INTERNATIONAL STANDARD

ISO 10207

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Rock drilling equipment — Rope threaded drill steel equipment for percussive drilling, nominal sizes 22 mm to 38 mm

Matériel de forage des roches — Équipements pour forage percutant à filetage corde, de dimension nominale 22 mm à 38 mm



ISO 10207:1991(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10207 was prepared by Technical Committee ISO/TC 82, *Mining*.

This International Standard, together with ISO 10208:1991, cancels and replaces ISO 1719:1974 and ISO 1920:1974, of which it constitutes a technical revision.

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Rock drilling equipment — Rope threaded drill steel equipment for percussive drilling, nominal sizes 22 mm to 38 mm

1 Scope

This International Standard specifies the basic dimensions of rope threaded drill steel equipment, for percussive drilling, of the following nominal sizes:

22 mm

25 mm light

25 mm

28 mm light

28 mm

32 mm light

32 mm

38 mm

This equipment comprises mainly hexagonal shank rods, extension rods, coupling sleeves and drill bits.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 722:1991, Rock drilling equipment — Hollow drill steels in bar form, hexagonal and round.

ISO 723:1991, Rock drilling equipment — Forged collared shanks and corresponding chuck bushings for hollow hexagonal drill steels.

ISO 10208:1991, Rock drilling equipment — Left-hand rope threads.

3 Shank rods for central flushing

The dimensions of the shank rods shall comply with those shown in figure 1 and given in table 1.

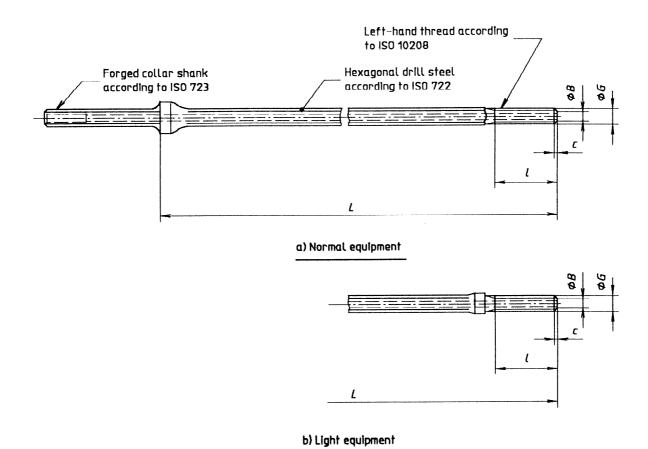


Figure 1

Table 1

| n | | |
|------------|----|-------------|
| Dimensions | ın | millimetres |

| Nominal size | Nominal size of hexagonal drill steel | Nominal thread diameter <i>G</i> | <i>I</i> min. | B max. | c min. | L ± 25 |
|--------------|---------------------------------------|--|---------------|-----------|-----------|----------------|
| 22 | 22 | 22 | 70,5 | 17,2 | 2,1 | |
| 25 light | 22 | 25 | 80 | 20,1 | 2,1 | 1 600 |
| 25 | 25 | 25 | 80 | 20,1 | 2,1 | 2 400 3 200 |
| 28 light | 25 | 28 | 80 | 22,8 | 4,4 | 4000 |
| 28 | 28 | 28 | 80 | 22,8 | 4,4 | |

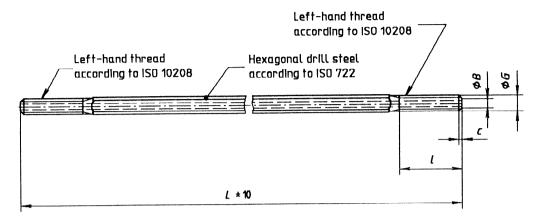
4 Extension rods

The dimensions of the extension rods shall comply with those given in figure 2 and table 2 for hexagonal extension rods, and those given in figure 3 and

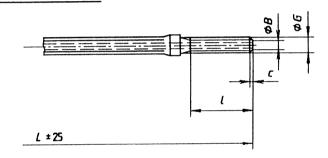
table 3 for round extension rods. The latter may be provided with wrench flats, the dimensions of which are given in figure 4 and table 4.

4.1 Hexagonal drill steels

Tolerances in millimetres



a) Normal equipment



b) Light equipment

Figure 2

Table 2

Dimensions in millimetres

| Nominal size | Nominal size of hexagonal drill steel | Nominal thread diameter $\it G$ | <i>l</i> min. | B max. | c min. | L |
|--------------|--|---------------------------------|------------------|-----------|-----------|----------------|
| 22 | 22 | 22 | 70,5 | 17,2 | 2,1 | |
| 25 light | 22 | 25 | 80 | 20,1 | 2,1 | 610 |
| 25 | 25 | 25 | 80 | 20,1 | 2,1 | 1 220 1 830 |
| 28 light | 25 | 28 | 80 | 22,8 | 4,4 | 2 440 3 050 |
| 28 | 28 | 28 | 80 | 22,8 | 4,4 | 3 660 |
| 32 light | 25 | 32 | 80 | 26,3 | 4,4 | |

4.2 Round drill steels

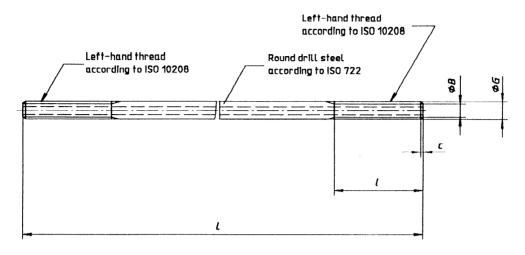


Figure 3

Table 3

Dimensions in millimetres

| Nominal size | Nominal size of round drill steel | Nominal thread diameter G | <i>l</i> min. | B max. | c min. | L ± 10 |
|--------------|-----------------------------------|---------------------------------|---------------|-----------|-----------|-------------------------|
| 32 | 32 | 32 | 80 | 26,3 | 4,4 | 1 220 1 830 2 440 |
| 38 | 38 | 38 | 91 | 32,1 | 5,1 | 3 050 3 660 |

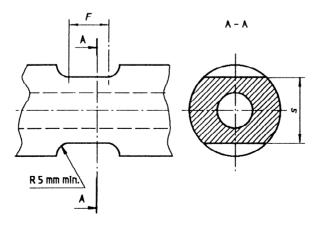


Figure 4

Table 4

Dimensions in millimetres

| Nominal size of round drill steel | F min. | \$ 0 -0,4 |
|-----------------------------------|-----------|-----------------|
| 32 | 15 | 25,6 |
| 38 | 20 | 32 |

5 Coupling sleeves

with the dimensions given in figure 5 and table 5 and in figure 6 and table 6, respectively.

The dimensions of the straight-through coupling sleeves and of those with a middle stop shall comply

5.1 Straight-through coupling sleeves

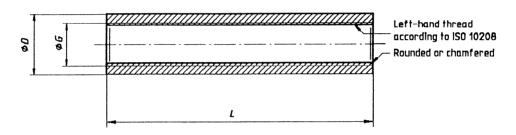
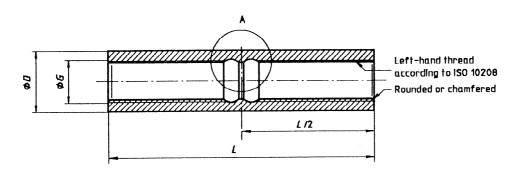


Figure 5

Table 5
Dimensions in millimetres

| Nominal size | Nominal thread diameter | <i>D</i> max. | L max. |
|--------------|-------------------------------|------------------|-----------|
| 22 | 22 | 32 | 140 |
| 25 | 25 | 37 | 160 |
| 28 | 28 | 42 | 160 |
| 32 | 32 | 45 | 160 |
| 38 | 38 | 56 | 180 |

5.2 Coupling sleeves with middle stop



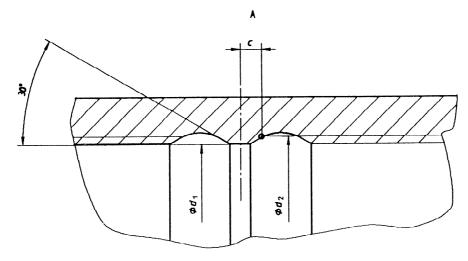


Figure 6

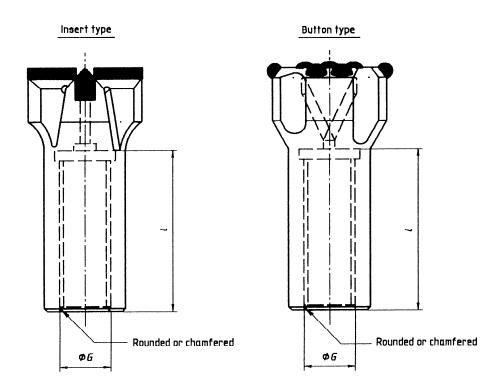
Table 6

Dimensions in millimetres

| Nominal size | Nominal thread diameter <i>G</i> | <i>D</i> max. | d₁ min. | d_2 min. | c max. | L max. |
|--------------|---|------------------|------------|------------|-----------|-----------|
| 22 | 22 | 32 | 17,5 | 21,8 | 2 | 140 |
| 25 | 25 | 37 | 20,5 | 24,7 | 2 | 160 |
| 28 | 28 | 42 | 23,2 | 28 | 4,3 | 160 |
| 32 | 32 | 45 | 26,7 | 31,3 | 4,3 | 160 |
| 38 | 38 | 56 | 32,5 | 38 | 5 | 180 |

6 Drill bits

The dimensions of the drill bits shall comply with those shown in figure 7 and given in table 7.



NOTE – The figures shown are only examples and are not intended to affect the manufacturer's design.

Figure 7

Table 7
Dimensions in millimetres

| Nominal size | Nominal thread diameter <i>G</i> | <i>l</i> max. |
|--------------|--|------------------|
| 25 | 25 | 80 |
| 28 | 28 | 80 |
| 32 | 32 | 80 |
| 38 | 38 | 90 |

7

