



Certificate no.:
TAP00002XW

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Gaskets and Sealings

with type designation(s)

Spiral Wound Gaskets for pipe flanges, Type: CXG-11

issued to

Cixi High New Sealing Material Co., Ltd.
CIXI, Zhejiang Province, China

is found to comply with

Application:

Refer to section Application in the certificate.

Temperature range: -196°C to 450°C (Graphite); -196°C to 260°C (PTFE); LNG using acc DNV Rules: -163°C

Max. working press.: Acc. ASME B16.5_Class 300 (cryogenic application max. 2 MPa)

Design: Spiral Wound Gasket with filler Graphite or PTFE

Sizes: DN80 / 3 inch

Issued at **Hamburg** on **2025-04-02**

This Certificate is valid until **2030-04-01**.

for **DNV**

DNV local unit: **Ningbo FIS**

Approval Engineer: **Thilo Pabst**

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

Asbestos free Spiral Wound Gasket CXG-11 with inner & outer/locating ring and intended for pipe flanges. Gaskets are with two different fillers available: Graphite filler or PTFE filler.

Material:

Spiral Wound Gasket Type	Standard	CXG-11 (Graphite)	CXG-11 (PTFE)
Inner Ring	ASTM/AISI	316L	316L
Outer (locating/centering) Ring		316L	316L
Metal Strip/Winding		316L	316L
Filler Graphite / PTFE	JB/T 7758.2-2005 / JB/T 6618-2005	Graphite	PTFE

Properties:

Technical data	unit	Standard	CXG-11 (Graphite)	CXG-11 (PTFE)
Nominal diameter	DN / Inch	ASME B16.2-2023	DN80 / 3"	
Sealing high	mm		4.5 ± 0,13	
Pressure Rating	./.	ASME/ANSI B16. 5	CL300	
Compressibility	%	GB/T 12622-2008	18 - 30	18 - 30
Recovery	%		≥ 17	≥ 15
Leakage rate (ambient T)	cm³/s	GB/T 12385-2008	≤ 0.0001	≤ 0.0001
Leakage rate (-196°C)	--	EN12308	passed	passed
Leakage rate (-165°C)	Pa*m³/s	JB/T 14645-2023	≤ 0.000001	≤ 0.000001

APPLICATION

This is a Non-Class Type Approval Certificate (TA-NONCL - for products where a Type Approval is not mandatory) on basis of test according to international standards.

The above listed types of Spiral Wound Gasket may be used under consideration of the mechanical and technical characteristics as well as physical and chemical properties for the following applications:

- On board of ships and other structures classed by DNV as follows:
Ship's piping systems as specified in DNV Rules Pt.4, Ch.6 Piping systems, pressurized items and machinery containing including cryogenic applications.
e.g. the following fluids: non-flammable gases, oil, fuel oil, water, LNG, LPG

The selection of the gaskets for the corresponding application and appropriate installation has to be in accordance with the instructions of the manufacturer.

Piping/Gaskets shall be hydrostatically tested: 1.5 times of the system design pressure (DNV Pt.4 Ch.6 – Piping)

Piping of all cargo handling systems shall be electrically bonded. (DNV Pt.5 Ch.5 – Oil Tanker and Pt.5 Ch. 7 – Liquefied Gas Tanker).

Limitation / Exclusions

- Pipelines on chemical and gas tankers carrying flammable gases (except LNG, LPG), noxious media, propylene oxide and mixtures of ethylene and propylene oxide.

TYPE APPROVAL DOCUMENTATION

TESTS CARRIED OUT

Documentation of tests performed are the basis for this Type Approval as referenced in the list above and DNV Ref.-Nos. 262.1-042089

MARKING OF PRODUCT

For traceability to this Type Approval products shall bear legible and durable marked as following:

- Manufacturer's registered trademark: COXIN
- Size: DN or NPS (inch)
- Nominal Pressure: CL...
- Materials (inner/outer ring+filler/metal strip/winding)
- Applicable Standard: ASME B16.20
- color (filler): Graphite = dark grey; PTFE = white

Sample: see product and label figure (right column)



COXIN		产品合格证 Certificate	
名称 Name		批号 Batch No.	
型号 Type		数量 Quantity	
规格 Size	DN PN NPS	检验 Inspect	
标准 Standard	ASME B16.20	材质 Material	
慈溪市高新密封材料有限公司 Cixi High New Sealing Material CO.,LTD		20 年 月 日	

PERIODICAL ASSESSMENT

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with (refer to the Class Programme DNV-CP-0338, Sec. 4).

To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE