PBD 15 : Part 2 : 1994

PIAWAI BRUNEI DARUSSALAM
BRUNEI DARUSSALAM STANDARD

Specification for

Welding terms and symbols

Part 2. Specification for symbols for welding

MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM

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First edition

Attention is drawn to the fact that this Brunei Darussalam Standard does not confer any immunity from legal obligations in any contract for compliance to the Standard.

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

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.

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FOREWORD

This Brunei Darussalam Standard has been adopted from the British Standard BS 499 Part 2: 1980, and 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 1994.

The elementary symbols in this standard depict the form of the weld to be made regardless of the welding process employed. These symbols may be qualified by the use of supplementary symbols, dimensional details and complementary indications.

In the absence of a single method being agreed internationally, ISO 2553 provisionally recognizes that the position of the symbol relative to the reference line should depend on the method of drawing projection (first or third angle) used in the particular case. In view of the existence of two systems of positioning the symbol, it is strongly recommended that all drawings should clearly state which system has been employed.

In order to simplify drawings, it is recommended that requirements relating to the preparation and making of welds should be included on the welding procedure sheets. For typical information to appear on welding procedure sheets for various process, reference should be made to the appendices in PBD 15: part 1: 1994.

Contents

1. Scope

This Part of PBD 15 specifies requirements for the symbolic representation of welds on drawings. For the most common types of weld the scheme provides basic indications regarding the welds to be made without over-burdening the drawing with notes or showing an additional view. The scheme is not intended to apply to complex joints, involving multiple welds for example, for which it may be simpler to show on the drawing a separate detailed view of the joint and welds required.

2. References

The titles of the standards publications referred to in this standard are listed on the inside back cover.

3. Symbols

3.1 Elementary symbols. The various types of weld are each characterized by a symbol which, in general, is representative of the shape of the weld to be made or the edge preparation to be used. The symbol is not to be taken to pre-judge the welding process to be employed.

The type of weld shall be indicated by the appropriate elementary symbol given in table 1. Examples are given in table 5. The vertical portions of the symbols for single-bevel butt, single-J butt and fillet welds shall always be on the left-hand side of the symbol irrespective of the orientation of the weld metal. The symbols shall apply to the respective welds regardless of the number of runs to be deposited, whether or not there is a root gap and whether or not there is backing material, as such details shall be given on the welding procedure sheet.

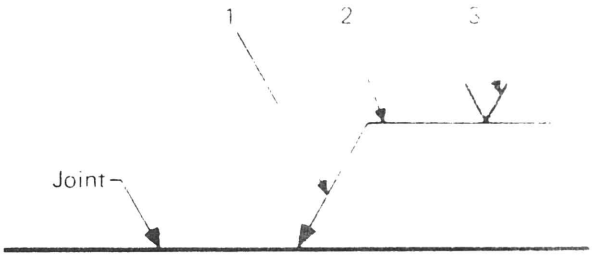
3.2 Combinations of elementary symbols. For welds made from two sides, combinations of elementary symbols shall be used. Examples are given in table 6.

In the case of compound welds, e.g. a fillet weld superimposed on a single-bevel butt weld, the appropriate combination of symbols shall be used, but the scheme of symbols is not intended to apply to complex joints. Examples are given in table 7.

3.3 Supplementary symbols. When the external surface of the weld is required to be of a particular shape, the appropriate supplementary symbol given in table 2 shall be used in conjunction with the relevant elementary symbol. Examples are given in tables 3 and 8.

4. Position of symbols

4.1 General. The symbols shall be used in conjunction with an arrow line and a reference line. Their method of representation is shown in figure 1.



1 is the arrow line
2 is the reference line
3 is the symbol

Figure 1. Method of representation

4.2 Arrow line relative to the joint. To indicate the position of a weld in a particular joint relative to the parts being joined, the 'head' of an arrow shall be used to denote the 'reference side' of the joint. The side nearer the arrow head shall be known as the 'arrow side' and the remote side as the 'other side'. Examples are given in figures 2 and 3.