JIS

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INDUSTRIAL
STANDARD

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JIS E 1103 : 1993

Light Rails

ICS 45.080

Descriptors : plain track, railway rails, unalloyed steels

Reference number : **JIS E 1103 : 1993 (E)**

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law :

Date of Establishment : 1952-02-12

Date of Revision : 1993-03-01

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

JAPANESE INDUSTRIAL STANDARD JIS E 1103 : 1993

Light rails

1 Scope This Japanese Industrial Standard specifies the light rails of carbon steel, hereafter referred to as the rails.

Remarks 1 The normative references to this Standard are given in Attached Table 1.

2 The units and numerical values given in { } in this Standard are in accordance with the conventional units, and are the standard values.

The conventional units and numerical values shall be switched over to the Annex after April 1, 1995.

2 Classes The classes of the rails shall be as given in Table 1.

Table 1 Classes

Class	Symbol	Note
		Calculated mass kg/m
6 kg rail	6	5.98
9 kg rail	9	8.94
10 kg rail	10	10.1
12 kg rail	12	12.2
15 kg rail	15	15.2
22 kg rail	22	22.3

Remarks : The 10 kg rail should preferably be not used.

3 Chemical composition and mechanical properties

3.1 Chemical composition The chemical composition of the rails, when subjected to the test in accordance with **7.1**, shall conform to the requirements of Table 2.

Table 2 Chemical composition

Class	Chemical composition %				
	C	Si	Mn	P	S
6 kg, 9 kg, 10 kg, 12 kg and 15 kg rail	0.40 to 0.60	0.40 max.	0.50 to 0.90	0.045 max.	0.050 max.
22 kg rail	0.45 to 0.65				

3.2 Mechanical properties The mechanical properties of the rails, when subjected to the test in accordance with **7.2**, shall conform to the requirements of Table 3.