

Specification for

The tapping of holes to receive wire thread inserts (UNC and UNF threads) —

Part 1: Diameters $\frac{1}{4}$ in and over

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:

Admiralty*	High Commission of India
Air Ministry	Institute of Marine Engineers
Associated Offices' Technical Committee	Institute of Petroleum
Association of Consulting Engineers	Institution of Civil Engineers
(Incorporated)	Institution of Gas Engineers
British Chemical Plant Manufacturers' Association	Institution of Heating and Ventilating Engineers
British Compressed Air Society	Institution of Mechanical Engineers
British Electrical and Allied Manufacturers' Association*	Institution of Mechanical Engineers (Automobile Division)
British Engineers' Association	Institution of Production Engineers
British Gear Manufacturers' Association	Locomotive and Allied Manufacturers' Association of Great Britain
British Internal Combustion Engine Manufacturers' Association	Machine Tool Trades Association
British Iron and Steel Federation	Ministry of Labour (Factory Inspectorate)
British Railways, The British Transport Commission	Ministry of Power
Crown Agents for Oversea Governments and Administrations	Ministry of Transport
D.S.I.R.—National Engineering Laboratory	Ministry of Works
Electricity Council, The Generating Board and the Area Boards in England and Wales	National Coal Board
Engineering Equipment Users' Association	National Physical Laboratory (D.S.I.R.)
Gas Council	Radio Industry Council
	War Office*

The Government departments and scientific and 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 standard:

British Plastics Federation	Ministry of Aviation
Gauge and Tool Makers' Association	Screw Thread Tool Manufacturers' Association
Institute of the Motor Industry (Incorporated)	Society of British Aircraft Constructors
London Transport Executive, The British Transport Commission	Society of Motor Manufacturers and Traders Ltd
	Individual manufacturers

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 16 August 1961

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Foreword

This standard makes reference to the following British Standards:

BS 919, *Screw gauge limits and tolerances — Part 1: Gauges for screw threads of Unified form.*

BS 949, *Screwing taps.*

BS 1044, *Recommended designs for plug, ring and gap gauges.*

BS 1580, *Unified screw threads.*

This British Standard has been prepared under the authority of the Mechanical Engineering Industry Standards Committee in response to requests received from a manufacturer of wire thread inserts and from the Admiralty.

The use of wire thread inserts by many branches of industry has grown rapidly in recent years. Their main purpose is to provide a wear resisting fastening in light alloys and similar materials. Their application varies widely: for example, inserts may be called upon to meet design requirements or they may be used for purposes of salvage and repair.

It is not considered practicable at the present time to standardize the inserts themselves as their free form depends on the method of manufacture and several different methods are in use. It may be stated, however, that any of these methods is capable of producing inserts which will provide a standard internal thread if used in a hole tapped to the appropriate limits of size.

The object of this standard, therefore, is to give limits of size for tapped holes which, when assembled with an insert, will give the required nominal size and class of tolerance of the internal thread. To assist in achieving this object, limits of size are also recommended for appropriate screwing taps and gauges. It is recognized that a transition period will necessarily ensue during which existing taps and gauges will continue to be used.

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.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 15 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.

1 Scope

This British Standard comprises three sections:

Section 1, which specifies limits of size for tapped holes to accommodate wire thread inserts to provide thread sizes from $\frac{1}{4}$ in to $1\frac{1}{2}$ in UNC inclusive and from $\frac{1}{4}$ in to 1 in UNF inclusive;

Section 2, which recommends screwing taps intended to produce holes to the limits of size specified in Section 1;

Section 3, which gives a recommended gauging system for checking the tapped holes.



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