ: CZ29132908
Tel.: +420 222 764 324

In-house inspection service / Vlastní inspekční služba
Pavel Dubinin

Safety and pressure equipment. / Bezpečnostní a tlaková výstroj.

	Cylinder valve Láhvový ventil	Main shutoff valve Hl. uzavírací ventil	Relief valve Pojistný ventil	Rupture disc Průtržná membrána	Vacuum valve Podtlakový ventil
Manufacturer / Výrobce	SCG, Thailand				
Type / Typ	D-V6-AZ.4	n/a	35 bar, 5 m3/min	n/a	n/a
Set pressure / Otevírací tlak					

Other provided documentation. / Ostatní předložená dokumentace.

- Declaration of conformity including the description of the product and all modifications / Prohlášení o shodě včetně popisu výrobku a všech modifikací.
- Declaration of Conformity and Certificates of material of service equipment. / Prohlášení o shodě a certifikáty materiálu provozní výstroje.
- Certificates of materials of the product and all subgroups. / Certifikáty materiálu výrobku a všech podskupin.
- Other documentation required according to above specifications. / Další dokumentace požadovaná dle uvedených specifikací.

Used control, measuring and test devices. / Použité kontrolní, měřící a zkušební zařízení.

Manufacturer monitoring and measuring equipment with valid calibration. / Monitorovací a měřící zařízení výrobce s platnou kalibrací.

Performed inspections and tests. / Provedené inspekce a zkoušky.

Supervision of manufacture. / Dohled nad výrobou.

- Verification of conformity with technical documentation: / Ověření shody s technickou dokumentací:
 - Verification of the validity of documentation provided for the type approval construction. / Ověření platnosti dokumentace poskytnuté pro schválení konstrukčního typu.
 - Verification of production and test procedures. / Ověření výrobních a zkušebních postupů.
 - Verification of production records. / Ověření výrobních záznamů.
 - Approved qualifications of workers performing permanent joints continue to be valid (if relevant). / Schválené kvalifikace pracovníků provádějících trvalá spojení jsou i nadále platná (pokud je to relevantní).
 - Approved qualifications of workers performing non-destructive tests continue to be valid (if relevant). / Schválené kvalifikace pracovníků provádějících nedestruktivní zkoušky jsou i nadále platná (pokud je to relevantní).
 - Protocols on destructive and non-destructive tests (if relevant). / Protokoly o destruktivních a nedestruktivních zkouškách (pokud je to relevantní).
 - Records on heat treatments (if relevant). / Záznamy o tepelném zpracování (pokud je to relevantní).
 - Calibration records. / Kalibrační záznamy.
- Verification that production process produces products which comply with the applicable regulations and documentation which applies to them. / Ověření, že výrobní proces produkuje výrobky, které odpovídají předpisům a dokumentaci, která se jich týká.
- Verification of material traceability and the check of material certificates with respect to specifications. / Ověření zpětné sledovatelnosti materiálů a kontrola certifikátů materiálů vzhledem ke specifikacím.
- If applicable, the verification that personnel performing permanent joints of construction parts and non-destructive tests are qualified or approved. / Pokud je to aplikovatelné, ověření, že personál provádějící trvalá spojení konstrukčních částí a nedestruktivní zkoušky je kvalifikovaný nebo schválený.

Initial Inspection and tests: Batchtests. / První inspekce a zkouška: jednotlivých dávek.

- Testing of the mechanical characteristics of the material. / Zkouška mechanických vlastností materiálů.
- Verification of the minimum wall thickness. / Ověření minimální tloušťky stěny.
- Verification of the homogeneity of the material for each manufacturing batch. / Ověření homogeneity materiálu každé výrobní dávky.
- Inspection of the external and internal condition. / Inspekce vnějšího a vnitřního stavu.
- Inspection of the neck thread. / Inspekce závitů v hrdle.
- Verification of the conformance with the design standard. / Ověření souladu s návrhovou normou.

Initial Inspection and test of each vessel. / První inspekce a zkouška: každé nádoby.

- Hydraulic pressure test (where applicable by gas pressure test). / Hydraulická tlaková zkouška (případně zkouška tlakem plynu).
- Inspection and assessment of manufacturing defects. / Inspekce a vyhodnocení výrobních vad.
- Inspection of the markings. / Inspekce značení.

Evaluation of tests / Vyhodnocení zkoušek: All prescribed tests complied. / Všechny předepsané zkoušky vyhověly.

The results of the inspection, submitted in this certificate, apply only to the evaluated equipment. Without the consent of HPC Research s.r.o. and the customer, the certificate cannot be reproduced other than in whole.

Výsledky inspekce podané v tomto certifikátu se vztahují pouze k posuzovanému zařízení. Certifikát nelze bez souhlasu HPC Research s.r.o. a zákazníka reprodukovat jinak než vcelku.

Declaration of conformity - No. POS-20200314-1

We, the undersigned HPC Research s.r.o.,
U Stadionu 615, Horní Bříza, 33012, Czech Republic
IČ 291 32 908

confirm that the products manufactured by our company:

UN composite cylinder with valve

Type	COMPANION G2
Description	Type 4 (according to ISO 11119-3) fully wrapped composite cylinder with non-load sharing PET liner intended for class 2 gasses (LPG).
Type drawing No.	9366
Article	9775 CG2/24/TOMEGAS/G.54
Color code	T-3000/M-3000/B-3000/H-3000
Gases	UN 1011, 1075, 1965, 1969, 1978
Serial No.	According to list of cylinders attached

is manufactured according to all required normative documents, including:

Directive 2010/35/EU, ADR/RID 2021 and ISO 11119-3:2013

Notified body	NB No. 1017, inspection body No.: 4002 accredited by ČIA TÜV SÜD Czech s.r.o., Novodvorská 994, 142 21 Praha 4, Czech Republic
Certificate of type conformity No.	11.997.342
Certificate of in-house inspection service No.	11.716.194

We hereby declare the conformity of production of composite UN cylinder for LPG according to requirements of all standards and normative documents mentioned above and the design defined in design type approval mentioned above. All required tests have been conducted in accordance with above mentioned technical regulation with satisfactory result.

Horní Bříza, 14.03.2020
(date and place)



HPC Research s.r.o. ⓘ
U Stadionu 615. 330 12 Horni Bříza
IČ: 29132908. DIČ: CZ29132908
Tel.: +420 222 764 324

Pavel Dubinin, Director
(name and signature of authorized person)

Serial numbers for order No.: 20210012

Customer: TOMEGAS s.r.o.

41316	41377	41479	41534	43554	43588	43621	43654
41329	41378	41480	41535	43555	43589	43622	43655
41331	41380	41486	41536	43556	43590	43623	43656
41333	41410	41487	41537	43557	43591	43624	43657
41334	41411	41488	41538	43558	43592	43625	43659
41336	41412	41489	41539	43559	43593	43626	43660
41337	41413	41490	41540	43560	43594	43627	43661
41338	41434	41491	41541	43561	43595	43628	43662
41339	41437	41492	41542	43562	43596	43629	43663
41340	41438	41493	41543	43563	43597	43630	43664
41341	41439	41494	41544	43564	43598	43631	43665
41342	41440	41495	41545	43565	43599	43632	43666
41343	41441	41496	41546	43566	43600	43633	43667
41344	41442	41497	41547	43567	43601	43634	43668
41345	41443	41498	41548	43568	43602	43635	43669
41346	41450	41499	41549	43569	43603	43636	43670
41347	41451	41500	41550	43570	43604	43637	43671
41348	41452	41501	43538	43571	43605	43638	43672
41353	41453	41502	43539	43573	43606	43639	43673
41354	41455	41504	43540	43574	43607	43640	43674
41355	41456	41506	43541	43575	43608	43641	43675
41356	41457	41507	43542	43576	43609	43642	43676
41357	41459	41509	43543	43577	43610	43643	43677
41358	41460	41511	43544	43578	43611	43644	43678
41359	41461	41514	43545	43579	43612	43645	43679
41360	41462	41515	43546	43580	43613	43646	43680
41368	41463	41527	43547	43581	43614	43647	43681
41369	41467	41528	43548	43582	43615	43648	43682
41371	41468	41529	43549	43583	43616	43649	43683
41372	41469	41530	43550	43584	43617	43650	43684
41374	41470	41531	43551	43585	43618	43651	43685
41375	41471	41532	43552	43586	43619	43652	43686
41376	41472	41533	43553	43587	43620	43653	43687

43688	43724	43760	43828	43864	43900	43936
43689	43725	43761	43829	43865	43901	43937
43690	43726	43762	43830	43866	43902	43938
43691	43727	43763	43831	43867	43903	43939
43692	43728	43764	43832	43868	43904	43940
43693	43729	43765	43833	43869	43905	43941
43694	43730	43766	43834	43870	43906	43942
43695	43731	43767	43835	43871	43907	43945
43696	43732	43768	43836	43872	43908	43946
43697	43733	43769	43837	43873	43909	43947
43698	43734	43770	43838	43874	43910	43948
43699	43735	43771	43839	43875	43911	43949
43700	43736	43772	43840	43876	43912	43950
43701	43737	43773	43841	43877	43913	43955
43702	43738	43774	43842	43878	43914	43960
43703	43739	43775	43843	43879	43915	43961
43704	43740	43776	43844	43880	43916	
43705	43741	43777	43845	43881	43917	
43706	43742	43778	43846	43882	43918	
43707	43743	43779	43847	43883	43919	
43708	43744	43780	43848	43884	43920	
43709	43745	43781	43849	43885	43921	
43710	43746	43783	43850	43886	43922	
43711	43747	43808	43851	43887	43923	
43712	43748	43809	43852	43888	43924	
43713	43749	43810	43853	43889	43925	
43714	43750	43812	43854	43890	43926	
43715	43751	43813	43855	43891	43927	
43716	43752	43816	43856	43892	43928	
43717	43753	43821	43857	43893	43929	
43718	43754	43822	43858	43894	43930	
43719	43755	43823	43859	43895	43931	
43720	43756	43824	43860	43896	43932	
43721	43757	43825	43861	43897	43933	
43722	43758	43826	43862	43898	43934	
43723	43759	43827	43863	43899	43935	

CERTIFICATE



Czech

Registration number 11.997.342

on the approval of construction type,

issued pursuant to Directive 2010/35/EU (Government Decree No. 208/2011 Sb. (Coll.), as amended) and agreement ADR/RID:2017

for the applicant:

HPC Research s.r.o.
U Stadionu 615
CZ - 330 12 Horní Bříza
Company Registration No.: 29132908

for transportable pressure equipment:

Name: **UN composite cylinder without valve and non-UN composite cylinder without valve**
 Type: **COMPANION G2**
 Manufacturer: **HPC Research s.r.o., U Stadionu 615, CZ - 330 12 Horní Bříza**
 Drawing No.: **9524, 9556, 9506, 9563, 9554, 9567, 9366, 9561**
 Construction standard: **ISO 11119-3:2013, EN 14427:2014**
 Approval number: **CZ-11.997.342**
 Volume: **12,7 - 26,2 L**
 Test pressure: **30 bar**
 Place of manufacture: **HPC Research s.r.o., Tovární 736, CZ - 330 12 Horní Bříza**

at which the construction type assessment has been performed pursuant to Directive 2010/35/EU (Government Decree No. 208/2011 Coll., as amended).

We hereby **certify the conformity** of properties of a sample of the product at stake with the basic requirements of

Directive 2010/35/EU
 (Government Decree No. 208/2011 Sb. (Coll.), as amended)
and agreement ADR/RID:2017

Validity period: 07.03.2029

This certificate is issued for the purpose of the issue of the Declaration of Conformity of the product with the above-mentioned technical regulation.

Details and list of important parts of the technical documentation are specified in the Report on evaluation – certification of construction type No. 11.991.061 which is an integral part hereof.

Validity conditions and rules for manipulation with the certificate are specified on the second page hereof.

Prague, on 07.03.2019



on behalf of Notified Body 1017
 Pavla Nerandžičová
 Head of Certification Department

1. Range of validity

of the Certificate Reg. No. 11.997.342 issued on the basis of applying ISO 11119-3:2013 Gas cylinders of composite construction - Specification and test methods and EN 14427:2014 LPG equipment and accessories - Transportable refillable fully wrapped composite cylinders for LPG – Design and construction

Type of cylinder: **COMPANION G2** Design life: Non-limited life *) Underwater: No
 Pressure relief device: Recommended Interval of periodic inspections: 10 years (according to P200, point 9 of ADR/RID:2017)

Finished cylinder		Liner		Composite material	
Capacity:	12,7 - 26,2 (+ 0,15) L	Material:	PET	Fiber type:	E-glass
Test pressure:	30 bar	Density:	1,32 - 1,4 g/cm ³	Min. Dry Fiber Tensile strength:	450 N
Diameter:		Melting point:	245 - 250 °C	Fiber modulus:	68 - 72 GPa
Without outer case:	292 ± 2 mm	Glass transition temperature:	74 - 80 °C	Matrix Components:	Epoxy resin, Hardener, Accelerant, Diluent
With outer case:	310 ± 3 mm	Auto ignition temperature:	440 - 460 °C	Min. Tensile strength:	1400 MPa
Length:		Min. thickness:	0,15 mm	Elongation:	2,5 - 5 %
Without outer case:	(284,8 - 505,5) ± 3 mm			Thickness:	1,5 - 4,5 mm
With outer case:	(396 - 615) ± 4 mm				
Empty weight of cylinder	(3,63 ± 0,25) - (5,24 ± 0,36) kg				
Thread	25E (W 28.8) and other				
Metal End Boss					
Material		Min. Yield Stress		Min. Tensile Strength	Min. Elongation
11SMn30C EN 10227		245 MPa		360 MPa	6 %
1.4305 EN 10088-2		230 MPa		500 MPa	35 %

*) See note 2 to Article 6.2.2.1.1 of ARD/RID:2017

2. Validity conditions

This certificate is renewable upon request. The renewal is possible after the full revision and examination of conformity with the ADR/RID provisions applicable as of the date of renewal. The renewal is not permitted after the type approval is cancelled. Modifications of the existing type approval which appeared during the validity period (e.g. at pressure containers minor changes like adding other sizes and capacities which does not affect the conformity with regulations) do not extend or change the original validity of the certificate.

If the applicable ADR/RID technical requirements change during this period (including reference standards) and the approved type does not conform any more, the relevant organizations which issued the type approval shall terminate the approval and notify the type approval holder about the fact.

The TÜV SÜD Czech shall be immediately notified of any modifications of the pressure equipment compared to the certified design. This fact may cause the further continuation of the certificate dependent on an additional examination of conformity.

If the type approval expired or was cancelled, the production of the equipment according to the type approval is not allowed any more.

Necessary instructions for use and assembly shall be supplemented to every product.

Every product shall bear a visible reference to the manufacturer or importer and the type label (approval number at tanks) to enable to identify the tested type with products put into circulation.

3. Rules for the manipulation with the Certificate:

The Certificate may be used only as a certificate for products which are specified on the first page. It also applies for the use in advertising, promotional and commercial materials.

The certificate shall only be reproduced complete. It is forbidden to change, amend or rewrite data in the certificate.

An unauthorized and deceptive use of the certificate may be subject to sanctions (Section 19, Act No. 22/1997 Sb. (Coll.), as amended).

The Certificate shall not be used as a certificate for products at which a change affecting the conformity with used regulations has been done without being approved by the TÜV SÜD Czech.

The certificate shall only promote its holder, the product and production places mentioned herein.

The transmission of this certificate to third parties is inadmissible as well as its use by third parties. It may be transferred to a third party only by the TÜV SÜD Czech.

Not specified items are governed by the General Terms and Conditions for Product Certification, as amended.

4. List of relevant parts of technical documentation:

- Drawings No. 9524, 9556, 9506, 9563, 9554, 9567, 9366, 9561,
- Composite cylinder COMPANION G2 - technical documentation,
- Reports of tests according to ISO 11119-3:2013,
- Reports of tests according to EN 14427:2014.



CERTIFICATE



Czech

registration number: **11.716.194**

on Professional Qualification of applicant's in-house inspection service

issued based on the examination of professional qualification pursuant to clause 1.8.7.6 ADR/RID:2017 and Directive 2010/35/EU (Government Decree No. 208/2011 Coll., as amended) for the applicant:

HPC Research s.r.o.
U Stadionu 615
CZ 330 12 Horní Bříza
ID-No.: 29132908

to perform supervision of manufacture, initial inspections and tests, periodical inspections of cylinders for transport of dangerous goods, class 2 (gases) according to ADR/RID:2017 and Directive 2010/35/EU (Government Decree No. 208/2011 Coll., as amended)

- In the scope:
1. **Manufacture, initial inspections and tests of cylinders for transport of gases, class 2 according to article 1.8.7.3 and 1.8.7.4 ADR/RID:2017**
 2. **Periodical inspections and tests of cylinders for transport of gases, class 2 according to article 1.8.7.5 ADR/RID:2017**

- For vessels: **Cylinders: transportable fully wrapped composite vessels with a maximum internal volume of 150 liters adequate and inadequate UN**
- ad 1. according to ISO 11119-3, EN 12245 + A1, EN 14427
 - ad. 2 according to EN ISO 11623, EN 1440 + A1, EN 16728

Validity conditions:


are mentioned in TÜV SÜD Czech Inspection Report no. 11.716.192 dated 9.7.2018, which is an integral part of this Certificate.

This Certificate is valid until: 9.7.2021

This Certificate replaces Certificate Reg. No. 08.318.447, rev. 2 dated 7.8.2017.

In Prague, dated 9.7.2018




 On behalf of Notified Body
Ing. Petr Navrátil

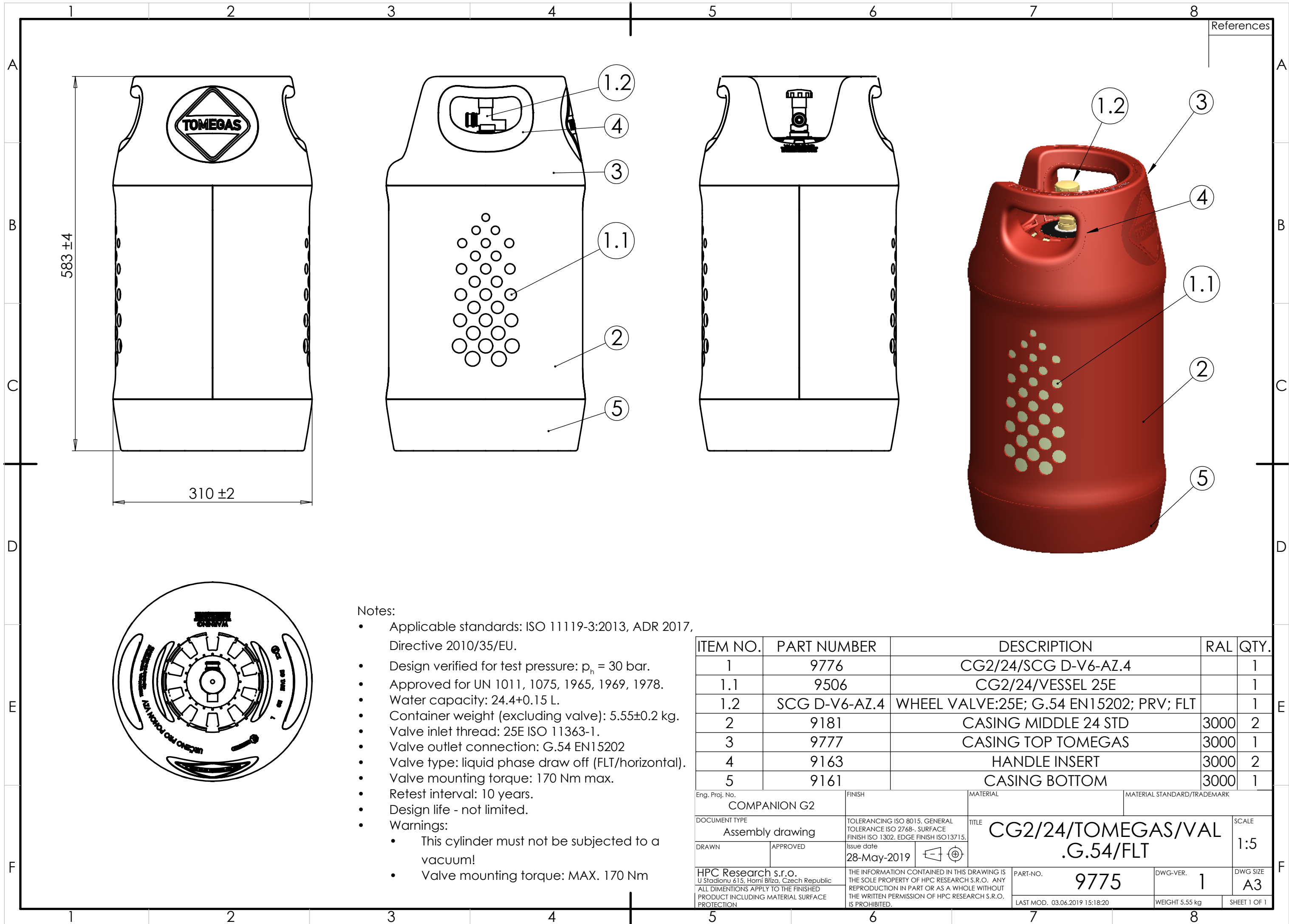
Annex: List of test engineers and their stamps

**List of test engineers of in-house inspection service
and their stamps of testing site**

Name of in-house inspection service: HPC Research s.r.o.

Address of in-house inspection service: Továrni 736,
330 12 Horní Bříza
Czech Republic

- | | |
|--------------------------------------------------------------|-----------|
| 1) Mr. Stanislav Dubinin, date of birth 1.8.1974, test stamp | CZ
AA1 |
| 2) Mr. Pavel Dubinin, date of birth 7.10.1984, test stamp | CZ
AA2 |
| 3) Mr. Václav Vlček, date of birth 8.5.1967, test stamp | CZ
AA3 |
| 4) Mr. Milan Boháč, date of birth 10.9.1976, test stamp | CZ
AA4 |



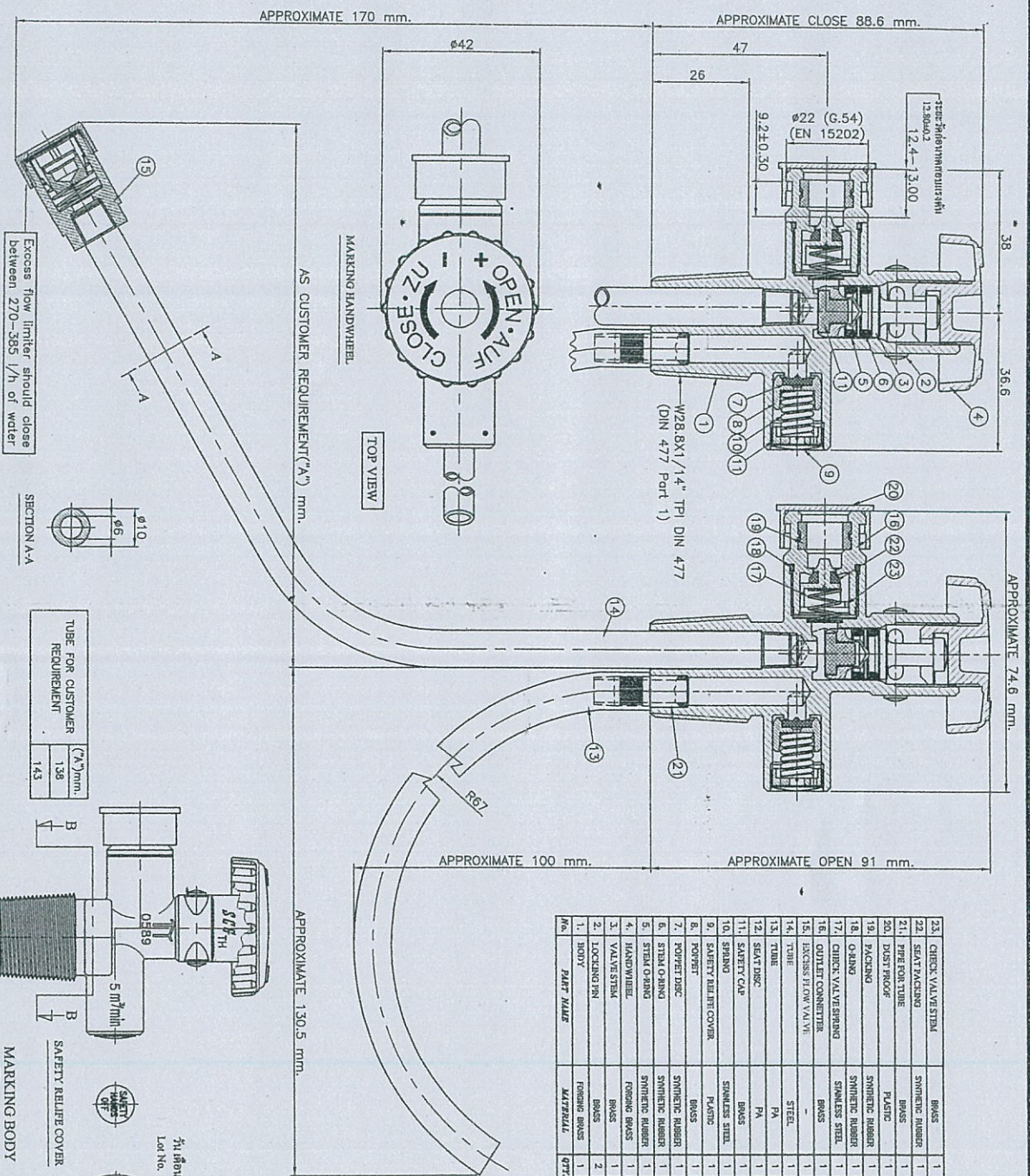
References

Notes:

- Applicable standards: ISO 11119-3:2013, ADR 2017, Directive 2010/35/EU.
- Design verified for test pressure: $p_h = 30$ bar.
- Approved for UN 1011, 1075, 1965, 1969, 1978.
- Water capacity: $24.4 + 0.15$ L.
- Container weight (excluding valve): 5.55 ± 0.2 kg.
- Valve inlet thread: 25E ISO 11363-1.
- Valve outlet connection: G.54 EN15202
- Valve type: liquid phase draw off (FLT/horizontal).
- Valve mounting torque: 170 Nm max.
- Retest interval: 10 years.
- Design life - not limited.
- Warnings:
 - This cylinder must not be subjected to a vacuum!
 - Valve mounting torque: MAX. 170 Nm

ITEM NO.	PART NUMBER	DESCRIPTION	RAL	QTY.
1	9776	CG2/24/SCG D-V6-AZ.4		1
1.1	9506	CG2/24/VESSEL 25E		1
1.2	SCG D-V6-AZ.4	WHEEL VALVE:25E; G.54 EN15202; PRV; FLT		1
2	9181	CASING MIDDLE 24 STD	3000	2
3	9777	CASING TOP TOMEGAS	3000	1
4	9163	HANDLE INSERT	3000	2
5	9161	CASING BOTTOM	3000	1

Eng. Proj. No. COMPANION G2	FINISH	MATERIAL	MATERIAL STANDARD/TRADEMARK
DOCUMENT TYPE Assembly drawing	TOLERANCING ISO 8015. GENERAL TOLERANCE ISO 2768-. SURFACE FINISH ISO 1302. EDGE FINISH ISO 13715.	TITLE CG2/24/TOMEGAS/VAL .G.54/FLT	SCALE 1:5
DRAWN	APPROVED	Issue date 28-May-2019	
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ALL DIMENSIONS APPLY TO THE FINISHED PRODUCT INCLUDING MATERIAL SURFACE PROTECTION		LAST MOD. 03.06.2019 15:18:20	DWG SIZE A3
		WEIGHT 5.55 kg	SHEET 1 OF 1



No.	DESCRIPTION	MATERIAL	QTY	REMARKS
1	BODY	BRASS	1	
2	LOCKING PIN	BRASS	2	
3	VALVE STEM	BRASS	1	
4	HANDWHEEL	BRASS	1	
5	STEEL O-RING	SYNTHETIC RUBBER	1	LOWER
6	STEEL O-RING	SYNTHETIC RUBBER	1	UPPER
7	POCKET DISC	BRASS	1	
8	POCKET DISC	BRASS	1	
9	SAFETY RELIEF COVER	PLATING	1	
10	SPRING	SMALLER STEEL	1	
11	SAFETY CAP	BRASS	1	
12	SEAT DISC	BRASS	1	
13	TUBE	PA	1	
14	TUBE	STEEL	1	
15	INLET CONNECTOR	BRASS	1	
16	INLET CONNECTOR	BRASS	1	
17	O-RING	SYNTHETIC RUBBER	1	
18	O-RING	SYNTHETIC RUBBER	1	
19	PACKING	SYNTHETIC RUBBER	1	
20	DUST PROOF	PLASTIC	1	
21	PIPE FOR TUBE	BRASS	1	
22	SEAT VALVE STEM	SYNTHETIC RUBBER	1	
23	CHECK VALVE STEM	SYNTHETIC RUBBER	1	

เอกสารนี้อาจมีค่าแต่ไม่ควบคุม
 UNCONTROLLED

ISSUE	REVISION	DATE	APPROVED
J	UPDATE CKD (**)	20/06/2017	RD
H	UPDATE CKD (**)	08/02/2016	RD
I	UPDATE TUBE (**)	19/04/2017	SDE

TECHNICAL DATA	
1. REFERENCE STANDARD	ISO 15995
2. HYDROSTATIC TEST PRESSURE	45 bar
3. WORKING TEMPERATURE	-20°C to 65°C
4. LEAKAGE TEST PRESSURE	MAX : 34 bar
	MIN : 0.1 bar
5. PRV SET PRESSURE	35 bar
6. PRV FLOW CAPACITY	5 m³/min
7. USEABLE FOR CYLINDER	MAX.WG : 42.8 L
B.Ref. PROJECT	N/A
PROJECT ENGINEER	
No.	09/09/14

TITLE : FORKLIFT VALVE WITH SRV EXCESS FLOW LIMITER FOR GERMANY
 I/L : W28.8x1/14" DIN477 ; O/L : Ø22 mm.
 MODEL : V6S1
 DRAWING No : D-V6-AZ.4

DATE : 09/05/2019
 ISSUE STATUS : L
 PREPARED BY : *Sims*
 CHECKED BY : *Sims*
 No. : D190205
 SCALE : 1:1.5

APPROVED BY : *Sims*
 FOR CUSTOMER USE
 NAME :
 DATE :
 SGG (THAILAND) CO., LTD.
 150/9001 & 150/1401 & 0855 10001