

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

中华人民共和国煤炭行业标准

**The General Technical Condition of the Hydraulic Rock
drill for Coal Mining**

煤矿用液压凿岩机通用技术条件

MT/T 198-1996
Replace MT 198-1989

1 Subject content and application scope

This standard specifies the technical requirements, test methods, inspection rules, marking, packaging, transportation and storage of the hydraulic rock drill for coal mine (hereinafter unified abbreviated as "Rock Drill").

This standard applies to rail and outrigger hydraulic rock drill, but also applies to drill blast hole for coal mining and hydraulic rotary drilling rig (hereinafter abbreviated as "Rotary Drill") for anchor rod hole, hydraulic rock impactor for crushing rock (hereinafter abbreviated as "Impactor").

2 Reference standards

GB 3836.1 Electrical apparatus for explosive gas atmospheres--Part 1: General requirements

GB 5621 Test methods of performance for rock drilling machines and pneumatic tools

GB 5898 Measurement of noise emitted by rock drilling machines and pneumatic tools--Engineering method

GB 7935 Hydraulic fluid power-General rules of technical requirements for hydraulic components

GB/T 13306 Plates

GB 13813 Testing method and judging rule of safety to friction spakr of metallic material

for coal mine

JB/T 7302 Rock drilling machines and pneumatic tools-General specifications for packing of products

ZB 4014 Rock drilling machines and pneumatic tools-General specifications for coating

3 Basic performance parameters items

The basic performance parameters items of the rock drill, rotary drill and impactor are shown in Table 1.

Table 1

Serial No.	Parameter item	Unit	Rock drill	Rotary drill	Impactor
1	Impact energy	J	√	—	√
2	Impact frequency	Hz	√	—	√
3	Impact power	kW		—	√
4	Impact working pressure	MPa	√	—	√
5	Impact work flow	L/min	√	—	√
6	Rotary torque	N·m	√	√	—
7	Rotary number	r/min	√	√	—
8	Rotary power	kW	√	√	—
9	Rotary working pressure	MPa	√	√	—
10	Rotary work flow	L/min	√	√	—
11	Machine weight	kg	√	√	√
12	Overall dimension (length, width, height)	mm	√	√	√
13	Apothem	mm	√	√	√
14	Hole punching (drilling) diameter	mm	√	√	—
15	Noise (sound power level)	dBA	√	√	√

4 Technical requirements

4.1 The rock drill, rotary drill and impactor shall be manufactured in accordance with the drawings and technical documents approved by the prescribed procedures, and the same parts shall be interchangeable.

4.2 All part materials of the friction and impact shall comply with the requirements of GB3836.1 and GB13813.

4.3 The proof pressure test shall be done on the cylinder block, shell, body, accumulator

shell, etc. The test pressure shall be 1.5 times of the maximum working pressure, keeping the pressure for 3min, without leakage, damage and other phenomenon.

4.4 The assembly work of the rock drill, rotary drill and impactor shall be done in a clean and dedicated assembly department. All parts must be cleaned up and assembled after being wiped with a cloth or drying naturally.

4.5 The rotary hydraulic motor of rock drill and rotary drill shall have an inspection certificate meeting GB7935 standard.

4.6 The surface coating (spraying) of the rock drill, rotary drill and impactor shall meet the requirements of JB3066.

4.7 The rock drill's impact mechanism and the impactor shall be started smoothly under the pressure that is not more than the start-up pressure specified by the products.

4.8 After the rock drill's rotary mechanism and the rotary drill running for one hour under the rated working flow and the pressure of 4MPa, the shell temperature shall not be higher than 70 °C.

4.9 The performance of the rock drill, rotary drill and impactor shall be consistent with the specified value of the product.

4.9.1 The proof pressure test must be done on the rock drill impact mechanism and impactor under the test pressure, and there shall be no clamping stagnation, leakage, damage and other anomalies.

4.9.2 Under the rated working pressure, the work flow of the rock drill impact mechanism and impactor shall not exceed the specialized range, and the impact energy and impact frequency shall not be less than 90% of the specified value of the product.

4.9.3 Under the rated working pressure and rated rotating speed, the rotary torque of the rock drill rotary mechanism and rotary drill shall not be less than 90% of the specified value.

4.9.4 The machine weight of rock drill, rotary drill and impactor shall not exceed 105% of the design value.

4.9.5 The apothem of the rock drill and rotary drill t shall be not more than 100 mm.

4.9.6 The noise sound power level A of the rock drill impactor shall not be higher than 120dB; and that of the rotary drill shall not be higher than 90dB.



北京文心雕语翻译有限公司
Beijing Lancarver Translation Inc.

完整版本请在线下单

或咨询：

TEL： 400-678-1309

QQ： 19315219

Email：info@lancarver.com

<http://www.lancarver.com>

对公账户：

单位名称：北京文心雕语翻译有限公司

开 户 行：中国工商银行北京清河镇支行

账 号：0200 1486 0900 0006 131

支付宝账户：info@lancarver.com

注：付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！