



BS 2559 : Part 5 : 1974

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Specification for **Screwdrivers**

Part 5. Spiral ratchet screwdrivers

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The following BSI references relate to the work on this standard:
Committee reference MEE/120/2 Draft for comment 72/39021DC

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British Woodwork Manufacturers' Association	National Coal Board
Engineers Allied Hand Tool Makers' Association	National Federation of Building Trades Employers
Federation of British Hand Tool Manufacturers	National Union of Furniture Trades Operatives
Furniture, Timber and Allied Trades Union	Post Office
Incorporated British Institute of Certified Carpenters	Rolled Thread Screw Association
Institution of Production Engineers	Saw Manufacturers' Association
Light Trades Tool Association	Society of British Aerospace Companies Limited
Ministry of Defence (Central)	Society of Motor Manufacturers and Traders Limited

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Foreword

This Part of this British Standard has been prepared under the authority of the Mechanical Engineering Industry Standards Committee.

The standard lays down the essential requirements for ensuring that the tools are of high quality and suitable for application to the popular sizes of wood screws and machine screws. The shape of the handle has not been specified as it is considered that this feature should remain at the option of the manufacturer. The shape is controlled to a large extent by the necessity for part of the mechanism to be housed in the handle which has to be strong enough to withstand the specified tests.

This Part deals mainly with those components of spiral ratchet screwdrivers that are directly affected by wear.

It is usual for the screwdriver bits to be supplied with the screwdriver, and, by specifying the drive end dimensions and limits applicable to bits for both slotted head and recessed head type screws, the standard ensures that bits made by different manufacturers will interchange with different makes of screwdriver.

Part 1 of BS 2559 deals with screwdrivers for slotted head screws. Part 2 deals with screwdrivers for recessed head screws. Part 3 deals with insulation of screwdrivers and Part 4 with ratchet screwdrivers.

Certification. Attention is drawn to the certification facilities described on the inside back cover of this standard.

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British Standard Specification for Screwdrivers Part 5. Spiral ratchet screwdrivers

Section one. General

1. Scope

This British Standard relates to screwdrivers that are worked by a ratchet-driven mechanism and a spindle having a double spiral track, the tool being operated by a reciprocating motion of the handle.

The standard specifies three sizes of screwdriver and bits: Size 1 light duty, Size 2 medium duty and Size 3 heavy duty.

Points of the screwdriver bits for use on recess head screws shall comply with the requirements of BS 2559:Part 2.

NOTE. The titles of the British Standards referred to in this standard are listed on the inside back cover.

2. Nomenclature

For the purposes of this Part of this British Standard, the nomenclature shown in Fig. 2 applies.

Section two. Manufacture

3. Material

3.1 General. It is not the intention of this standard to inhibit the development of materials used in the manufacture of spiral ratchet screwdrivers. The following materials are regarded as suitable but other material giving equal or superior performance may be used.

3.2 Spindle. The screwdriver spindle shall be manufactured from a steel conforming to the requirements of BS 970.

3.3 Nuts. The nuts shall be made from a brass conforming to the requirements of BS 1400 or BS 2874.

3.4 Bits. Bits for slotted head screws shall conform to the requirements of BS 2559:Part 1 and those for recessed head screws shall conform to the requirements of BS 2559:Part 2.

3.5 Pawl. The pawl shall be manufactured from any one of the following materials.

3.5.1 A carbon or alloy steel capable of being case hardened, selected from BS 970:Part 3.

3.5.2 Spring steel conforming to the requirements of BS 1449 En 42, E, F, G or J.

3.6 Ratchet mechanism housing. The housing shall be manufactured from one of the following materials.

3.6.1 Zinc alloy conforming to the requirements of BS 1004, alloy A.

3.6.2 Steel conforming to the requirements of BS 970:Part 1, Steel 220M07.

3.7 Handles.

3.7.1 Wood. Wood handles for screwdrivers shall be manufactured from beech or other suitable hardwood. The wood shall be straight grained and free from deleterious defects.

3.7.2 Moisture content. The moisture content of the timber from which the handles are manufactured, as determined in accordance with the method given in BS 373, shall be not less than 10 % or more than 15 %.

3.7.3 Plastics. Handles may be manufactured from suitable material as agreed between the purchaser and the supplier.

3.8 Ratchet mechanism sleeve. The sleeve shall be manufactured from a brass specified in BS 409, or from a steel complying with the requirements of BS 1449.

3.9 Springs. Springs shall be manufactured from a steel complying with the requirements of BS 1408.

3.10 Chuck. The chuck body shall be manufactured from a steel conforming to the requirements of BS 970:Part 1, Steel 220M07.