

Specification for

Parallel steel dowel pins —

Part 1: Inch Series

UDC 621.886:389.152

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Co-operating organizations

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

Associated Offices' Technical Committee	Institution of Heating and Ventilating Engineers
Association of Consulting Engineers	Institution of Mechanical Engineers*
Association of Mining Electrical and Mechanical Engineers	Institution of Mechanical Engineers (Automobile Division)
Board of Trade	Institution of Production Engineers
British Chemical Plant Manufacturers' Association	Locomotive and Allied Manufacturers' Association of Great Britain
British Compressed Air Society	London Transport Board
British Electrical and Allied Manufacturers' Association	Machine Tool Trades Association
British Gear Manufacturers' Association	Ministry of Defence, Army Department
British Internal Combustion Engine Manufacturers' Association	Ministry of Defence, Navy Department
British Iron and Steel Federation	Ministry of Labour (H.M. Factory Inspectorate)
British Mechanical Engineering Federation	Ministry of Power
Crown Agents for Oversea Governments and Administrations	Ministry of Public Building and Works
Electricity Council, the Generating Board and the Area Boards in England and Wales	Ministry of Technology — National Engineering Laboratory
Engineering Equipment Users' Association	Ministry of Transport
Gas Council	National Coal Board
Institute of Marine Engineers	National Physical Laboratory (Ministry of Technology)
Institution of Civil Engineers	Radio Industry Council
Institution of Gas Engineers	Royal Institute of British Architects

The industrial organization 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:

British Plastics Federation	Taper Pin Manufacturers' Association
Gauge and Toolmakers' Association	Individual manufacturers
Society of British Aerospace Companies Ltd.	

This British Standard, having been approved by the Mechanical Engineering Industry Standards Committee and endorsed by the Chairman of the Engineering Divisional Council, was published under the authority of the General Council on 26th August, 1966

© BSI 07-1999
First published, November, 1951
First revision, published as Part 1, August, 1966

The following BSI references relate to the work on this standard:
Committee reference MEE/117
Draft for comment D64/1572

ISBN 0 580 35084 3

Amendments issued since publication

Amd. No.	Date	Comments
96	September 1968	
4124	November 1982	Indicated by a sideline in the margin

Contents

	Page
Co-operating organizations	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Material	1
4 Hardness	1
5 Dowel pins in blind holes	2
6 Dimensions	2
7 Limits of tolerance on dimensions	2
8 Surface texture	2
9 Chamfer	2
10 Anti-corrosion treatment	3
11 Marking	3
Appendix A Fitting dowel pins into blind holes	6
Appendix B Tables for conversion of inches to approximate millimetre equivalents	6
Figure 1 — Method for releasing trapped air	6
Table 1 — Limits of tolerance on diameter	2
Table 2 — Limits of tolerance on length	2
Table 3 — Dimensions of parallel steel dowel pins	4

Foreword

This standard makes reference to the following British Standards:

BS 427, *Method for Vickers hardness test — Part 1: Testing of metals*.

BS 860, *Table of approximate comparison of hardness scales*.

BS 970, *Wrought steels in the form of bars, billets and forgings, up to 6 in ruling section for automobile and general engineering purposes. En series*.

BS 1133, *Packaging code — Section 6: Temporary prevention of corrosion (during transportation and storage)*.

BS 1134, *Centre-line-average-height method for the assessment of surface texture*.

BS 1407, *High carbon bright steel (silver steel)*.

BS 1423, *High carbon oil-hardening steel (precision finish)*.

This British Standard, which was first published in 1951, has been revised under the authority of the Mechanical Engineering Industry Standards Committee.

Changes have been made to the range of stock sizes in order to correspond with present-day demands. Also, recognizing that the precision ground parallel dowel pins are sometimes used in applications where the cylindrical surface of the pin has a functional duty, surface texture is subjected to numerical control, thus bringing considerably closer definition to the term “precision ground”.

The term “dowel pin”, though widely used throughout industry has, so far, had no common meaning. Not only has the use of the term varied with industries but sometimes in the same industry its use has varied with the locality. On the one hand different terms have been used for pins of the same type, while on the other the same term has been applied to pins of differing types. For these reasons distinctions have been drawn by defining “precision ground parallel dowel pin” and “ground parallel dowel pin”.

Dowel pins are normally used to locate two or more components to a required degree of accuracy. In order to provide for varying degrees of accuracy four grades have been standardized.

Attention is specially called to the danger which may arise when fitting dowel pins into blind holes. A suggestion for preventing this danger is made in an appendix.

Part 2 of this standard deals with metric series parallel steel dowel pins.

Obsolescent (by Amendment No. 2). The need for the product covered by this British Standard has been reviewed and it has been decided that, in the interests of rationalization, it should be regarded as obsolescent and not therefore used for new designs. The standard will be withdrawn in due course.

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 7 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.