

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. 1**

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.

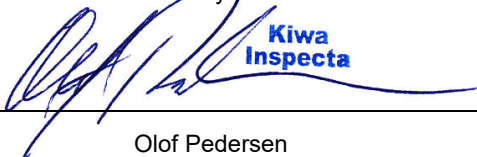
This Certificate is valid until: 2030-04-07

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

MALMÖ, 2021-03-03

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, list of approval drawings below:

Drawing No.:	Rev	Service pressure PW [bar]	Test pressure PW [bar]
304L-HDXX-40-APPROVAL	A	130	200
304L-HDXX-50-100-APPROVAL	A	100	200
304L-HDXX-150-500-APPROVAL	A	100	150
304L-HDXX-1000-APPROVAL	A	100	150
304L-HDXX-2250-1GAL-APPROVAL	A	100	150
316L-50DXX-150-500-APPROVAL	A	300	450
316L-HDXX-150-500-APPROVAL	A	100	150
316L-HDXX-1000-APPROVAL	A	100	150

Internal volumes (40-3785 ml) according to the catalog “Swagelok® Products Compliant with the Transportable Pressure Equipment Directive (TPED)” (Doc. No. MS-02-193, Rev. K, October 2017).

- This certificate replaces the one issued in 2020-04-07 (Rev. 0).
- The manufacturer is allowed to affix the “π” mark followed by the Notified Body No 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)
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

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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, 2021-03-03

Kiwa Inspecta AB




Olof Pedersen
Senior Design Review Engineer