



Certificate No:
TAP00002EN

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Gaskets and Sealings

with type designation(s)
CPS4000; CPS5220; CPS5230; CPS5053; CPS6000; CPS3000

Issued to

Zhejiang CPS Cathay Packing & Sealing Co., Ltd.
Hangzhou City, Zhejiang Province, China

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
ASME B16.20-2017, Metallic Gaskets for Pipe Flanges
ASME B16.21-2016, Nonmetallic Flat Gaskets for Pipe Flanges

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Temperature range:

Max. working press.:

Design: Spiral wound / Flat

Sizes: DN10 - DN3000

Issued at **Hamburg** on **2021-12-15**

This Certificate is valid until **2026-12-14**.

DNV local station: **Shanghai**

for **DNV**

Approval Engineer: **Christian Kaemmer**

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Olaf Drews
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.



Form code: TA 251

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Page 1 of 3

Product description

Spiral Wound gasket **CPS4000** / 2 types:

- with locating ring
- with locating both of inner ring and locating ring

Dimension of spiral wound gasket:

NPS (inch)	Inner Diameter D ₂	Outer Diameter D ₃	Inner Ring D ₁	Locating Ring D ₄	Thickness of Inner Ring and Locating Ring	Thickness of Gasket(not including raised filler)
½ - 3	+/-0.4	+/-0.8	+/-0.8	+/- 0.8	2.97 – 3.33	+/- 0.13
3½ - 8	+/-0.4	+/-0.8	+/-1.5			
10-24	+/-0.8	+1.5, -0.8	+/-1.5			
26-34	+/-0.8	+/-1.5	+/-3.0			
36-60	+/-1.5	+/-1.5	+/-3.0			

Spiral Wound gaskets meet requirements of the standard ASME B16.20-2017

Non metallic flat gasket **CPS5220; CSP5230; CPS5053; CPS6000; CPS3000**:

- Non asbestos gasket **CPS5220 & CPS5230**,
- rubber gasket **CPS5053**,
- PTFE-gasket **CPS6000**,
- flexible graphite metal composite reinforced gasket **CPS3000**

are non-metallic flat gaskets.

Dimension of non-metallic flat gasket:

NPS (inch)	Inner Diameter d _i	Outer Diameter D ₀	Center circle Diameter of bolt hole, K	Center distance of adjacent bolt holes	Thickness
≤12	+/- 1.5	0.0, -1.5	+/- 1.5	+/- 1.0	Nominal Thickness +/- 10 %
≥14	+/- 3.0	0.0 -3.0			

Gaskets meet requirements of the standard ASME B16.21-2016

Manufacturing location

Taoyuan Village, Puyang Town, Xiaoshan District Hangzhou, Zhejiang 311255.

Application/Limitation

Products covered by this certificate may be used as pipe flange sealing for non-flammable gases, oil, fuel oil, water, LNG.

Maximum permitted pressure shall be in accordance with the flange design standard and pressure rating. The certificate covers the compliance of gasket sizes with the design standard.

Type Approval documentation

Marking of product

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

- Manufacturer's tradename
- Size
- Nominal Pressure
- Material
- Applicable Standard

Periodical assessment

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