



Specification for **Wire brushes**

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The following BSI references relate to the work on this standard:

Committee reference M/19 Draft for comment 70/34914

Co-operating organizations

This British Standard was prepared by a technical committee consisting of representatives of the following Government departments and professional and industrial organizations:

Association of Hospital and Residential Care Officers
Association of Municipal Corporations
British Brush Manufacturers' Association
British Brush Manufacturers' Research Association
British Railways Board
Crown Agents for Oversea Governments and Administrations
Department of the Environment

Greater London Council
Institute of Hospital Administrators
Institute of Public Cleansing
Institute of Purchasing and Supply
London Transport Executive
Ministry of Defence



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Foreword

This British Standard was originally issued at the request of the Local Authorities and Hospital Authorities Standards Advisory Committees of BSI and of large scale users.

In the present revision of the standard dimensions are given in metric units. The wire sizes used are those set out in BS 4391, 'Recommendations for metric basic sizes for metal wire'.

The table covering scrubs filled with non-ferrous wire and bassine has been omitted as these brushes are no longer manufactured. Apart from this there is no appreciable change in the brushes specified, either in the overall sizes or in the diameter of the wire used.

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

British Standard Specification for Wire brushes

1. Scope

Clause 2 of this British Standard specifies requirements for the materials and manufacture of a range of wire-filled hand brushes, both hand-drawn and machine filled, as purchased by local authorities, public institutions and industrial users. The types of brushes described include burnishing and fettling brushes, wire brooms and jewellers' and silversmiths' brushes.

Clause 3 of this British Standard specifies requirements for the materials and manufacture of a range of wire-filled rotary brushes, as purchased by local authorities, public institutions and industrial users. The brushes described include rotary cup brushes, decarbonizing brushes, pencil brushes, valve guide brushes, plug cleaners, scratch brushes and narrow and wide-faced brushes for the removal of carbon, scale, paint or burrs from metal and other surfaces, suitable for mounting on portable pneumatic or electric tools and stationary grinders.

NOTE. Wire fillings of diameters other than those prescribed in the tables may be supplied if specified by the purchaser.

2. Wire-filled hand brushes

2.1 Materials

2.1.1 Filling. The filling wire shall be uniform in quality and temper and shall be clean and free from any injurious defects.

Steel wire used in filling shall be capable of being bent double and straightened without fracture, and when doubled over a mandrel having a diameter of 6 mm shall, on release, return to an angle of approximately 45° from the original.

2.1.2 Wood. The wood used in the construction of the brushes shall be properly seasoned and free from decay, splits and other defects.

2.2 Manufacture. The brushes shall be manufactured in accordance with the requirements specified in Tables 1 to 5.

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Table 1. Requirements for miscellaneous wire brushes (machine filled)*

BS ref. no.	Handle or stock		Steel wire for knots				Finish etc.			
	Description	Board material and thickness	Approximate measurements (length and breadth)	Number of knot holes (minimum)	Description	Mass per finished brush (minimum)		Approximate number of wires in each knot	Height out of board	Thickness and width or diameter (nominal)
M 1	Casting	mm	mm 175 x 73	60	Hardened and tempered flat steel brush wire	g 255	5	mm 76	mm 1.25 x 0.45	Straight stock with square ends fitted with web strap 50 mm wide secured to board by six wire nails
M 2	Casting, with handle	Beech, 22	356 x 66	70		298	10 (doubled in each pair of knot holes)	76	1.25 x 0.28	Straight stock with shaped handle. Back of stock fitted with two tinplate strips 19 mm x 100 mm each secured by four wire nails
M 3	Flat, 45 mm		190 x 57	60		177	8	45		Straight stock with rounded ends. Hole for 6.3 mm dia. bolt in centre
M 4	Flat, 50 mm		203 x 63	111		255	7	50		Straight stock with rounded ends. Roached back
M 5	Flat, 75 mm	190 x 57	74	213		6	76	Stock of dumb-bell pattern with rounded ends and bevelled edges.		

*Some typical patterns which may be supplied against these specifications are illustrated by Fig. 1a, b, c and d. These illustrations are for guidance only and do not constitute part of the standard requirements.

Table 1. Requirements for miscellaneous wire brushes (machine filled) * (continued)

BS ref. no.	Handle or stock		Steel wire for knots				Finish etc.			
	Description	Board material and thickness	Approximate measurements (length and breadth)	Number of knot holes (minimum)	Description	Mass per finished brush (minimum)	Approximate number of wires doubled in each knot	Height out of board	Thickness and width or diameter (nominal)	
M 6	Flat, with handle	mm	mm 215 × 60	81	Hardened and tempered flat steel brush wire	g 260	7	mm 42	mm 1.25 × 0.45	Bent stock with square ends fitted with iron handle secured to stock with iron screw
M 7	Curved handle	Beech, 22	370 × 22 length filled 140	55	Hardened and tempered bright round steel brush wire	54	15	22	0.425	Bent stock
M 8	Narrow		300 × 10 length filled 138	27		15	28	32	0.25	Straight stock
M 9	Surface cleaning		300 × 40	60		170	50	40	0.32	Wire to be left with irregular surface and not ground off smooth. Bent stock with pointed ends and shaped handle. Back of brush covered with japanned sheet iron secured to stock with wire nails
M 9A	Surface cleaning (narrow)		300 × 25	31		100				

*Some typical patterns which may be supplied against these specifications are illustrated by Fig. 1a, b, c and d. These illustrations are for guidance only and do not constitute part of the standard requirements.