

## SLOVENSKI STANDARD SIST EN 13236:2011/kFprA1:2015

01-november-2015

Varnostne zahteve za	a superabrazive
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Safety requirements for superabrasive products

Sicherheitsanforderungen für Schleifwerkzeuge mit Diamant oder Bornitrid

Prescriptions de sécurité pour les produits superabrasifs

Ta slovenski standard je istoveten z: EN 13236:2010/FprA1

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Abrasives

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## FINAL DRAFT EN 13236:2010

## FprA1

July 2015

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**English Version** 

### Safety requirements for superabrasive products

Prescriptions de sécurité pour les produits superabrasifs

Sicherheitsanforderungen für Schleifwerkzeuge mit Diamant oder Bornitrid

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 143.

This draft amendment A1, if approved, will modify the European Standard EN 13236:2010. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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#### SIST EN 13236:2011/kFprA1:2015

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### Foreword

This document (EN 13236:2010/FprA1:2015) has been prepared by Technical Committee CEN/TC 143 "Machine tools - Safety", the secretariat of which is held by SNV.

This document is currently submitted to the Unique Acceptance Procedure.

#### EN 13236:2010/FprA1:2015 (E)

#### 1 Modification to Clause 1, Scope

#### Replace:

"This European Standard is applicable to the following superabrasive products: precision superabrasive grinding and cutting-off wheels, non-precision cutting-off wheels, diamond wires, mounted points and other superabrasive products for non-precision grinding. It also applies to reconditioned superabrasive cutting-off wheels."

with:

"This European Standard only applies to superabrasives products containing natural or synthetic diamond or cBN (cubic boron Nitride). It includes precision grinding and cutting-off wheels, non-precision cutting-off wheels, diamond wires, mounted points and other superabrasive products for non-precision grinding. It also applies to reconditioned superabrasive cutting-off wheels.".

#### 2 Addition of Subclause 5.3.7, Tensioning of non-precision cutting-off wheels

Add the following new subclause:

"

#### 5.3.7 Tensioning of non-precision cutting-off wheels

All non-precision cutting off wheels, marked with maximum operating speed of 100 m/s for hand-held cuttingoff machines and steel centre diameter 300 mm to 400 mm, shall be in a tensioned state in order to minimize the risk of wobbling (excessive vibrations).

The position of neutral point shall be in an angle range between 90° to 160° in order to have a correct tensioning of the non-precision cutting off wheel.".

# 3 Addition of Subclause 5.3.8, Limitation of sides abrasives and/or superabrasives coating

Add the following new subclause:

"

#### 5.3.8 Limitation of sides abrasives and/or superabrasives coating

Side abrasives and/or superabrasives coating is only allowed at periphery of the steel centre within a limit  $x \le 0.05 D$  (distance of 5 %) of steel centre diameter for all non-precision cutting off wheels marked with maximum operating speed of 100 m/s for hand-held cutting-off machines and steel centre diameter 300 mm to 400 mm."

# 4 Addition of Subclause 6.5, Verification of tensioning of non-precision cutting-off wheels

Add the following new subclause:

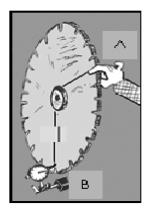
"

#### 6.5 Verification of tensioning of non-precision cutting-off wheels

Tensioning means pre-stressing method of the steel centre.

Verification of the required tensioning of a non-precision cutting-off wheel is performed by measuring the position of the neutral point.

Method: measurement of the neutral point position.



Fix a dial gauge indicator with the contact point as close as possible of the external diameter of the steel centre, but under the slot level (B).

Pull the steel centre towards you at the diamond part position, segment by segment. The dial gauge indicator shows a steel centre deviation, but the deviation will decrease till zero when increasing the angle where the strength is applied. When the dial gauge indicator indicates zero deviation, measure the angle between the dial gauge indicator position (B) and the strength position (A). This is the neutral point position.

After that zero position, the deviation measured by the dial gauge indicator is going in the opposite direction.

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