

Specification for

Podger spanners

Confirmed
January 2011

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 (Incorporated)	Institution of Civil Engineers
British Chemical Plant Manufacturers' Association	Institution of Gas Engineers
British Compressed Air Society	Institution of Heating and Ventilating Engineers
British Electrical and Allied Manufacturers' Association*	Institution of Mechanical Engineers*
British Electricity Authority and Area Boards	Institution of Mechanical Engineers (Automobile Division)
British Engineers' Association	Institution of Production Engineers*
British Internal Combustion Engine Manufacturers' Association	Locomotive Manufacturers' Association*
British Iron and Steel Federation	Machine Tool Trades' Association*
British Railways, The British Transport Commission*	Ministry of Fuel and Power
Crown Agents for Oversea Governments and Administrations	Ministry of Labour and National Service (Factory Department)
D.S.I.R. — Mechanical Engineering Research Laboratory	Ministry of Supply*
Engineering Equipment Users' Association	Ministry of Transport and Civil Aviation
Gas Council*	Ministry of Works
	National Coal Board
	National Physical Laboratory*
	Radio Industry Council
	War Office

The Government departments and other 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 standard:—

Federation of British Hand Tool Manufacturers	Society of British Aircraft Constructors
General Post Office	Society of Motor Manufacturers and Traders
Institution of Structural Engineers	Telephone Manufacturers Technical Development Committee
Leicester Technical College	Spanner manufacturers
National Association of Drop Forgers and Stampers	

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 3 March 1955

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The following BSI references relate to the work on this standard:—
Committee reference MEE/9/4
Draft for comment CR(MEE) 5054

ISBN 0 580 02571 3

Amendments issued since publication

Amd. No.	Date	Comments

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Foreword

This standard makes reference to the following British Standards:

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

BS 916, *Black bolts and nuts. Hexagon and square, BSW and BSF.*

BS 970, *Wrought steels.*

BS 1083, *Precision hexagon bolts, screws, nuts and plain washers.*

BS 1769, *Unified black hexagon bolts, screws and nuts and plain washers. Heavy series.*

This British Standard, which has been prepared under the authority of the Mechanical Engineering Industry Standards Committee, forms one of a group relating to various types of spanners which are either already published or in course of preparation.

Although these spanners are generally known by the name adopted for this specification, i.e. podger spanners, they are also sometimes referred to by the alternative names of “rat-tail spanners”, “erector’s spanners” or “constructor’s spanners”.

It was originally intended to include the specifications for railway track spanners, square nut (Post Office type) spanners and podger spanners in one standard, but consideration of their entirely different and distinct functions led to a decision to keep them separate. Not the least of the considerations in the case of podger spanners centred on safety, particularly having regard to the severe stresses (and abuse) to which they are sometimes subject.

It was seen to be impossible to provide for a tool which would be safe under all conditions and on all occasions but, throughout the work of preparation, the question of safety has been kept well to the forefront, the intention being to produce a document which would ensure that the tools did not fall below a certain standard of quality and therefore safety.

Two different designs of spanner are included, one applying when the tool is manufactured from steel to En 3A and the other when it is made from En 8. The proportions and heat treatment of each have been laid down in relation to the use of the spanner, whether turning a nut or bolt or whether being applied through the podger end to force heavy steel beams into line or as a cantilever on which the operator intends to stand. There is no doubt that this latter use, while very widespread, is injudicious and ill-advised. It constitutes a type of abuse for which such a specification cannot provide, although it was considered when the loads for the torque test were being investigated and when actual tests were being made.

It is quite common in steel construction work for these spanners to be left lying in the foundations or on open ground after erection is completed. It will be readily understood that the strength and safety of the tool is likely to be seriously affected by the resultant corrosion and that extra precautions should be taken if the spanner is to be used again, particularly on the top of high structures.

In conclusion it should be remarked that while several other forms of podger spanner are popular and in fairly wide use, those given in this specification have been selected because they represent types which can be adopted with some confidence having proved their value during lengthy and extensive service in construction work and in shipyards.

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Summary of pages

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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.