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JAPANESE INDUSTRIAL STANDARD

**Method of U-groove weld
cracking test**

JIS Z 3157—1993

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JAPANESE INDUSTRIAL STANDARD

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Method of U-groove weld cracking test

Z 3157-1993

1. Scope This Japanese Industrial Standard specifies the method of U-groove weld cracking test for detecting the cold cracking generated in the welds of the carbon steel and the low alloy steel by shielded metal arc welding, gas shielded arc welding and self-shielded arc welding.

Remarks: The standards cited in this Standard are shown in Attached Table 1.

2. Test plates

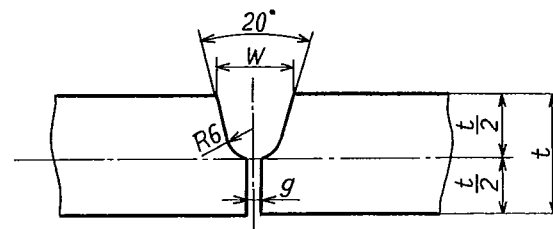
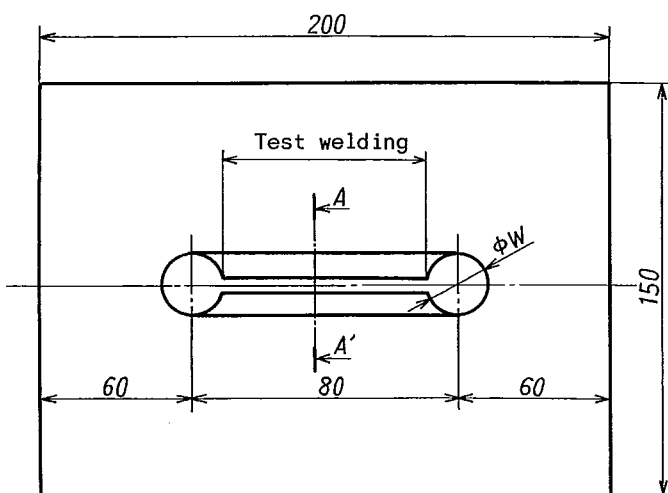
2.1 Shape and dimensions of test plates The shape and dimensions of the test plates shall conform to Fig. 1. The root gap " g " shall be determined by selecting the appropriate value in the range of 1.0 mm to 2.0 mm according to the welding method, the welding materials or the like, and its allowance shall be ± 0.2 mm.

Fig. 1. Shape and dimensions of test plates

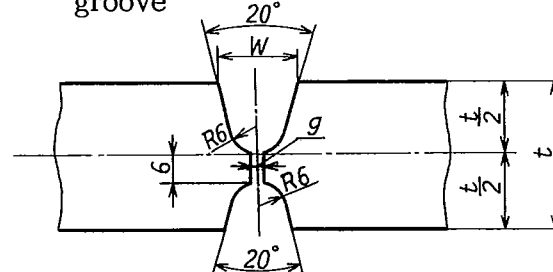
Unit: mm

Section A-A'

(a) In the case of one-side U-groove



(b) In the case of both sides U-groove



where, t : thickness of the test plate

g : root gap

W : diameter of drilled hole

Remarks: The groove specified in (b) may be employed when the thickness " t " of the test plate exceeds 25 mm.