

Specification for

Right angle and box angle plates

UDC 621.753:531.745

Confirmed
February 2012

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

BSI
Documents

AVA

Document Sharing Hub

Cooperating organizations

The Mechanical Engineering Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- Associated Offices Technical Committee
- Association of Consulting Engineers
- Association of Hydraulic Equipment Manufacturers
- Association of Mining Electrical and Mechanical Engineers
- British Compressed Air Society
- British Electrical and Allied Manufacturers' Association (BEAMA)
- British Gas Corporation
- British Gear Manufacturers' Association
- British Internal Combustion Engine Manufacturers' Association
- British Pump Manufacturers' Association
- British Steel Corporation
- Chartered Institution of Building Services
- Crown Agents for Oversea Governments and Administrations
- Department of Industry, Mechanical Engineering
- Department of Industry, National Engineering Laboratory
- Department of the Environment
- Department of Trade (Marine Division)
- Department of Transport
- Electricity Supply Industry in England and Wales
- Engineering Equipment Users' Association
- Federation of Manufacturers of Construction Equipment and Cranes
- Health and Safety Executive
- Institution of Gas Engineers
- Institution of Mechanical Engineers
- Institution of Plant Engineers
- Institution of Production Engineers*
- London Transport Executive
- Machine Tool Trades Association
- Ministry of Defence*
- National Coal Board
- Process Plant Association
- Railway Industry Association of Great Britain
- Telecommunication Engineering and Manufacturing Association (TEMA)
- The Society of Motor Manufacturers and Traders Limited
- Water-tube Boilermakers' Association

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

- Department of Industry, National Physical Laboratory
- Department of Prices and Consumer Protection, British Calibration Service
- Gauge and Tool Makers' Association
- Individual expert

This British Standard, having been prepared under the direction of the Mechanical Engineering Standards Committee, was published under the authority of the Executive Board on 30 December 1977

© BSI 03-1999

The following BSI references relate to the work on this standard:
Committee reference MEE/59
Draft for comment 72/33749

ISBN 0 580 09738 2

Amendments issued since publication

Amd. No.	Date of issue	Comments

Contents

	Page
Cooperating organizations	Inside front cover
Foreword	ii
1 Scope	1
2 References	1
3 Nomenclature and definitions	1
4 Material	2
5 Finish	2
6 General features of design	3
7 Recommended sizes	3
8 Accuracy	4
9 Matched pairs of box angle plates	4
10 Protection against climatic conditions	4
11 Marking	5
Appendix A Recommended chemical compositions of plain and alloy cast irons, and method of heat treatment	6
Figure 1 — Right angle plate: unwebbed	1
Figure 2 — Right angle plate: webbed	1
Figure 3 — Box angle plate	2
Figure 4 — Exaggerated illustration of squareness tolerance	2
Figure 5 — Granite right angle plate	3
Figure 6 — Granite box angle plate	4
Table 1 — General dimensions of right angle plates and box angle plates	4
Table 2 — Tolerances for right angle plates and box angle plates	5
Publications referred to	Inside back cover

Foreword

This British Standard has been prepared under the direction of the Mechanical Engineering Standards Committee.

BS 3080:1959 “Cast iron angle plates and box angle plates for workshop use” and BS 3645:1963 “Precision angle plates” were expressed in terms of imperial units. These two former standards are now replaced by this metric British Standard.

Because angle plates offer one or more right angles for obtaining squareness, they are complementary to machine tool work tables and to surface plates. They are accordingly used extensively in various manufacturing methods and processes and in inspection rooms.

Inspection and certification of items in this standard may be undertaken by certain laboratories approved for this purpose by the British Calibration Service; addresses can be obtained on application to the Director, British Calibration Service, 26 Chapter Street, London SW1P 4NS.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.