

TYPE APPROVAL CERTIFICATE

Certificate No:
TAP00001CF
Revision No:
2

This is to certify:

That the Pipe System with Couplings

with type designation(s)

Exhaust Gas System Type DW-kl /double wall, Exhaust Gas System Type EW-kl /single wall

Issued to

Jeremias Abgastechnik GmbH
Wassertrüdingen, Germany

is found to comply with

EN 1856-1:2009 Chimneys – Requirements for metal chimneys – Part 1: System chimney products

EN 1856-2:2009 Chimneys – Requirements for metal chimneys – Part 2: Metal flue liners and connecting flue pipes

EN 13216-1:2004 Chimneys – Test methods for system chimneys – Part 1: General test methods

Application :

Type:	Temperature range:	Max. pressure:	Design:
Exhaust Gas System Type DW-kl /double wall	up to 600°C	5000 Pa	see certificate
Exhaust Gas System Type EW-kl /single wall	up to 600°C	5000 Pa	see certificate

Issued at **Hamburg** on **2023-06-01**

This Certificate is valid until **2028-05-31**.

for **DNV**

DNV local unit: **Augsburg**

Approval Engineer: **Ana Cristina Do Carmo Insfran**

Sven Klinger
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Exhaust gas piping system consisting of double walled pipe or single walled pipe.

Technical data:

<u>Materials:</u>	Inner pipe	ASTM SA 312 TP 304H, 316L, 316TI, / EN 1.4404, 1.4571, 1.4948
	Outer pipe	ASTM SA 312 TP 304, 316L, 316TI / EN 1.4404, 1.4571
	Insulation	Type approved pre-formed mineral fibre, Minimum density 120kg/m ³ , Minimum thickness 32,5 mm, optional 50 mm
	Sealing materials	Asplit (up to 600°C) Silicone (up to 200°C)
Size range		DN 80 to DN 1000
Pipe wall thickness		0,6 mm to 1,0 mm inside / outside
Maximum Allowable Working Temp. (MAWT)		up to 600°C
Maximum Allowable Working Pressure (MAWP)		5000 Pa

Application/Limitation

The exhaust gas piping systems of type DW-kl and EW-kl are approved for the use as exhaust gas lines on boilers and diesel engines (downstream of turbo chargers).

Note:

For penetration of ship's fire divisions DNV type approved pipe penetrations shall be used.

The selection of the Exhaust Gas System for the corresponding application and correct installation shall be in accordance with the manufacturer's instructions.

Type Approval documentation

Marking of product

For traceability to this type approval the products are to be marked with:

- Manufacturer's name and mark
- Nominal diameter
- DNV - Type Application Certificate number

Place of Production

Jeremias Abgastechnik GmbH
 Opfenrieder Straße 11 – 14
 D-91717 Wassertrüdingen

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to DNV CP-0338, Sec.4.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE