

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 725

ISO INCH SCREW THREADS

BASIC DIMENSIONS

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ISO INCH SCREW THREADS

BASIC DIMENSIONS

1. SCOPE

This ISO Recommendation tabulates the basic dimensions for ISO inch screw threads according to ISO Recommendation R 263, *ISO inch screw threads – General plan and selection for screws, bolts and nuts (diameter range 0.06 to 6 in)*.

2. APPLICATION

When inch units are given in a national standard, the values should preferably be rounded to four decimal places.

When a conversion to metric units is required, the following rules should be applied :

- (1) multiply the relevant figure, found in the Tables, by 25.4;
- (2) round the value obtained to three decimal places.

3. CALCULATION

The values given in this ISO Recommendation have been calculated from the following formulae. The values have been given to six decimal places in order to enable a proper conversion to metric units (see section 2).

$$D_2 = D - 2 \times 3/8 H = D - \frac{0.649\ 519\ 053}{n} \text{ in}$$

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$$D_1 = D - 2 \times 5/8 H = D - \frac{1.082\ 531\ 755}{n} \text{ in}$$

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where

- D is the basic major diameter for internal threads,
- D_2 is the basic pitch diameter for internal threads,
- D_1 is the basic minor diameter for internal threads,
- d is the basic major diameter for external threads,
- d_2 is the basic pitch diameter for external threads,
- d_1 is the basic minor diameter for external threads,
- H is the height of fundamental triangle,
- n is the number of threads per inch.