

JB

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

JB/T 10507-2005

Metal bellows for valves

阀门用金属波纹管

(English Translation)

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1 Scope

This standard specifies the terms and definitions, classification and identification, requirements, test methods, inspection rules as well as marking and packaging of the metal bellows for valves (hereinafter referred to as bellows) and their assemblies.

This standard is applicable to bellows and their assemblies for globe and gate valves. It may be used as reference for other types of bellows for valves.

This standard is not applicable to non-metallic bellows and bellows not for valves.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this national standard. For dated references, subsequent amendments (excluding corrections) to, or revisions, of any of these publications do not apply to this standard. However parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition applies.

GB/T 1047-1995 Nominal size for pipe components

GB/T 1048-1990 Nominal pressure for pipe components

GB/T 1220-1992 Stainless steel bars

GB/T 3089-1982 Thinnest-wall seamless tubes of stainless and acid-resistance steel

GB/T 3280-1992 Cold rolled stainless steel sheets and plate

GB/T 4237-1992 Hot rolled stainless steel sheets and plates

GB/T 4239-1991 Cold rolled stainless steel and heat-resisting steel strips

GB/T 14992-1994 Types of heat-resisting superalloys

GB/T 15010-1994 Cold-rolled sheets of corrosion-resisting

JB/T 6169-1992 Metal bellows

JB/T 9092-1999 Valve inspection and testing

3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply.

3.1 bellows

thin-walled elastic shell part with many transverse convolutions

3.2 bellows assemblies

accessories composed of two or more parts (one of them is the bellows that connected in series by one or more ones), flanges etc.

3.3 hydroformed bellows

bellows made by hydraulic forming method that placing the metal tube in a mold, applying hydraulic pressure from inside, and axially compressing the metal tube simultaneously

3.4 mechanically formed bellows

bellows made by mechanically forming method, convolutions of bellows are individually and continuously processed and formed on the metal tube with rotating tools, rubber mould or metal mould

3.5 welded bellows

bellows made by welding method, outer and inner edges of a plurality of annular elastic metal diaphragms are alternately welded together to make bellows