INTERNATIONAL STANDARD



723

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION «МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ «ORGANISATION INTERNATIONALE DE NORMALISATION

Rock drilling — Forged collared shanks and chuck bushings for hollow hexagonal drill-steels

Forage des roches - Emmanchements à collerette forgée et douilles porte-outils pour profilé hexagonal creux en acier

First edition – 1974-06-15 Teh STANDARD PREVIEW (standards.iteh.ai)

ISO 723:1974 https://standards.iteh.ai/catalog/standards/sist/d8e931a8-447c-499c-9c38-9903aab149af/iso-723-1974

UDC 622.233.059

Descriptors: mining, drilling equipment, drilling stem, bushings.

Ref. No. ISO 723-1974 (E)

O 723-1974 (E

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 82 has reviewed ISO Recommendation R 723 and found it suitable for transformation. International Standard ISO 723 therefore replaces ISO Recommendation R 723-1968.

https://standards.iteh.ai/catalog/standards/sist/d8e931a8-447c-499c-9c38-

ISO Recommendation R 723 was approved by the Member Bodies of the following countries :

Australia

Hungary

South Africa, Rep. of

Belgium

India Japan Spain Sweden

Brazil Chile

Korea, Rep. of

Turkev

Czechoslovakia

Netherlands

United Kingdom

Egypt, Arab Rep. of

New Zealand

Yugoslavia

France

Germany

Poland Portugal

The Member Body of the following country expressed disapproval of the Recommendation on technical grounds:

U.S.S.R.

The Member Body of the following country disapproved the transformation of ISO/R 723 into an International Standard :

Canada

Rock drilling — Forged collared shanks and chuck bushings for hollow hexagonal drill-steels

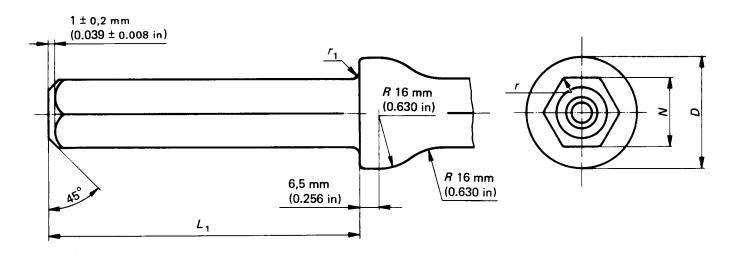
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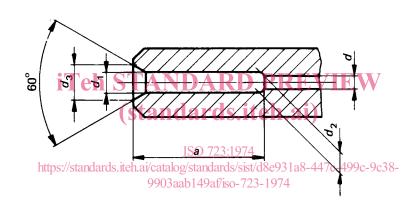
1 SCOPE AND FIELD OF APPLICATION Standards.iteh.ai)

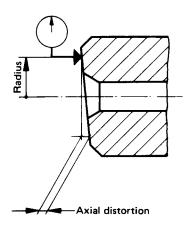
This International Standard fixes the dimensions of forged collared shanks and chuck bushings for hollow hexagonal drill-steels used for rock drilling.

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2 FORGED COLLARED SHANKS FOR HOLLOW HEXAGONAL DRILL-STEELS







Eccentricity:

Distance between the centre of the hexagon and the centre of the enlarged hole: maximum 0,75 mm (0.030 in).

Axial distortion of end surface:

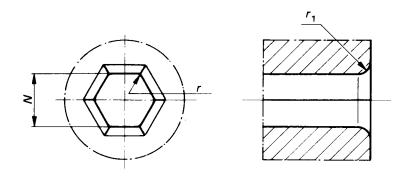
For 19 mm (3/4 in) shank: maximum 0,15 mm (0.006 in), measured at a radius of 7 mm (0.276 in);

For 22 mm (1/8 in) and 25 mm (1 in) shanks: maximum 0,2 mm (0.008 in), measured at a radius of 9 mm (0.354 in).

| N D | | a | Ì | ø | ď1 | d ₂ | d ₃ | æ. | Dimension | Dimensions in millimetres |
|------------|----|-----------|---------------|--|-------------------------|---------------------------|----------------|-------|---------------|---------------------------|
| Basic size | | Tolerance | | | | 1 | , | min. | | max. |
| 19,2 | | 0 | 33 ± 1 | 9 ± 0,5 | £'0 ∓ 8 | 8 + 0,3 - 0,6 | 9,4 ± 0,4 | 20 | 1,5 + 1 | |
| 22,4 | | - 0,4 | 35 ± 1 | 9'0 ∓ 2'9 | 6 ± 0,3 | 9,0 - ee | 10,4 ± 0,4 | 50 | 2 + 1 | u V |
| 25,6 | | 0 | 38 ± 1 | 3. 4 5 4 9 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 | £,0 ± 5,9 | 9,0 - 3,6 h | 10,9 ± 0,4 | 50 | 2 + 1 | ? r |
| 25,6 | | 9'0 – | 38 ± 1 | 7,6 ± 0,7 | 5, 5 ± 63 | 9,5 + 0,3 9,5 - 0,6 | 10,9 ± 0,4 | 70 | 2 + 1 | |
| | | | | alog/standards/sist/d 3aab149af/iso-723- | 1dards.ite | NDARD | | | Dimer | Dimensions in inches |
| | > | | а | 1974 5 | eh.a | ^ζ ρ PR | ερ | в | , | 71 |
| Basic size | ze | Tolerance | | 18-44 | ui) | EX | | min. | | max. |
| 0.756 | 9 | 0 | 1,299 ± 0.039 | 0.236 ± 0.020 | 0.315 ± 0.012 | 0.315 + 0.012 - 0.024 | 0.370 ± 0.016 | 1.969 | 0.059 + 0.039 | |
| 0.882 | ~ | | 1.378 ± 0.039 | 0.264 ± 0.024 | 0.354 ± 0.012 | 0.354 + 0.012 - 0.024 | 0.409 ± 0.016 | 1.969 | 0.079 + 0.039 | 0 177 |
| 1.008 | æ | 0 | 1,496 ± 0.039 | 0.299 ± 0.030 | 0.374 ± 0.012 | 0.374 + 0.012 - 0.024 | 0.429 ± 0.016 | 1.969 | 0.079 + 0.039 | ; |
| 1.008 | 86 | | 1,496 ± 0.039 | 0.299 ± 0.030 | 0.374 ± 0.012 | $0.374 + 0.012 \\ -0.024$ | 0.429 ± 0.016 | 2.756 | 0.079 + 0.039 | |

The basic sizes and tolerances of N as well as other relevant dimensions are also valid for 22 mm (7/8 in) and 25 mm (1 in) plain shanks.

3 CHUCK BUSHINGS FOR HOLLOW HEXAGONAL DRILL-STEELS-CONNECTING DIMENSIONS



Dimensions in millimetres

| Length of forged | , | v | r | r ₁ |
|------------------|---|--|---|--|
| collared shank | Basic size | Tolerance | max. | |
| 108 | 19,2 | | | |
| Teh &TAN | D22,4 R | + 0,25 + 0,05 | VIEV | V |
| 108Stan | da25:61s. | iteh.a | 1,2 | 4,5 ^{+ 1} 0 |
| 159 | ISO 723:19 | + 0,35) <u>74</u> + 0,05 | | |
| | collared shank 108 Teh 108 TAN 108 Stan | Length of forged collared shank Basic size 108 19,2 Teh 108 TAN D224R 108 Stand 225,618 | collared shank Basic size Tolerance 108 19,2 Teh 108 TAN D22 4R D + 0,25 H + 0,05 108 stand 225.6 s iteh. a 159 25.6 + 0,35 | Length of forged collared shank Basic size Tolerance max. 108 19,2 Teh 108 TAN D224 RD + 0.25 FVIEV 108 standa25.6 s iteh.ai 1,2 159 25.6 + 0.35 |

9903aab149af/iso-723-1974

Dimensions in inches

| Church burbing | Length of forged | N | | r | r ₁ |
|----------------|------------------|------------|--------------------|-------|-------------------------------|
| Chuck bushing | collared shank | Basic size | Tolerance | max. | |
| 3/4 | 4 1/4 | 0,756 | | | |
| 7/8 | 4 1/4 | 0.882 | + 0.010 + 0.002 | | 0 177 + 0.039 |
| • | 4 1/4 | 1.008 | | 0.047 | 0.177 ^{+ 0.039} 0 |
| , | 6 1/4 | 1.008 | + 0.014 + 0.002 | | |

These tables are valid for forged collared shanks in the sizes of 19 mm (3/4 in), 22 mm (7/8 in), and 25 mm (1 in) and for plain shanks in the sizes of 22 mm (7/8 in) and 25 mm (1 in).

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