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

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## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Welding Engineering Society (JWES) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS Z 3158:1993** is replaced with this Standard.

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# Method of y-groove weld cracking test

## Introduction

This Japanese Industrial Standard was established in 1966 and has gone through two revisions up to the present. The last revision was made in 1993, and the revision at this time is to correspond to subsequent changes in welding method and welding consumables.

No corresponding International Standard has been established at this point.

## 1 Scope

This Standard specifies the method of y-groove weld cracking test for examining the likelihood of occurrence of cold cracks in the welds of steel made by means of manual metal-arc welding or gas-shielded metal-arc welding, and also for examining appropriate preheating temperatures for preventing such cold cracks.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS Z 3001 (series) *Welding and allied processes — Vocabulary*

## 3 Terms and definitions

For the purposes of this Standard the terms and definitions given in JIS Z 3001, and the following apply.

### 3.1 restraint welding

welding to prepare a test plate (see Figure 2)

### 3.2 test welding

welding to carry out the cracking test (see Figure 4)

### 3.3 test bead

bead obtained by test weld (see Figure 4)

### 3.4 end zone surplus bead method

method of test welding in which the start and the crater of test bead are located outside the groove (see Figure 4)

### 3.5 straight bead method

method of test welding in which the start and the crater of test bead are located inside the groove (see Figure 4)