NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

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Metallic materials - Tube - Ring tensile test

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1 Scope

This Standard specifies the metallic tube ring tensile test methods that stretch the sample until it breaks to expose the surface and internal defects of the sample. This Standard can also be used to evaluate the ductility of metallic tube.

This Standard is applicable to the metallic tube, of which the outer diameter is more than 150 mm, the wall thickness is not more than 40 mm and the inner diameter is more than 100 mm.

2 Principle

Cut a section of tube ring sample from one end of the metallic tube; let the metallic tube ring sample bear the circumferential deformation until fracture occurs.

3 Test equipment

Use 2 cylindrical pins of the same diameter; their axes are parallel, and relatively movable; remain parallel during the movement.

In principle, the diameter of the cylindrical pin shall be the minimum value of the allowable strength. The diameter of the cylindrical pin shall be at least 3 times the wall thickness of the tube ring, if the inner diameter of the metallic tube ring is allowed (as shown in Figure 1).

in millimeters