

HG

**CHEMICAL INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

HG/T 20630-2009

**Metal jacketed gaskets for use with steel pipe flanges (Class
designated)**

钢制管法兰金属包覆垫片 (Class 系列)

(English Translation)

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1. Scope

1 Scope

This standard specifies the type, dimension, technical requirements and marking of metal jacketed gaskets for use with steel pipe flanges (Class designated).

This standard is applicable to the raised-face metal jacketed gaskets for use with steel pipe flanges that the nominal pressure is Class300 (PN150) in HG/T 20615.

Note: As for the use of the gaskets in which contain the material of asbestos, it shall meet the requirements of the relevant laws and regulations. If the aforesaid gaskets are used, the protective measures shall be adopted to prevent man from damaging.

2 Normative references

The following provisions contained in the following standards are turned into the provisions of this national standard by being referred in this national standard. For date reference, the subsequent amendments to (excluding amending error in the text) or revisions of, any of these publications do not apply. And parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. For undated references, its latest edition referred to applies.

GB/T 232 "Metallic materials--Bend test" GB/T 710 "Hot-rolled Quality Carbon Structural Steel Sheets and Strips" GB/T 2040 "Sheet of Copper and Copper Alloy" GB/T 2518 "Continuously Hot-dip Zinc-coated Steel Sheet and Strip" GB/T 3280 "Cold Rolled Stainless Steel Plate Sheet and Strip" GB/T 3880 "Wrought Aluminium and Aluminium Alloy Plates, Sheets and Strips for General Engineering" GB/T 3985 "Compressed Asbestos Fiber Jointing" GB/T 15601 "Metal Jacketed Gasket for use with Pipe Flange" HG/T 20615 "Steel Pipe Flange (Class Designated)" HG/T 20635 "Specification for Selection of Steel Pipe Flange, Gaskets and Bolting (Class designated)" JB/T7758.2 "Specifications of Flexible Graphite Sheets"

3.0.1 Maximum operating temperature of coated metal material shall meet the requirements

of Table 3.0.1.

Table 5.0.1 Hardness of Coating Material

Coating metal material Code name Hardness (HB), maximum Pure aluminum sheet L3 L3 40 Fine copper sheet T3 T3 60 Galvanized thin steel sheet St (Zn) 90 08F St 90 0Cr13 405 183 0Cr18Ni9 304 0Cr18Ni10Ti 321 00Cr17Ni14M02 316L 00Cr19Ni13M03 317L

5.0.2 The thickness of the coating metal material is 0.3 - 0.5mm.

5.0.3 Coating metal material usually is made of full sheet of sheet metals. If it is necessary to be jointed, the quantity of the splice joint shall not exceed three. the sheet at the joint shall be cut into 45°; and argon arc welding or gas welding shall be adopted. the weld at the joint must be polished till it is flush with the parent metal. Cold bending test shall be carried out for the weld according to the requirements of GB/T 232; its bending radius is 1.5mm and tortuosity factor is 180°. There shall not be cracks at the weld of the specimen for the cold bending.

5.0.4 If the paronite is adopted for the filling material, the indicator of the technical

performance shall meet the requirements of XB450 or XB350 in GB/T 3985. If the flexible graphite sheets are adopted, it shall meet the requirements of JB/T 7758.2. Thereinto, the content of chloride ion shall be less than or equal to 50x10⁻⁶.

5.0.5 The material with the same thickness shall be adopted for the filling material. The thickness of the filling material shall be uniform on the whole section.

5.0.6 Filling material shall be fully packaged in the metal enclosure; and the width of metal

wrapping shall be equal to with each other symmetrically.

5.0.7 Dimension tolerance of gasket dimension shall meet the requirements of Table 5.0.7.

Table 5.0.7 Gasket Dimension Tolerance (mm)

Nominal dimension DN Dimension tolerance of DI and D2 T Dimension tolerance ≤600
+1.5 0 +0.75

5.0.8 Gasket surface shall be flat and smooth. There shall not be such defects as penetrating

scratch along the radial direction and cracks which impact the sealing property.

5.0.9 Compression ratio, rebound rate, stress relaxation ratio and sealing leak ratio of the gasket shall meet the requirement of GB/T 15601.

6 Marking and Packaging

6.0.1

The gasket shall be packaged respectively according to the specification and material.

There shall be production quality test conformity certificate at the delivery time; and the specified contents in Article 6.0.2 shall be indicated with labels on each gasket.

6.0.2

Marking content.

- 1 Standard No. (HG/T 20630);
- 2 Nominal dimension DN;
- 3 Nominal pressure Class;
- 4 The code name of coating metal material (see Table 3.0.1);
- 5 Filling material.

6.0.3

Marking illustration.

As for metal envelope gasket with 0Cr18Ni9 metal cladding material, whose nominal dimension is DN500 and nominal pressure is Class300, the filling material is flexible graphite;

and the marking is.

HG/T 20630 metal envelope gasket (a) 500-300 304/FG