

EU TYPE-EXAMINATION CERTIFICATE

Application of the
MSBFS 2011:3 (The European Parliament and the Council Directive 2010/35/EU of 16 June 2010 on Transportable Pressure Equipment)

CERTIFICATE NO.: **19-1016480-103, Rev. 0**

This Certificate consists of three (3) pages

THIS IS TO CERTIFY THAT THE EQUIPMENT

Pressure vessel

WITH THE TYPE DESIGNATION/EQUIPMENT DESCRIPTION

Sample cylinders (internal volumes: 40-3785 ml)

MANUFACTURED BY

**Swagelok Company, 29500 Solon Road,
Solon, OH 44139-3492 - U.S.A.**

is found to comply with the requirements in § 1, chapter 2 (Article 12) and EN 1964-3:2000.

The equipment has been examined with respect to the procedure of conformity assessment as described in the MSBFS 2011:3 (Directive 2010/35/EU) and the current edition of ADR §1.8.7.2 at the time of issuing this certificate.

APPLICATIONS

Design Pressure min/max: *) 0/ 300 bar(g)

Design Temp. range: -50°C to +50°C

Further details of the product and conditions for the certification are given overleaf.

This Certificate is valid until: 2030-04-07

*) See 'Limitations' (page 2/3)

MALMÖ, 2020-04-07

Kiwa Inspecta AB

Notified Body No.: 0409



Kiwa Inspecta

Olof Pedersen
Senior Design Review Engineer



Notice: The certificate is subject to terms and conditions, if any, overleaf. Any significant changes in design or construction of the product, the quality system or amendments to the MSBFS 2011:3 (Directive 2010/35/EU) or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with the MSBFS 2011:3 (Directive 2010/35/EU), as amended.

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LIMITATIONS

- TPED Sample Cylinders covered:

Part No	Test pressure PH (bar)	Service pressure PW (bar)	Int'l volume V (ml), ±5%
304L-HD**-40	200	130	40
304L-HD**-50	200	130	50
304L-HD**-75	200	130	75
304L-HD**-100	200	130	100
304L-HD**-150	150	100	150
304L-HD**-200	150	100	200
304L-HD**-300	150	100	300
304L-HD**-400	150	100	400
304L-HD**-500	150	100	500
304L-HD**-1000	150	100	1000
304L-HD**-2250	150	100	2250
304L-HD**-1GAL	150	100	3785
316L-HD**-150	150	100	150
316L-HD**-200	150	100	200
316L-HD**-300	150	100	300
316L-HD**-400	150	100	400
316L-HD**-500	150	100	500
316L-HD**-1000	150	100	1000
316L-50D**-150	450	300	150
316L-50D**-300	450	300	300
316L-50D**-500	450	300	500

- The manufacturer is allowed to affix the "π" mark followed by the Notified Body number 0409 (KIWA Inspecta AB) to the approved equipment described in the chapter 3 of the TPED 2010/35/EU.

MANUFACTURING PLANT

Swagelok Company (Atlantic)
26651 Curtiss Wright Parkway
Willoughby Hills, OH, U.S.A.

TYPE APPROVAL DOCUMENTATION

- Swagelok Company Technical File:

0.	Contents of TPED Technical File for Swagelok Sample Cylinders
1.	Signed TPED Directive 2010_35_EU Kiwa Application Form
2.	a. Essential Characteristics including Hazard and Risk
	b. SPS-00144 Rev. G: TPED Cylinder (Design, Calculations)
	c. EN 1964-3 TPED cylinder tests (TÜV SÜD 2003)

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3.	<u>Drawings and Catalogs</u> a. Approval Drawings b. MS-02-193 Rev. K: "TPED Product" Catalog c. SCS-00231 Rev. -: "TPED Cylinder Instructions For Use"
4.	<u>TPED Cylinder Material Specifications and Forms</u> a. SMS-00252 Rev. F: Pipe, UNS S31603 for Approved Cylinders (redacted) b. SMS-00265 Rev. C: Pipe, UNS S31403 for Approved Cylinders (redacted) c. SMS-00440 Rev. G: Tubing, UNS S31403 for Gas Cylinders (redacted) d. SMS-00569 Rev. D: Tubing, UNS S31403 for Approved Cylinders (redacted) e. SMS-00666 Rev. F: Tubing, UNS S31603 for DOT-3E Cylinders (redacted) f. SF-06-121 Rev. B: Material Acceptance-Cylinder Tubing g. SKS-00227 Rev. F: Vacuum Anneal, SS Process Specification
5.	<u>TPED Cylinder Marking and Testing Specifications and Forms</u> a. SKS-00366 Rev. G: Marking, TPED Cylinders b. SKS-00529 Rev. A: TPED Cylinder Testing Requirements c. SI-07-078 Rev. D: Issuing DoCs for TPED Cylinders d. SQC-00234 Rev. D: TPED cylinder quality checklist e. SI-00465 Rev. B: Manage TPED Cylinder Report + Documents f. SF-05-209 Rev. L: TPED Cylinder Test Report g. SF-07-017 Rev. L: TPED Cylinder EU Declaration Of Conformity
6.	<u>Certifications</u> a. ISO 9001 b. Example certification package: audited cylinder 2019-Dec (Lot 3C29)

TESTS CARRIED OUT

- Technical Report No: 2019, Rev. 0: Swagelok Company – Type Inspection. Kiwa Inspecta Proj. No: 19-1016480-104.

MALMÖ, 2020-04-07

Kiwa Inspecta AB



Olof Pedersen
Senior Design Review Engineer