INTERNATIONAL STANDARD

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEXAYHAPOAHAA OPFAHИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ ORGANISATION INTERNATIONALE DE NORMALISATION

Subland twist drills with Morse taper shanks for holes prior to tapping screw threads

Forets étagés à queue cône Morse pour avant-trous de taraudage

iTeh STANDARD PREVIEW First edition – 1975-09-01

> <u>ISO 3438:1975</u> https://standards.iteh.ai/catalog/standards/sist/a3aa05d6-ad81-4b27-902ff29719d7823e/iso-3438-1975

(standards.iteh.ai)

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Descriptors : tools, twist drills, Morse taper shanks, dimensions.

Ref. No. ISO 3438-1975 (E)

3438

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.

International Standard ISO 3438 was drawn up by Technical Committee VIEW ISO/TC 29, Small tools, and circulated to the Member Bodies in May 1974. (standards.iteh.ai)

It has been approved by the Member Bodies of the following countries :

| | | <u>ISO 3438:1975</u> |
|---------------------|----------------------------------|---|
| Australia | Hungary https://standards.ite | h.ai/catalogstah Africas Rep. a05d6-ad81-4b27-902f- |
| Austria | India | f297190/8435/80-3438-1975 |
| Belgium | Ireland | Thailand |
| Brazil | Israel | Turkey |
| Canada | Italy | United Kingdom |
| Chile | Japan | U.S.A. |
| Czechoslovakia | Korea, Rep. of | U.S.S.R. |
| Egypt, Arab Rep. of | Netherlands | Yugoslavia |
| France | Poland | |
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The Member Body of the following country expressed disapproval of the document on technical grounds :

Sweden

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Subland twist drills with Morse taper shanks for holes prior to tapping screw threads

1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the dimensions of subland twist drills with Morse taper shanks for holes prior to tapping screw threads.

It gives only metric dimensions, which are the only recommended dimensions in the future for subland twist drills.

The drills have been designed to produce holes prior to tapping metric threads (coarse pitch series) over a selected range of M 8 to M 30.

Unless otherwise stated, these drills will be right-hand cutting.

Subland twist drills with parallel shanks for holes prior to tapping screw threads are dealt with in ISO 3439.

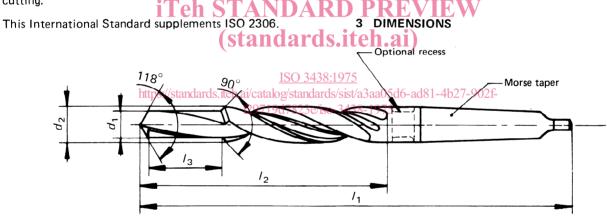
2 REFERENCES

ISO/R 286, ISO system of limits and fits – Part I : General, tolerances and deviations.

ISO 296, Machine tools - Self-holding tapers for tool shanks.

ISO 2306, Drills for use prior to tapping screw threads.

ISO 3439, Subland twist drills with parallel shanks for holes prior to tapping screw threads.



| ď2 h8 | | / ₁ | 1 ₂ | / ₃ | Morse taper No. | Thread | |
|----------|-----------------------------|----------------|----------------|----------------|-----------------------|---------------------|-------|
| | d ₁ h9 | | | | | Nominal diameter | Pitch |
| 9 | 6,8 | 162 | 81 | 21 | | M 8 | 1,25 |
| 11 | 8,5 | 175 | 94 | 25,5 | 1 | M 10 | 1,5 |
| 14 | 10,2 | 189 | 108 | 30 | | M 12 | 1,75 |
| 16 | 12,0 | 218 | 120 | 34,5 | | M 14 | 2 |
| 18 | 14,0 | 228 | 130 | 38,5 | | M 16 | 2 |
| | | | | | 2 | | |
| 20 | 15,5 | 238 | 140 | 43,5 | | M 18 | 2,5 |
| 22 | 17,5 | 248 | 150 | 47,5 | | M 20 | 2,5 |
| 24 | 19,5 | 281 | 160 | 51,5 | | M 22 | 2,5 |
| 26 | 21,0 | 286 | 165 | 56,5 | 3 | M 24 | 3 |
| 30 | 24,0 | 296 | 175 | 62,5 | | M 27 | 3 |
| 33 | 26,5 | 334 | 185 | 70 | 4 | M 30 | 3,5 |

Dimensions in millimetres

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