

INTERNATIONAL STANDARD

ISO
710-5

Second edition
1989-07-01

Graphical symbols for use on detailed maps, plans and geological cross-sections —

Part 5 : Representation of minerals

*Symboles graphiques à utiliser sur les cartes, les plans et les coupes géologiques
détaillés —*

Partie 5 : Représentation des minéraux



Reference number
ISO 710-5 : 1989 (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 approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 710-5 was prepared by Technical Committee ISO/TC 82, *Mining*.

This second edition cancels and replaces the first edition (ISO 710-5 : 1982), Table 1 of which has been technically revised : symbol 16 has been deleted and symbols 17 and 18 have been replaced.

ISO 710 consists of the following parts, under the general title *Graphical symbols for use on detailed maps, plans and geological cross-sections* :

Part 1: General rules of representation

Part 2: Representation of sedimentary rocks

Part 3: Representation of magmatic rocks

Part 4: Representation of metamorphic rocks

Part 5: Representation of minerals

Part 6: Representation of contact rocks and rocks which have undergone metasomatic, pneumatolytic or hydrothermal transformation or transformation by weathering

Part 7: Tectonic symbols

Graphical symbols for use on detailed maps, plans and geological cross-sections —

Partie 5 : Representation of minerals

1 Scope

This part of ISO 710 provides a unified series of symbols and abbreviations for the representation of certain minerals often found in rocks, with a view to facilitating the characterization of certain rocks on detailed maps, plans and geological cross-sections.

In general, there are two ways of representing these minerals, namely

- by the addition of another symbol, characterizing the mineral, to the elementary symbol for the rock in question;
- by the addition of letters, designating the mineral, to the symbol for the rock.

2 Representation by symbols (see table 1)

In view of the great variety of minerals which exist, it is impossible to design symbols for them all and therefore specific symbols can be assigned only to a selection of minerals. To emphasise the incomplete nature of table 1, the minerals have been listed in random order.

As far as possible, the shape of each symbol represents the crystal form of the mineral in question. If it is necessary to develop symbols for further minerals, this shall be done in the same way.

The symbols for minerals are added to the elementary symbols for the rock as specified in the relevant part of ISO 710; by varying the number of added elements, the frequency of occurrence of the represented mineral can be indicated.

3 Designation by Latin letters (see table 2)

A greater number of minerals have been designated by letters of the Latin alphabet. The result of this study is shown in the list in table 2 which gives the abbreviations in alphabetical order, followed by the names of the corresponding minerals.

As far as possible, abbreviations consisting of only one letter have been avoided. In general, lower case letters shall be used for minerals; however, for chemical elements the first letter shall be a capital. The same rules shall be used concerning abbreviations for other minerals.

In those cases where letters are also used for the designation of other rock characteristics, the abbreviations for minerals shall be marked in a special way (for example by choosing a different type of writing or by framing the abbreviation). The marking shall be defined in a key.

If the occurrence of several minerals in the same rock is indicated by letters, the abbreviations shall be listed in the order of importance of the minerals. The most abundant mineral shall be placed first.