

Irish Standard I.S. EN ISO 17683:2015

Ships and marine technology - Ceramic weld backing for marine use (ISO 17683:2014)

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#### I.S. EN ISO 17683:2015

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## National Foreword

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# EUROPEAN STANDARD NORME EUROPÉENNE

# EN ISO 17683

## **EUROPÄISCHE NORM**

December 2015

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**English Version** 

# Ships and marine technology - Ceramic weld backing for marine use (ISO 17683:2014)

Navires et technologie maritime - Soutien de soudures en céramique pour usage maritime (ISO 17683:2014)

Schiffe und Meerestechnik - Keramische Schweißbadsicherungen für maritime Anwendungen (ISO 17683:2014)

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EN ISO 17683:2015 (E)

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## **European foreword**

The text of ISO 17683:2014 has been prepared by Technical Committee ISO/TC 8 "Ships and marine technology" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 17683:2015 by 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of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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# INTERNATIONAL STANDARD

ISO 17683

First edition 2014-02-01

## Ships and marine technology — Ceramic weld backing for marine use

Navires et technologie maritime — Soutien de soudures en céramique



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## ISO 17683:2014(E)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 8, *Ship design*.

# Ships and marine technology — Ceramic weld backing for marine use

## 1 Scope

This International Standard specifies the classification, dimension and appearance, performance, and test methods for ceramic weld backing. It also specifies marking, packaging, and storage.

This International Standard is applicable to designing, manufacturing, testing, and accepting ceramic weld backing that are to be used in the double side form with single side weld, such as arc welding, gas welding, vertical gas welding, and submerged arc welding, and the shaping structural steel welding end for carbon steel, stainless steel, aluminium alloy, copper alloy, and so on.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 528, *Refractory products — Determination of pyrometric cone equivalent (refractoriness)* 

ISO 29862, Self adhesive tapes — Determination of peel adhesion properties

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

## 3.1

## ceramic weld backing block

ceramic block with certain geometric shape manufactured by inorganic material

## 3.2

## moisture absorption rate

Wa

ratio of the weight of water vapour absorbed on the surface of ceramic weld backing block to the weight of the dried sample, with certain temperature, humidity, and time

3.3

## adhesive aluminium foil tape

strip of aluminium foil coated with pressure-sensitive adhesive and covered with release paper

#### 3.4

metal case

case which is made of low carbon steel, and used for combining ceramic weld backing blocks

## 4 Classification

According to the fixed method, ceramic weld backing is classified as follows:

a) type I — ceramic weld backing with adhesive aluminium foil tape;

b) type II — ceramic weld backing with metal cases.



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