

# ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

## ISO RECOMMENDATION R 273

PART II

**iTeh STANDARD PREVIEW**

**(standards.iteh.ai)**  
CLEARANCE HOLES FOR METRIC BOLTS

42 UP TO AND INCLUDING 150 mm THREAD DIAMETER

<https://standards.iteh.ai/catalog/standards/sist/90338275-02a0-430a-beb0-43b19a868a14/iso-r-273-2-1968>

1st EDITION  
November 1968

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

## BRIEF HISTORY

ISO Recommendation R 273, Part II, *Clearance holes for metric bolts 42 up to and including 150 mm thread diameter*, was drawn up by Technical Committee ISO/TC 2, *Bolts, nuts and accessories*, the Secretariat of which is held by the Deutscher Normenausschuss (DNA).

ISO Recommendation R 273-1962, which is now considered as Part I of ISO/R 273, refers to clearance holes for metric bolts with thread diameters from 1.6 up to and including 39 mm, in conformity with ISO Recommendation R 272-1962.

ISO Recommendation R 273, Part II, was prepared to conform with a revision of ISO Recommendation R 272, published in 1968 and containing additional specifications for hexagon bolts and nuts with thread diameters from 42 up to and including 150 mm. In conjunction with that revision, a proposal concerning clearance holes for metric bolts with these diameters was adopted by the Technical Committee in October, 1966.

In August 1967, this document, intended originally as an addendum to ISO Recommendation R 273-1962, was circulated as Draft ISO Recommendation No. 1276 to all ISO Member Bodies for enquiry. It was approved by the following Member Bodies

|                |  |                               |
|----------------|--|-------------------------------|
| Austria        | India  | Romania                       |
| Belgium        | <a href="#">Iran ISO/R 273-2:1968</a>              | South Africa, Rep. of         |
| Canada         | <a href="#">Israel standards/sist/90338275-02a</a> | <a href="#">Spain a-beb0-</a> |
| Chile          | <a href="#">43b19a00a14/iso-r-273-2-1968</a>       | Sweden                        |
| Czechoslovakia | Japan  | Switzerland                   |
| Denmark        | Korea, Rep. of                                     | Thailand                      |
| Finland        | Netherlands  | Turkey                        |
| France         | New Zealand  | U.A.R.                        |
| Germany        | Norway   | United Kingdom                |
| Greece         | Poland   | U.S.A.                        |
| Hungary        | Portugal   | U.S.S.R.                      |

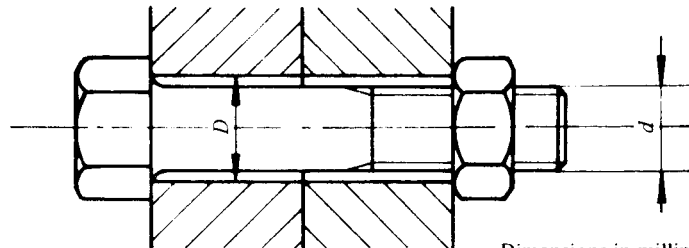
No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in November 1968, to accept it. It is now published as Part II of ISO Recommendation R 273.

## PART II

## CLEARANCE HOLES FOR METRIC BOLTS

42 UP TO AND INCLUDING 150 mm THREAD DIAMETER



Dimensions in millimetres

| Thread diameter<br>$d$ | Clearance holes $D^*$ |                  |        |
|------------------------|-----------------------|------------------|--------|
|                        | fine                  | Series<br>medium | coarse |
| 42                     | 43                    | 45               | 48     |
| 45                     | 46                    | 48               | 52     |
| 48                     | 50                    | 52               | 56     |
| 52                     | 54                    | 56               | 62     |
| 56                     | 58                    | 62               | 66     |
| 60                     | 62                    | 66               | 70     |
| 64                     | 68                    | 70               | 74     |
| 68                     | 70                    | 74               | 78     |
| 72                     | 74                    | 78               | 82     |
| 76                     | 78                    | 82               | 86     |
| 80                     | 82                    | 86               | 91     |
| 85                     | 87                    | 91               | 96     |
| 90                     | 93                    | 96               | 101    |
| 95                     | 98                    | 101              | 107    |
| 100                    | 104                   | 107              | 112    |
| 105                    | 109                   | 112              | 117    |
| 110                    | 114                   | 117              | 122    |
| 115                    | 119                   | 122              | 127    |
| 120                    | 124                   | 127              | 132    |
| 125                    | 129                   | 132              | 137    |
| 130                    | 134                   | 137              | 144    |
| 140                    | 144                   | 147              | 155    |
| 150                    | 155                   | 158              | 165    |

- \* The following tolerance zones are given for information only, for use where it is considered desirable to specify tolerances in national standards :

fine series : H12  
 medium series : H13  
 coarse series : H14

In cases where it is necessary to avoid interference between the edge of the clearance hole and the radius under the head of the bolt, it is recommended to chamfer the edge of the clearance hole.

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