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STANDARD

8866

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**Rotary core diamond drilling equipment —  
System C**

*Matériel de forage rotatif au diamant avec carottage — Système C*



Reference number  
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## Foreword

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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 8866 was prepared by Technical Committee ISO/TC 82, *Mining*.

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## **Introduction**

System C is characterized by a series of nesting hole sizes providing small clearances between the hole wall and the equipment, making it possible to use thin-walled casing tubes. The equipment specified in this International Standard should be considered a separate system intended to be applied in parallel with system A (see ISO 3551) and system B (see ISO 3552): it is not interchangeable with these systems.

# Rotary core diamond drilling equipment — System C

## 1 Scope

This International Standard specifies the material for and the dimensions of rotary core diamond drilling equipment, system C.

NOTE 1 Cutting materials other than diamond may be used.

It applies to

- single- and double-tube core barrels, including diamond core bits, reaming shells, core lifters, core-lifter cases, core tubes (outer and inner) and heads;
- drill rods and couplings;
- casing tubes and couplings.

The casing tubes are not designed for drilling, and the casing string is only employed for casing-off the hole.

The range of equipment covers diamond core drilling of holes from 35 mm to 112 mm in diameter (outer bit diameter) with the corresponding core diameters from 21 mm to 92 mm.

Single- and double-tube core barrels provide a means of coring compact rocks (types M and DM core barrels), fissured and fractured rocks (types T and DT core barrels) and fractured and broken-down rocks (type DP core barrels).

## 2 Designation

The designation of items complying with this International Standard comprises

- the nominal outside diameter of the item;
- the letter C (denoting system C).

## EXAMPLES

Reaming shell DT59C

Drill rod 54C

## 3 Material

The equipment shall be manufactured from materials which, in the manufactured items, provide mechanical properties not less than those given in table 1.

Table 1 — Minimum mechanical properties of the material

Item	Tensile strength	Yield stress	Percentage elongation after fracture
	$R_m$ N/mm <sup>2</sup> (MPa)	$R_e$ N/mm <sup>2</sup> (MPa)	$5,65 \sqrt{S_0}$ %
Drill rods (upset ends)	690	490	12
Drill rod coupling	765	590	14
Casing and core tubes, outside diameter $\leq 89$ mm	690	490	12
Casing and core tubes, outside diameter $> 89$ mm	640	370	16
Other items	Not specified		