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Railway crossings—Shape and dimension

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by Minister of Land, Infrastructure, Transport and Tourism through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard from Japan Railway Turnout Manufacture's Association (JRTMA)/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 E 1306:1995 is replaced with this Standard.

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Being in conformance with this Standard may come under the use of the following patent right concerning the symbol of grade below.

1.	Title of invention	Crossing nose rail and manufacture thereof and weld crossing and manufacture thereof
	Patent number	No. 2965280
	Patent holder	Yamato Kogyo Co., Ltd.
	Address	380 Kibi, Otsu-ku, Himeji city, Hyogo
2.	Title of invention	Crossing nose rail and formation thereof and weld crossing and formation thereof
	Patent number	No. 2110362
	Patent holder	Tetsudo Kiki, Ltd.
	Address	1151 Simomino, Fukuoka-machi, Takaoka city, Toyama

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The "patent rights" as mentioned here include patent right, application for a patent after opening to the public or utility model right.

Railway crossings—Shape and dimension

Introduction

This Japanese Industrial Standard was established in 1975 and has gone through three-time revisions to this day. The last revision was taken place in 1995; and the revision of this time is to add NEW crossings (Non-groove Electron beam Welding crossings) and advanced welded crossings to this Standard, which are newly developed and put into practical use afterwards, as well as to modify and organize diagrams thereof.

The corresponding International Standard has not yet been published at this moment.

1 Scope

This Standard specifies the shapes and dimensions of 1 067 mm and 1 435 mm gauge railway crossings (hereafter referred to as "crossings") used for the ordinary railway among railways stipulated in the Enforcement Regulations of Article 4 of the Railway Business Act. However, this does not apply to the crossings for Shinkansen railway which is based on the Nationwide Shinkansen Railway Development Act.

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 E 1301 Turnout number

JIS E 1311 Railway—Turnouts and crossings vocabulary

3 Terms and definitions

For the purposes of this Standard, the terms and definitions given in **JIS E 1311** and the following apply.

3.1 advanced welded crossing

rigid crossing of combined type in which the long point rail and the short point rail of the flat bottom in shape are welded at the head and the bottom thereof to construct the V-piece, and bonded with the wing rail through the filler

4 Shapes and dimensions of crossings

The shapes and dimensions of crossings are as given in table 1 to table 5. For the crossing number, **JIS E 1301** applies.

Type of	Crossing	Applicable figure number					
rail	number	Built-up crossing	Pressure welded crossing	NEW crossing	Advanced welded crossings	Solid manganese steel rigid crossing	
40N	6	17	_	_	_	_	
	7	1, 4					
	8	1, 4, 16					
	10	1, 4					
	12						
	14	2, 5					
	16						
50N	6	17	_	_	_	23 , (31)	
	7	1, 4				24, (31)	
	8	1, 4, 16	7	10	13	25 , (31)	
	10	1, 4	7			26 , (31)	
	12					27 , (31)	
	14	3,6				28 , (31)	
	16					29 , (31)	
	20					30 , (31)	
60	8 —	_	8	11	14	32 , (37)	
	10					33 , (37)	
	12					34 , (37)	
	16		9	12	15	35, (37)	
		20					36 , (37)
30A	8	16	_	_	_	—	
37A	8	16					

Table 1 Crossing