DiaNi Diamond Grinding Disc

Introduction

Trojan DiaNi diamond grinding disc is made of precision diamond powder through special process, which can effectively prevent clogging. It can be used with any standard grinding and polishing machine. For cooling, only water is used, no special lubricants or diamond suspensions are required.

It is widely used in the processing of various high-precision products and various materials, and has been successfully used in the following industries: steel, stainless steel, steel alloy, optical glass, various crystals, industrial ceramics, ceramic seals, minerals, etc.



Technical specifications

Diameter（inch/mm）	Granularity（FEPA）
8/200 10/250 12/300	80
	120
	200
	400
	800
	1200

Instructions

(1) Use a grinding stone to sharpen the blade, and place the grinding stone horizontally on the radial direction of the diamond grinding disc for grinding.

(2) When used in an automatic grinding and polishing machine, place the sample symmetrically and evenly in the sample holder.

(3) Cut the edge of the sample holder and the edge of the diamond grinding disc tangentially.

(4) Keep adding small amounts of lubricating coolant.

(5) Make the cooling water flow at 1/3 from the center of the chassis during automatic grinding.

(6) Diamond grinding discs should be replaced when worn down to the base metal.

(7) The diamond grinding disc makes a pleasant rustling sound with just the right amount of lubricating coolant.

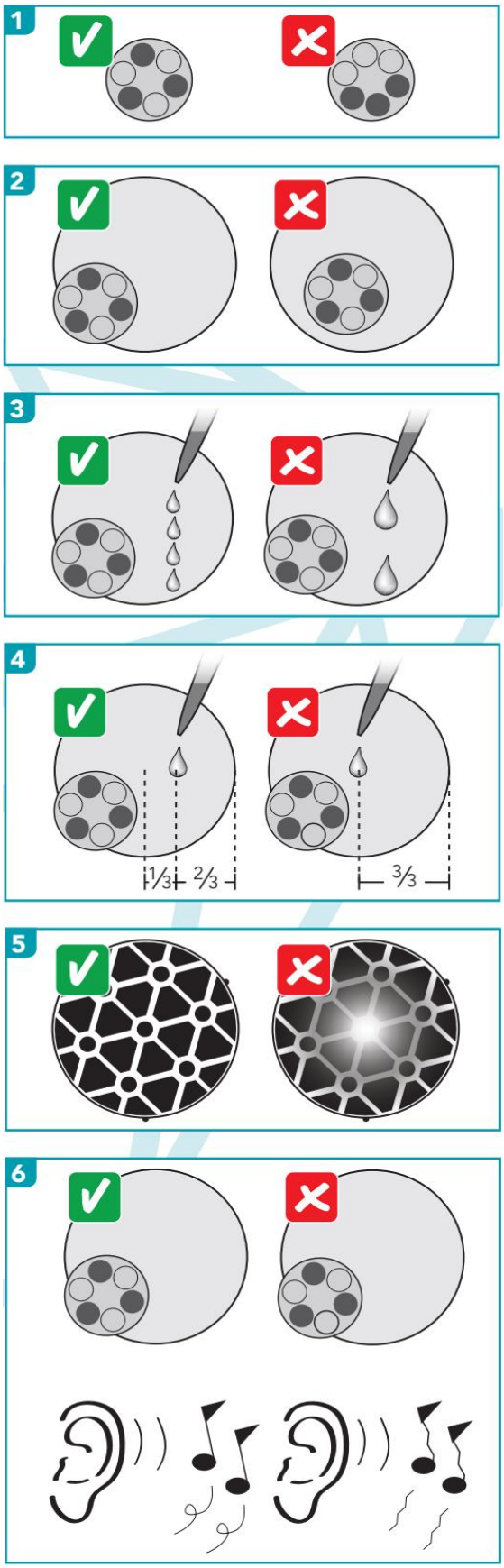
(8) The recommended pressure for automatic grinding is shown in the table below.

Diameter	25mm	30mm	32mm	40mm	50mm
Pressure Range	20-30N	28-42N	32-48N	45-65N	75-100N

The pressure is controlled at 5-7N/cm^2

Diameter of Grinding Disc	200mm	250mm	300mm	350mm	400mm
Speed	400-800RPM	300-600 RPM	250-500 RPM	200-400 RPM	180-360 RPM
Recommended Speed	500 RPM	400 RPM	300 RPM	280 RPM	250 RPM

The line speed is controlled at 4-8 m/s, the maximum should not exceed 10 m/s, and it is recommended to be at 5 m/s.


1
2
3
4
1/3
2/3
3/3
5
6

Precautions

1. If the diamond grinding disc is found to be damaged or dirty, please do not use it, so as not to affect the grinding quality.

2. General metallographic samples can be ground for 1-3 minutes to meet the requirements. For different samples, particle sizes and sample preparation requirements, the time can be set according to the specific situation.

3. The operating temperature of the lubricating coolant should not exceed 45°C.

4. When trimming the surface of the disc, you need to open the faucet of the grinder and take the grindstone with both hands under running water, and pull it from the center of the disc to the edge. Repeat this operation again. Because the inner and outer diameters of the discs are different, when using the whetstone, control the time of the inner and outer rings to avoid uneven dressing of the disc surface.

5. When the surface of the disc shows a white base, the life of the grinding disc is over and it needs to be replaced with a new one.

6. After the diamond grinding disc is used, use a brush to remove the grinding debris and dry it for the next use.

Storage

1. Diamond grinding discs with different particle sizes should be placed separately and marked for easy access when needed.

2. It should be stored in a cool and ventilated place, avoid direct sunlight, and the storage temperature should not be higher than 30°C, and avoid humid environment.