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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 6480-2026**

Replacing GB/T 6480-2015

**Detachable bits and rods for rock drilling tools**

凿岩用钎头和连接钎杆

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## Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document supersedes GB/T 6480-2015 "Hard alloy drill bits for rock drilling" and GB/T 6481-2016 "Hollow six-point drill bits for rock drilling". This document is based on GB/T 6480-2015 and integrates the standards of GB/T 6482-2007 "Threaded Drill Rods for Rock Drilling" and GB/T 6482-2007 "Threaded Drill Rods for Rock Drilling". The content of GB/T 6481-2016 and GB/T 6482-2007. Compared with GB/T 6480-2015, except for structural adjustments and editorial changes... Aside from the changes, the main technical changes are as follows:

---The scope has been changed (see Chapter 1, GB/T 6480-2015);

---Added terms and definitions (see Chapter 3);

---Added a category for drill rods (see 5.1);

---Added technical requirements for drill rod specifications, dimensions, inspection

methods, marking, packaging, transportation, storage, and quality certificates (see...) Chapters 6, 7, and 9. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the China Iron and Steel Association. This document is under the jurisdiction of the National Steel Standardization Technical Committee (SAC/TC183). This document was drafted by: Shougang Guiyang Special Steel Co., Ltd., Zhejiang Pulanka Drilling Tools Co., Ltd., and Metallurgical Industry Information Standards. Preliminary Research Institute, Qianjiang Jiangnan Drilling Tools Co., Ltd., Shanxi Guangkai Machinery Technology Co., Ltd., Huaibei Lingguang Drilling Electromechanical Engineering Co., Ltd. China Steel Structure Association The main drafters of this document are. Xiong Jiaze, Li Songbai, Shen Guohua, Wang Yujie, Dai Kaifeng, Ye Weisong, Liu Xu, Liu Xiujie, Shen Linggen, and Wang Ji. Lan, Ye Jianbing, He Mengmeng, Xu Haochi, Gao Lan, He Chao, Liu Baoshi, Xu Suicheng, Yang Yun. The release history of this document and the document it replaces is as follows:

---First published in 1986 as GB/T 6480-1986, revised for the first time in 1994, and revised for the second time in 2002;

---This is the third revision, and it incorporates GB/T 6481-2016 "Hollow Hexagonal Drill Rod for Rock Drilling Cone Connection" The previous versions of GB/T 6481-2016 are. GB/T 6481-1986, GB/T 6481-1994, GB/T 6481-2002 and GB/T 6482-2007 "Threaded Drill Rods for Rock Drilling" (GB/T 6482-2007) The version release information is as follows: GB/T 6482-1986, GB/T 6482-1994. Rock drilling bit and connecting rod

1.Scope This document specifies the ordering details, product classification, technical requirements, inspection methods, inspection rules, and markings for rock drilling bits and connecting rods. Packaging, transportation, storage and quality certificates. This document applies to rock drilling cone connecting rods with nominal side dimensions of 19mm, 22mm, and 25mm, and 22mm to 87mm. Rock drilling threaded connection drill rod, connecting sleeve (device) and carbide drill bit with diameter of 28mm~152mm for rock drilling.

4.Order details Contracts or orders placed in accordance with this document shall include at least the following.

- a) This document number;
- b) Product Name;
- c) Specifications and model;
- d) Quantity (weight);

## 5 Product Categories

5.1 Overview Rock drilling connecting rods and drill bits are classified into conical connection type and threaded connection type according to the connection method, as

shown in Figure 1 and Figure 2.

## 5.2 Drill rod

5.2.1 Conical connection type drill rods are divided into head drills, conical connection drills, etc.

5.2.2 Threaded connection drill rods are divided into tail drill rods, tunneling drill rods, connecting drill rods, and quick-connect drill rods, etc.

5.2.3 The structure of the cone-shaped connecting rod is shown in Figure 3.

5.2.4 The structure of threaded connection type drill rods is shown in Figure 4, and the relevant dimensions shall conform to the provisions of Figures 11 and 12.

5.3 Connecting sleeve (device) The structure of the connecting sleeve (device) is shown in Figure 5, and the relevant dimensions should conform to the specifications in Figures 11 and 12.

## 5.4 Drill Bit

5.4.1 Based on the shape of its alloy or the arrangement of its teeth, drill bits are classified into two types. flat type (straight-edged, three-edged, cross-shaped, X-shaped) and cylindrical type (based on...). The head planar shape is divided into. cylindrical planar shape, cylindrical concave shape and cylindrical convex shape) and composite type, as shown in Figure 6.

5.4.2 The drill bit is divided into "ordinary type (P)" and "easy-return type (Y)" according to the different types of pants, as shown in Figure 7.

## 6.1.1 Drill rod

6.1.1.1 Method of representing the drill rod The method for representing the specification code of the drill rod is as follows: Example. T38-H35-R32 indicates a drill rod with a T38 thread at the end near the rock drill, an R32 thread at the drill bit end, and an H35 thread on the rod body.

6.1.1.2 Rod Specifications The specifications of the drill rod should conform to the requirements of GB/T 1301.

6.1.1.3 Rock drill end structure The cone-shaped connecting rod and the tail rod are connected to the rock drill via the tail shank of the connecting rod. The threaded connection drill rod and the head drill are connected to the rock drill end via threads.

6.1.2 Drill bit Method for representing the specification code of the drill bit. Example. 76x12-T45Y; indicates an easy-return drill bit with a nominal diameter of 76, 12 teeth, and a T45 thread.

6.1.3 Connecting sleeve (device) Method for representing the specification code of connecting sleeves (devices). Example. T38F/R32F indicates a connecting sleeve with a T38 internal thread at the rock drill end and an R32 internal thread at the drill bit end.

### 6.2.1 Solder tail

6.2.1.1 The dimensions, permissible deviations, and geometric tolerances of the taper connecting the drill rod and the tail rod shall conform to the specifications in Figure 8.

6.2.1.2 The coaxiality tolerance within 100mm on both sides of the drill shoulder is 1.0mm.

6.2.1.3 The radial runout of the tailstock water hole axis is

### 6.2.2 Cone

6.2.2.1 The cone dimensions and permissible deviations of the cone-connected drill rod, the head drill, and the cone-connected drill bit shall conform to the specifications in Figure 9.

6.2.2.2 With the consent of both the supplier and the buyer, and as specified in the contract, other cone-shaped drill rods may be supplied.

### 6.2.3 Drill bit

6.2.3.1 The structure, dimensions and permissible deviations of the drill bit shall conform to the provisions of Figure 10, and the structure and dimensions of the internal thread shall conform to the provisions of Figure 12.

6.2.3.2 Other sizes of drill bits may be supplied upon the request of the buyer and upon agreement between the supplier and the buyer.

### 6.2.4 Thread Specifications

6.2.4.1 Threaded connections between drill rods, drill bits, connecting sleeves (equipment), and drill bits are classified into wave threads (R) and trapezoidal threads (T) according to their tooth profile. For double-ended threads (ST), the external thread structure and dimensions shall conform to the specifications in Figure 11, and the internal thread structure and dimensions shall conform to the specifications in Figure 12.

6.2.5.4 Threaded connection drill rods may also be delivered in lengths agreed upon by both the supplier and the buyer, according to the requirements of the buyer.

## 6.3 Raw Material Requirements

6.3.1 The hollow steel used for drill rods shall conform to the requirements of GB/T 1301. Other grades of hollow steel may be supplied upon agreement between the supplier and the buyer.