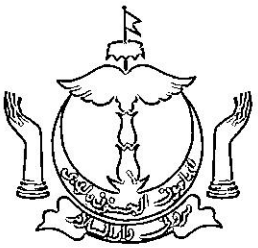
PBD 19 : 1995



PIAWAI BRUNEI DARUSSALAM

BRUNEI DARUSSALAM STANDARD

Specification for

Structural Steel I and H Sections -

Tolerances on shape and dimensions

MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM

Construction Planning and Research Unit
Ministry of Development
Old Airport, Jalan Berakas
Bandar Seri Begawan 1190
Negara Brunei Darussalam

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PBD 19 : 1995
First edition

Attention is drawn to the fact that compliance with this Brunei Darussalam Standard does not, of itself confer any immunity from legal obligations.

The Brunei Darussalam Standards are subject to periodical review according to the current needs of the local industries to keep abreast of progress in the industries concerned. Suggestions of amendments will be recorded and in due course brought to the notice of the committees concerned.

Amendments issued since publication

Amd No.	Date of issue	Text affected

CONTENTS

FOREWORD

This Brunei Darussalam Standard has been adopted from the British Standard / European Standard BS EN 10034:1993 and was prepared under the direction of the Technical committee on Iron and Steel. It was endorsed by the Ministry of Development and was first published in 1995.

In preparing this standard references were made to the following:

1. PBD 17 Part 1 : 1995	Specification for hot rolled sections of structure steel.
2. PBD 20 : 1995	Definition of steel products.

Acknowledgement is made for the use of BS EN 10034 on which this standard is based.
Any reference to British Standard / European Standard and "BS EN numbers" are replaced with Brunei Darussalam Standard (Piawai Brunei Darussalam) and "PBD numbers" as appropriate.

COMMITTEE REPRESENTATION

The Technical Committee on Iron and Steel was entrusted by the Ministry of Development for the preparation of this Brunei Darussalam Standard.

The members of the Technical Committee are as follows:

1.	Dr. Faqir Gul	Institute Technology Brunei (Chairman)
2.	Awg. Hamdani Hj. Mohd Jamil	Ministry of Development
3.	Dr. Naseer Ahmed	University Brunei Darussalam
4.	Awg. Mansor Jaluddin	Maktab Teknik Sultan Saiful Rijal
5.	Dyg. Masni Haji Mohsin	Ministry of Industry & Primary Resources
6.	Mahendra Coomaraswamy	Pertubuhan Ukur Jurutera Akitek (PUJA)
7.	Lawrie Harris	Cooper Macdonald & Partners
8.	Chee Wah Tsang	Jurutera Tempatan
9.	Nicholas Leong Soon Kong	Brunei Shell Petroleum
10.	Lai Foo Juat	Public Works Department
11.	Michael Khoo	Interline Roofing Co. (B) Sdn. Bhd.
12.	Awg. Abd Rahman Hj. Jaafar	Housing Development Department

1 Scope

This Brunei Darussalam Standard specifies tolerances on shape dimensions and mass of structural steel I and H sections. These requirements do not apply to I and H sections rolled from stainless steel. These requirements do not apply to taper flange sections.

NOTE. For dimensions of I and H beams, reference should be made to PBD 17 Part 1 : 1995.

2. Normative reference

This Brunei Darussalam Standard makes reference to other Standards and publications. These references are cited at appropriate places in the text and are listed at the end of this standard.

3. Definitions

For the purpose of this Brunei Standard, the definitions in PBD 20 : 1995 apply.

4 Rolling tolerances for structural steel I and H sections

4.1 Section height *(h)*

The deviation from nominal on section height measured at the centre line of web thickness shall be within the tolerance given in table 1.

4.2 Flange width *(b)*

The deviation from nominal on flange width shall be within the tolerance given in table 1.

4.3 Web thickness *(s)*

The deviation from nominal on web thickness measured at the mid-point of dimension h shall be within the tolerance given in table 1.

4.4 Flange thickness *(t)*

The deviation from nominal on flange thickness measured at the quarter flange width point shall be within the tolerance given in table 1.

4.5 Out-of-squareness $(k + k')$

The out-of-squareness of the section shall not exceed the maximum given in table 2.

4.6 Web off-centre *(e)*

The mid-thickness of the web shall not deviate from the mid-width position on the flange by more than the distance (e) given in table 2.

4.7 Straightness $(q_{xx} \text{ or } q_{yy})$

The straightness shall comply with the requirements given in table 3.

5 Tolerances on mass

The deviation from the nominal mass of a batch or a piece shall not exceed ± 4.0%.

The mass deviation is the difference between the actual mass of the batch or piece and the calculated mass.

The calculated mass shall be determined using a density of 7850 kg/m^3

6 Tolerance on length

The sections shall be cut to ordered lengths to tolerances of:

a) ± 50 mm; or
b) + 100 mm where minimum lengths are requested.

L represents the longest useable length of the section assuming that the ends of the section have been cut square (see figure 1).