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**Method for hemming test of high  
strength aluminium alloy sheets for  
automotive use**

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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 of revision of Japanese Industrial Standard submitted by The Foundation of Osaka Science & Technology Center (OSTEC) /Japanese Standards Association(JSA) 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 H 7701:2003** is replaced with this Standard.

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# Method for hemming test of high strength aluminium alloy sheets for automotive use

## 1 Scope

This Japanese Industrial Standard specifies the test method for straight and curved hemming tests of high strength aluminium alloy sheets for automotive use of not less than 0.8 mm and not more than 1.2 mm thickness.

## 2 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

NOTE : General terms regarding hemming and detrimental phenomena in hemming except the terms as defined in this clause are shown in Annex B.

### 2.1 test force

the force to be applied to a test piece at the time of bending for the purpose of the test

### 2.2 tensile pre-strain

the permanent elongation applied to a test piece, prior to hemming, indicated by the increment of gauge length converted to percentage (%)

### 2.3 hemming

bending process of the edge of an outer or inner sheet flange in order to join the outer and inner sheets into one piece

### 2.4 straight hemming

hemming in which the bent edge forms a straight line

### 2.5 curved hemming

hemming in which the bent edge forms a concave or convex with a certain curvature and which involves deformation caused by stretch or shrink flange

### 2.6 flanging

bending process to make a hem flange or standing flange prior to hemming

### 2.7 pre-hemming

bending the flange to the angle necessary for final hemming

It is also referred to as “pre-bending”.