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Svetsning – Bultar och keramikringar för bågbultsvetsning (ISO 13918:2017)

Welding – Studs and ceramic ferrules for arc stud welding (ISO 13918:2017)

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Denna standard ersätter SS-EN ISO 13918:2008, utgåva 2.

The European Standard EN ISO 13918:2018 has the status of a Swedish Standard. This document contains the official version of EN ISO 13918:2018.

This standard supersedes the Swedish Standard SS-EN ISO 13918:2008, edition 2.

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EUROPEAN STANDARD

EN ISO 13918

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2018

ICS 21.060.10; 25.160.10

Supersedes EN ISO 13918:2008

English Version

Welding - Studs and ceramic ferrules for arc stud welding (ISO 13918:2017)

Soudage - Goujons et bagues céramiques pour le soudage à l'arc des goujons (ISO 13918:2017)

Schweißen - Bolzen und Keramikringe für das Lichtbogenbolzenschweißen (ISO 13918:2017)

This European Standard was approved by CEN on 21 November 2017.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN ISO 13918:2018) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2018, and conflicting national standards shall be withdrawn at the latest by July 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 13918:2017 has been approved by CEN as EN ISO 13918:2018 without any modification.

SS-EN ISO 13918:2018 (E)

Introduction

The range of types of studs specified in this document represents customary applications.

This document can be used in all fields of the metal-working industry.

Welding — Studs and ceramic ferrules for arc stud welding

1 Scope

This document specifies the following:

- requirements for studs and ceramic ferrules for arc stud welding;
- dimensions, materials and mechanical properties.

[Table 1](#) shows types of studs and the symbols for studs and ceramic ferrules that are covered by this document.

Table 1 — Types of studs and symbols for studs and ceramic ferrules

Welding technique	Type of stud ^a	Symbol for studs	Symbol for ceramic ferrules
Drawn arc stud welding with ceramic ferrule or shielding gas	Fully-threaded stud	FD	UF
	Virtually fully-threaded stud ^b	MD	MF
	Partially threaded stud	PD	PF
	Threaded stud with reduced shaft	RD	RF
	Unthreaded stud	UD	UF
	Insulation pin/nail	ND	UF
	Stud with internal thread	ID	UF
	Shear connector	SD	UF/DF
Short-cycle drawn arc stud welding	Threaded stud with flange	PS	—
	Unthreaded stud	US	—
	Stud with internal thread	IS	—
Stud welding with tip ignition	Threaded stud	PT	—
	Unthreaded stud	UT	—
	Stud with internal thread	IT	—
^a Further types of stud and ceramic ferrules can be specified as required for special applications.			
^b Also called MPF, stud with a nearly full thread and a minimum length of the unthreaded part.			

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread*

ISO 3506-1, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs*

ISO 4042, *Fasteners — Electroplated coatings*

ISO 4759-1, *Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C*

ISO 6947, *Welding and allied processes — Welding positions*