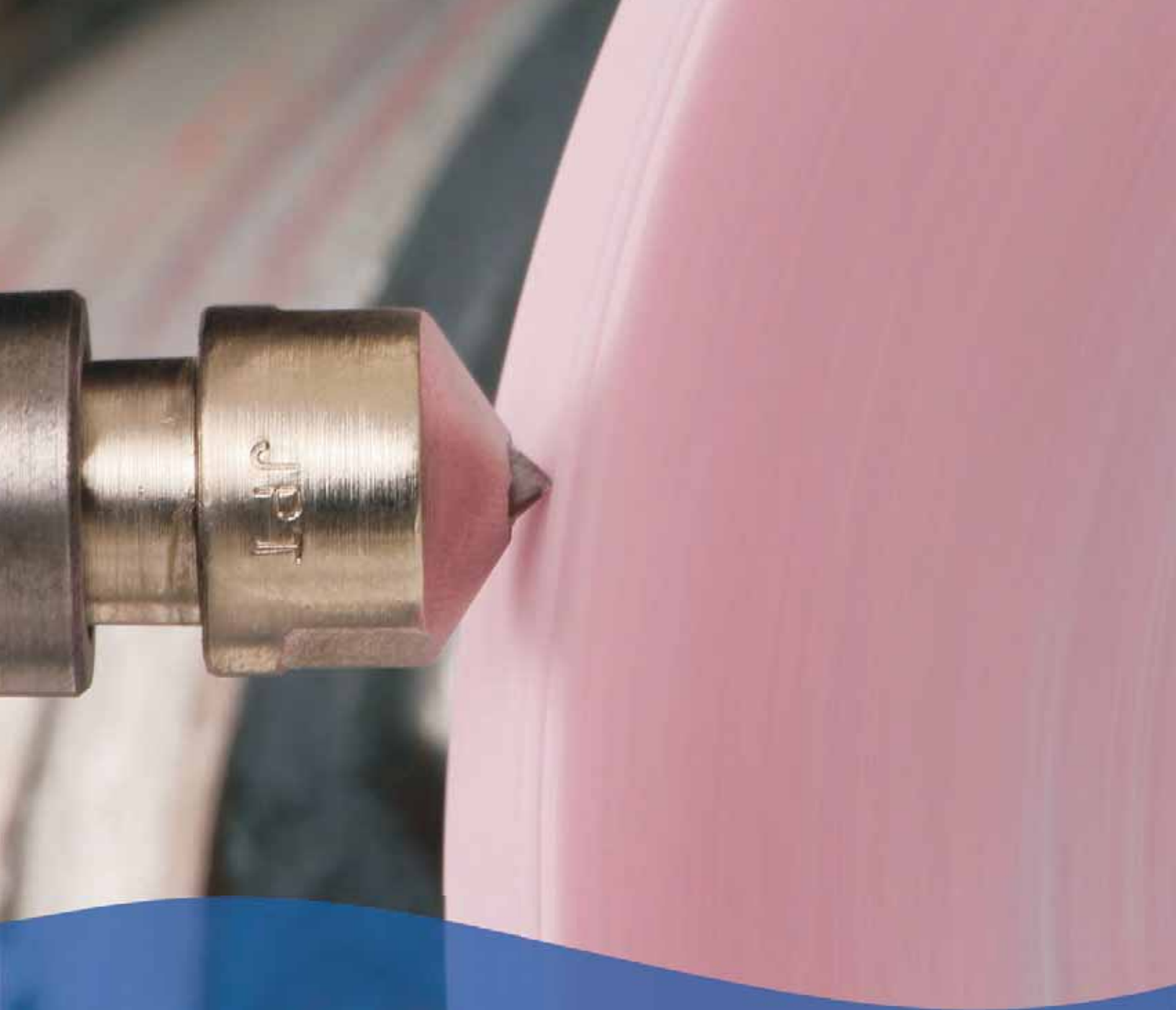




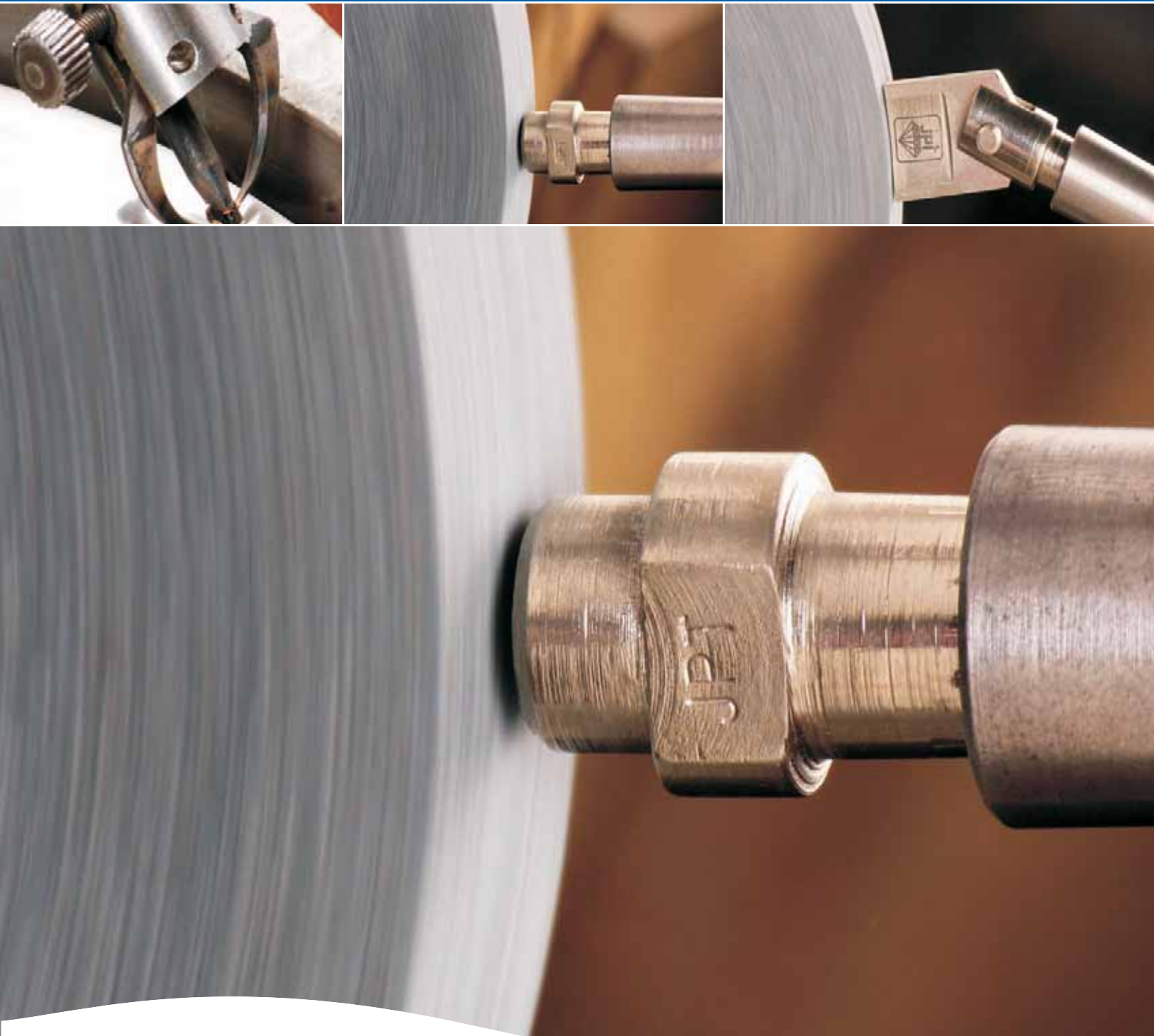
JAIN PRECISION TOOLS



**Manufacturer & Exporter
of Diamond Tools**



JAIN PRECISION TOOLS



Vision & Mission

Envisioned to Excel

“Becoming in production for Diamond- CBN Tools and Wheels that best understand & provide the products, services and solutions that enable and transform the highest quality of products to customers”

Mission Impeccable

Jain Precision Tools defines its reputation with each customer always striving to set the standards for high quality of customer service and product satisfaction.

We will make sure that each single customer should get complete technical support and guidance that client deserves while working to achieve highest level of results. We assure for unwavering commitment to honesty, transparency and innovation.



Profile

JAIN PRECISION TOOLS (JPT) was established on the determination to make a conscious commitment to serve high quality of Diamond and CBN Tools. Narendra Gangwal and Rahul Gangwal combine immense knowledge, accumulated expertise and experience that spans 3 decades.

Established in the year 1984 in Aurangabad, Jain Precision Tools (JPT) has full-fledged sophisticated manufacturing plant of its own to give customers the highest degree of service. JPT's Research and Development team is continuously engaged in developing high Quality & to enhance life of the Diamond and CBN Tools. Our QC system starts at the raw materials and involves checking components and finished products. We use a management philosophy that combines technology, creativity and reliability to serve you better .

Uncompromising quality and high manufacturing standards for making Diamond and CBN Tools, is something Jain Precision Tools passionately believes in. Moreover it distinguishes itself as offering unique and innovative customized solutions for its clients. And due to this expertise we deliver Diamond and CBN Tools with highest customer satisfaction.

Award



DIAMOND AND CBN TOOLS

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Chisel Type Diamond Dressers

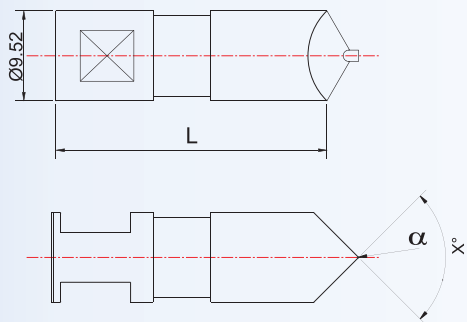


➤ Description

For Dressing of profile wheels, shaped diamond tools in the form of Chisel Type, Cone, Cubes etc are produced as per specifications. Thread Grinders, Gear Grinders, Form Grinders, Diaforms and other machines. Nose radius can be on specific enquiry and other details.

➤ Application tips

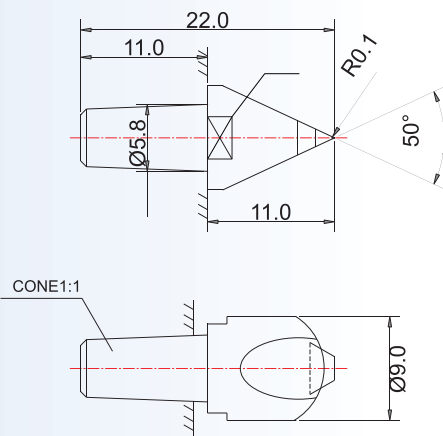
- ✓ There must be a perfect fit between the holder of the diamond dressing tool and the dressing device. otherwise dimensionally stable dressing with a true profile is not possible.
- ✓ Carefully place the diamond on the grinding wheel.
- ✓ Cooling results considerably improves the dressing and dressing is mandatory for exacting requirements. A strong and continuous flow of cooling medium must be fed to the contact zone prior to the beginning of the dressing process. Shock-like cooling may destroy the diamond.
- ✓ Dressing is performed at a normal or reduced grinding wheel speed.
- ✓ The increment by dressing infeed stroke may vary from about 0.01 to 0.03 mm.



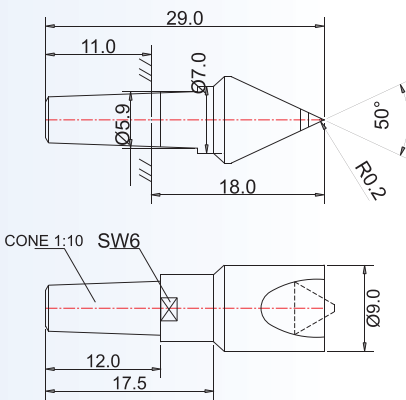
DIAFORM CHISEL DRESSERS

TOOL CODE DEGREE RADIUS

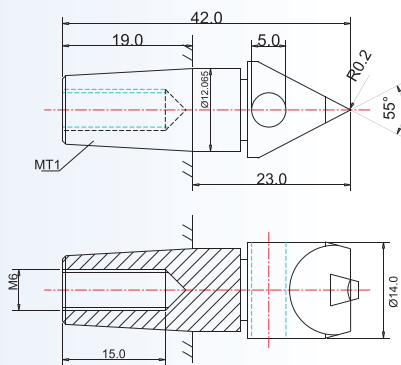
D40R125	40	0.125
D40R250	40	0.250
D40R500	40	0.500
D40R700	40	0.700
D60R125	60	0.125
D60R250	60	0.250
D60R500	60	0.500



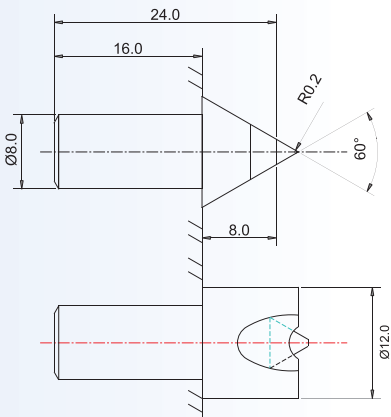
TOOL CODE
DC-JUNG RA 39



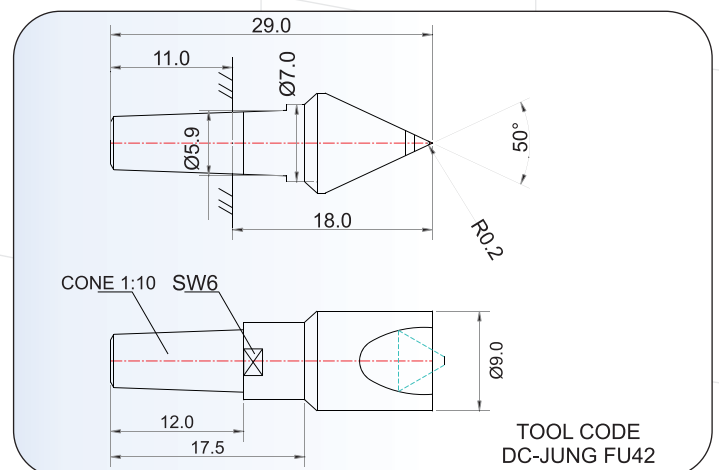
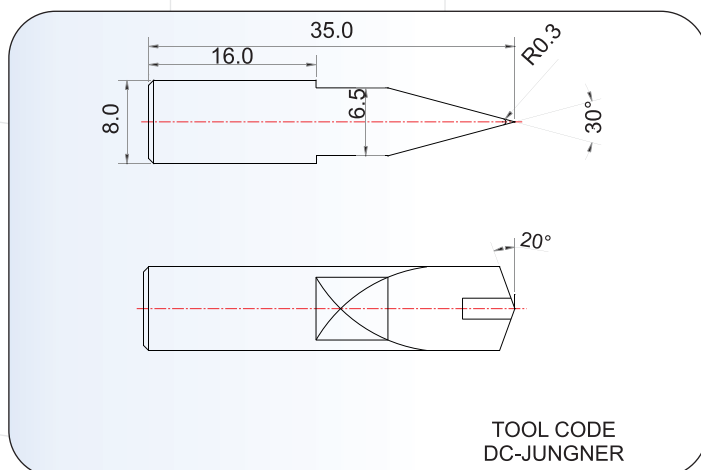
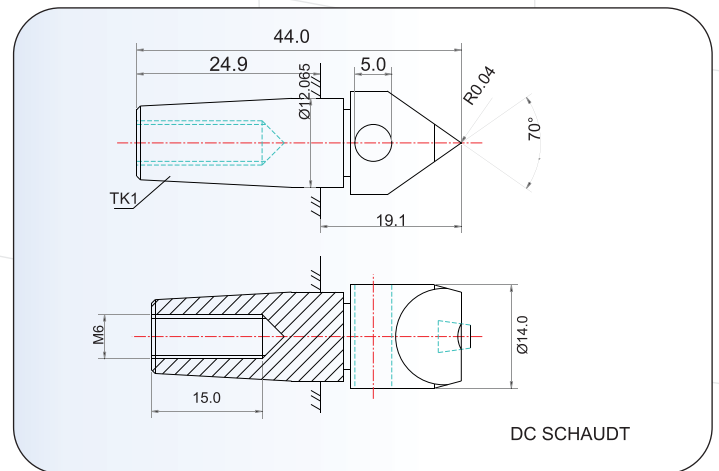
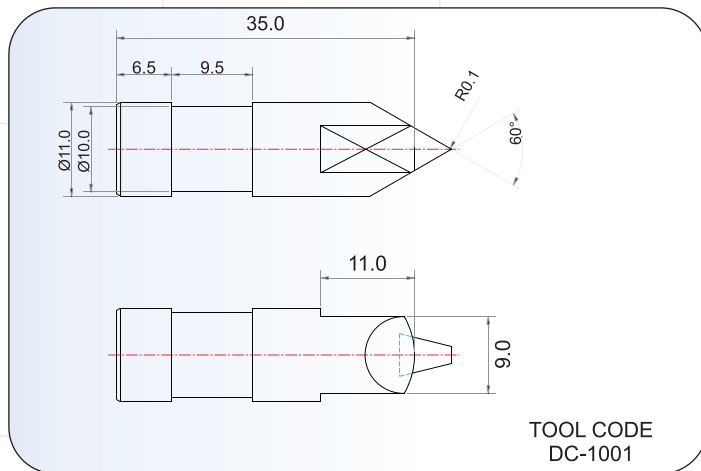
TOOL CODE
DC JUNG FU42



TOOL CODE
DC-FORTUNA



TOOL CODE
DC-MS0



MATRIX CHISEL DIAMOND DRESSERS

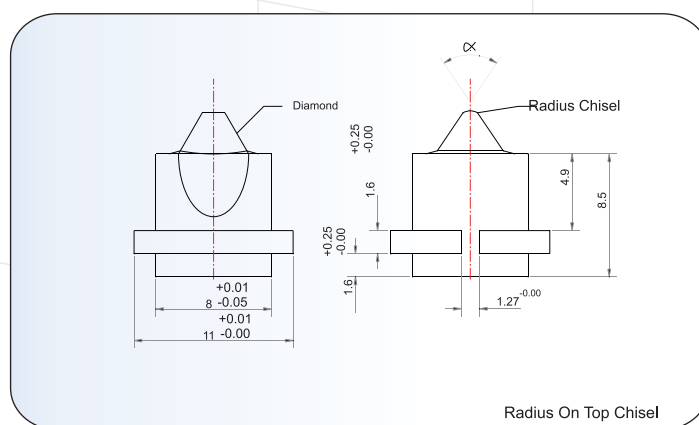
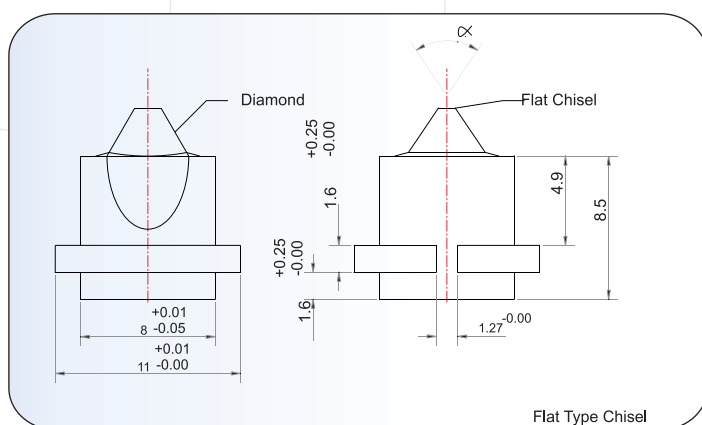


➤ Description

Matrix Chisel Diamond Dressers are made by using special stones for applications of precise wheel forming. These Diamond Tool are used for profiling and re-profiling of wheels with high accuracy on matrix thread grinding. These chisels are available in flats as well as in radius form.

➤ Application tips

Matrix Thread Grinding Machine
Nowell And Reishauer Machine



TOOL CODE	DEGREE	TOP FLAT
C37F01	37	0.001"
C42F01	42	
C52F01	52	
C37F15	37	0.0015"
C42F15	42	
C52F15	52	
C37F02	37	0.002"
C42F02	42	
C52F02	52	

TOOL CODE	DEGREE	TOP FLAT
C37F03	37	0.003"
C42F03	42	
C52F03	52	
C37F05	37	0.005"
C42F05	42	
C52F05	52	
C37F07	37	0.007"
C37F08	37	
C37F10	37	

BLADE TYPE DIAMOND DRESSERS



➤ Description

JPT Produces Blade Type diamond dressers in Grit Type and Needle Type diamonds. Blade type diamond dressers can be a combination of single point diamond dressers and multipoint diamond dressers. It is used in straight dressing and profile dressing.

➤ Importance of Thickness (T) Of Plate:

The bigger the volume to be removed the bigger is the Blade dressers T (in mm) should be chosen.

➤ Types

Needle Type Blade Dresser (NBD)

In this Blade Type Diamond Dressers, Needle shaped diamonds are carefully selected and set manually in an appropriate pattern in several layer's .It is equipped with high quality of Diamond Needles and set in proper scheme. Use for larger window and longer dressing.

Grit Type Blade Dresser (GBD)

In this Blade Type Diamond Dressers, Grit type block diamonds are set according in proper scheme. It's a manual process of setting the diamonds. This blade is made for extremely long service life and used in a high precision dressing application

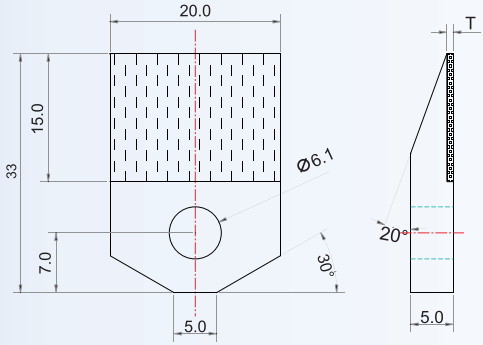
Blade type dresser with MCD and CVD Diamonds

As MCD And CVD diamonds are manmade diamonds, JPT produces the same as per the customer enquiry and specifications.

➤ Application Tips

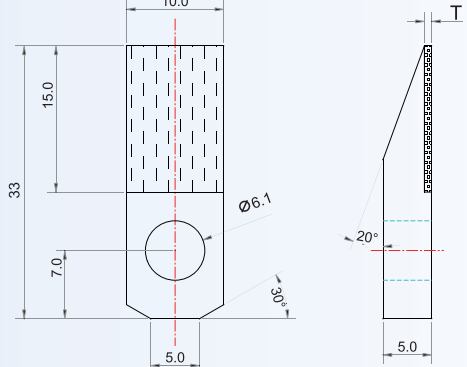
- ✓ There must be a perfect fit between the holder of the diamond dressing tool and the dressing device. Otherwise dimensionally stable dressing with a true profile is not possible.
- ✓ Cooling improves the dressing results considerably and is mandatory for exacting dressing requirements. A strong and continuous flow of cooling medium must be fed to the contact zone prior to the beginning of the dressing process.
- ✓ Dressing is performed at a normal or reduced grinding wheel speed.
- ✓ Infeed increments of up to 0.03 mm per dressing operation are possible.

DRAWING FOR NEEDLE TYPE BLADE DRESSERS



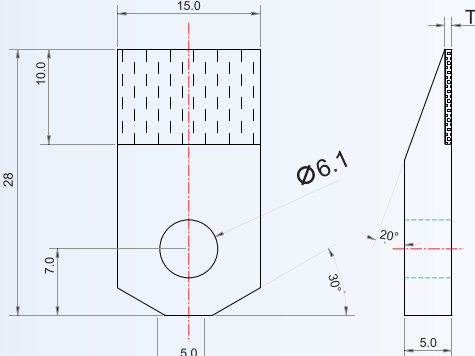
TOOL CODE	DIMENSION	T-THICKNESS
FA075	20x15xT	0.75mm
FA090	20x15xT	0.90mm
FA110	20x15xT	1.10mm
FA140	20x15xT	1.40mm

NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



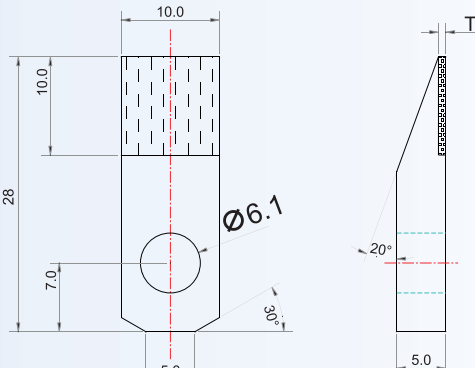
TOOL CODE	DIMENSION	T-THICKNESS
FB075	10x15xT	0.75mm
FB090	10x15xT	0.90mm
FB110	10x15xT	1.10mm
FB140	10x15xT	1.40mm

NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



TOOL CODE	DIMENSION	T-THICKNESS
FC075	15x10xT	0.75mm
FC090	15x10xT	0.90mm
FC110	15x10xT	1.10mm
FC140	15x10xT	1.40mm

NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118

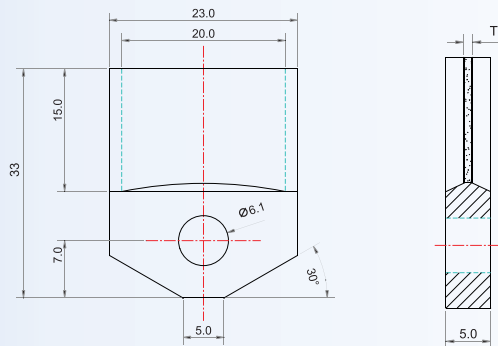


TOOL CODE	DIMENSION	T-THICKNESS
FD075	10x10xT	0.75mm
FD090	10x10xT	0.90mm
FD110	10x10xT	1.10mm
FD140	10x10xT	1.40mm

NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



DRAWING FOR NEEDLE TYPE BLADE DRESSERS



TOOL CODE	DIMENSION	T-THICKNESS
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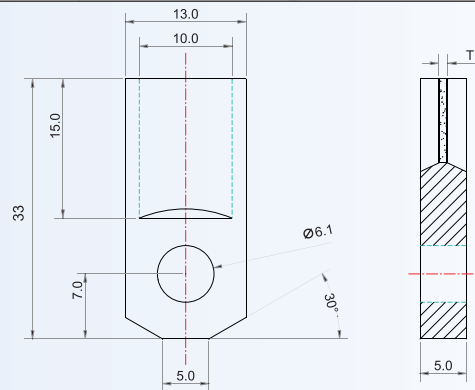
SA075	20x15xT	0.75mm
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SA090	20x15xT	0.90mm
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SA110	20x15xT	1.10mm
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SA140	20x15xT	1.40mm
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NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



TOOL CODE	DIMENSION	T-THICKNESS
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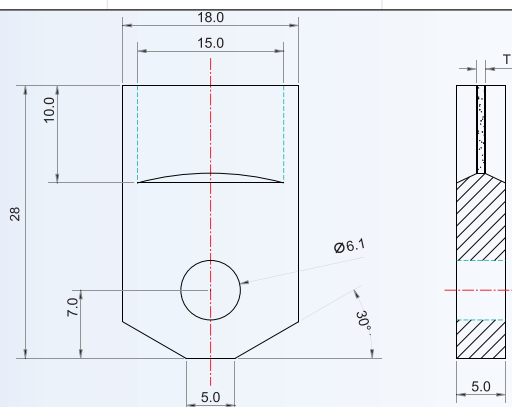
SB075	10x15xT	0.75mm
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SB090	10x15xT	0.90mm
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SB110	10x15xT	1.10mm
-------	---------	--------

SB140	10x15xT	1.40mm
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NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



TOOL CODE	DIMENSION	T-THICKNESS
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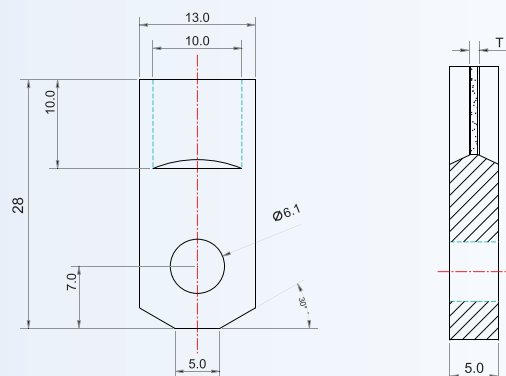
SC075	15x10xT	0.75mm
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SC090	15x10xT	0.90mm
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SC110	15x10xT	1.10mm
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SC140	15x10xT	1.40mm
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NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



TOOL CODE	DIMENSION	T-THICKNESS
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SD075	10x10xT	0.75mm
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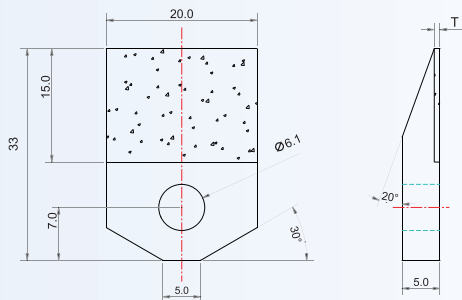
SD090	10x10xT	0.90mm
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SD110	10x10xT	1.10mm
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SD140	10x10xT	1.40mm
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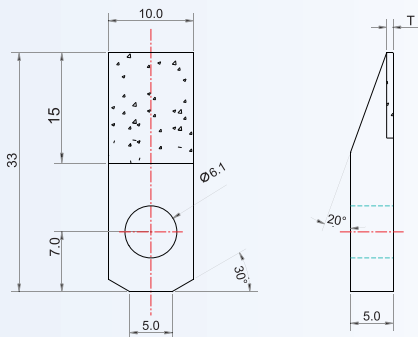
NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118

DRAWING FOR GRIT TYPE BLADE DRESSERS



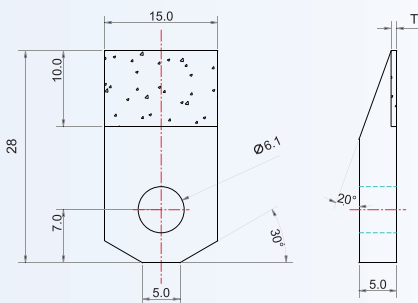
TOOL CODE	DIMENSION	T-THICKNESS
GFA075	20x15xT	0.75mm
GFA090	20x15xT	0.90mm
GFA110	20x15xT	1.10mm
GFA140	20x15xT	1.40mm

NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



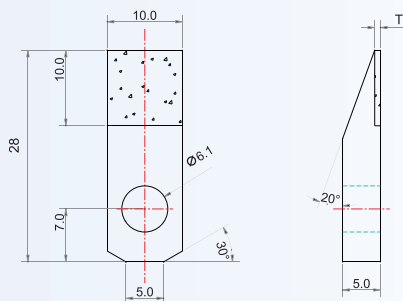
TOOL CODE	DIMENSION	T-THICKNESS
GFB075	10x15xT	0.75mm
GFB090	10x15xT	0.90mm
GFB110	10x15xT	1.10mm
GFB140	10x15xT	1.40mm

NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



TOOL CODE	DIMENSION	T-THICKNESS
GFC075	15x10xT	0.75mm
GFC090	15x10xT	0.90mm
GFC110	15x10xT	1.10mm
GFC140	15x10xT	1.40mm

NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118

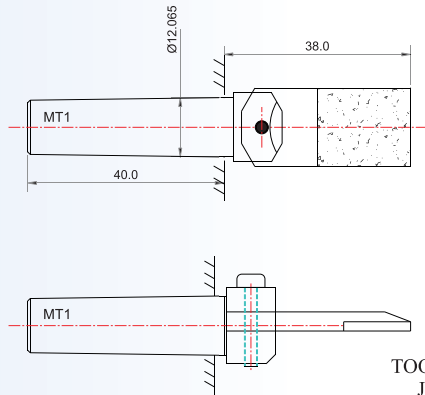


TOOL CODE	DIMENSION	T-THICKNESS
GFD075	10x10xT	0.75mm
GFD090	10x10xT	0.90mm
GFD110	10x10xT	1.10mm
GFD140	10x10xT	1.40mm

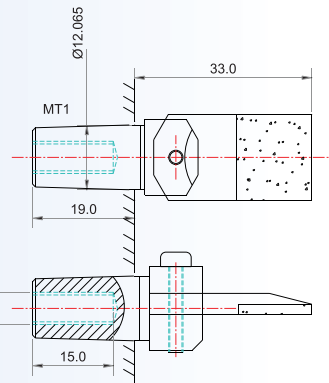
NOTE : DIAMOND GRIT AVAILABLE ARE D501,D711,D1001,D118



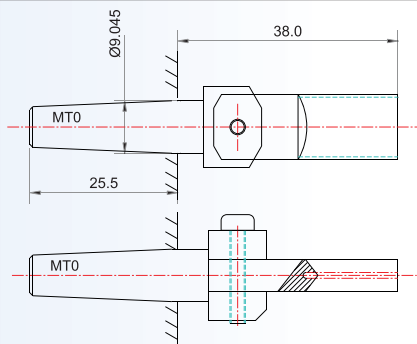
DRAWING FOR ADJUSTABLE HOLDER



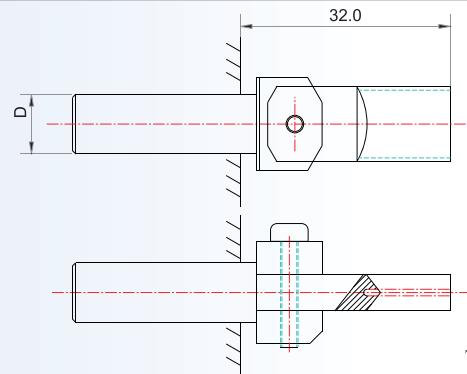
TOOL CODE
JPT-H1



TOOL CODE
JPT-H2

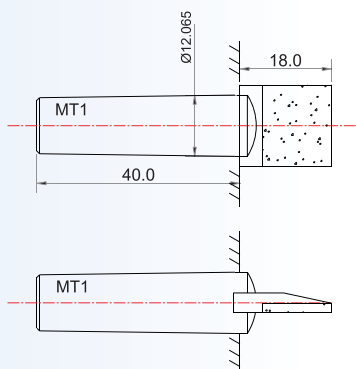


TOOL CODE
JPT-H3

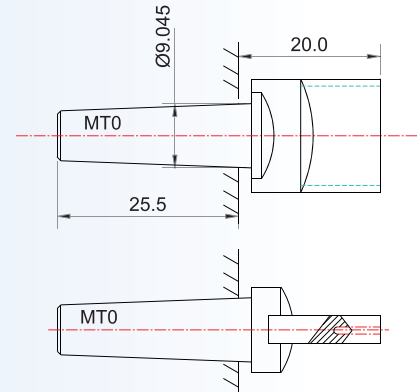


TOOL CODE
JPT-H4

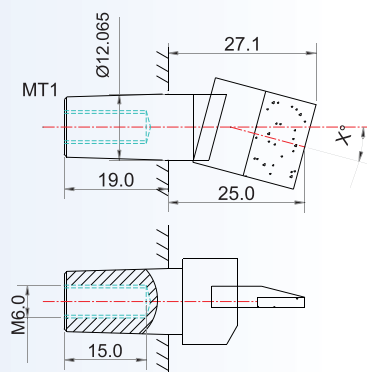
Drawing for brazed holder



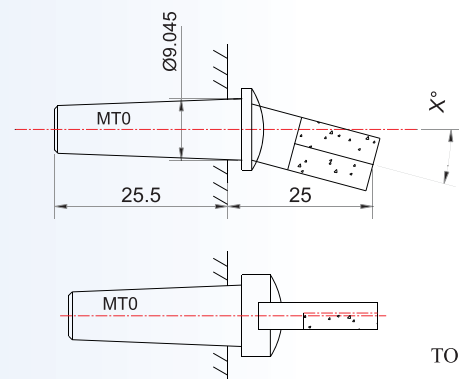
TOOL CODE
JPT-H5



TOOL CODE
JPT-H6



TOOL CODE
JPT-H7



TOOL CODE
JPT-H8

SINGLE POINT DIAMOND DRESSERS



➤ Description

The Single Point Diamond Dresser is more versatile which is used for truing and dressing purpose of grinding wheel. The diamond for the single point dressing tools are selected for their structural strength, degree of sharpness & lack of detrimental flaws. The proper selection of single point diamond dresser depends on the dimension of grind hardness, grit size and abrasive type.

Single Point Diamond Dressing Tools Grade

- 'A' , 'B' , 'C' ➔ These Stones are Bruted Type Commercial Quality diamonds
- 'AA' Class ➔ These Stones are natural polished stones
- 'AAA' Class ➔ These are premium grade Gem quality natural diamonds with 3 - 4 workable points

Diamond Carat Selection Formula

- 1 Carat= 0.2 g
- $(r + R) \times 0.004 = \text{Carat Size Of Diamond}$
- $(\text{Radius} + \text{Grinding Wheel Depth}) \times 0.004 = \text{Carat Size Of Diamond}$

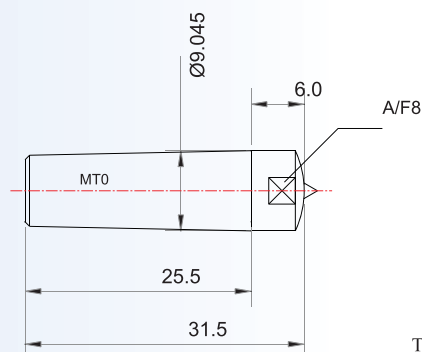
Grinding Wheel Diameter	Carat Size
-------------------------	------------

50	0.25
100	0.33
200	0.50
300	0.75
400	1.00
500	1.50
600	2.00
800	3.50
900	4.00

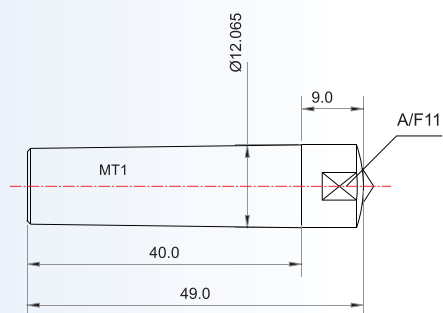
➤ Application tips

- ✓ The diamond point should contact the grinding wheel slightly below its center and at an inclination of 10-15°.
- ✓ In feed increments of up to approx. 0.01-0.03 mm per dressing operation are possible.
- ✓ Cooling improves the dressing results considerably and is mandatory for exacting dressing requirements. A strong and continuous flow of cooling medium must be fed to the contact zone prior to the beginning of the dressing process.
- ✓ Shock-like cooling may destroy the diamond.
- ✓ There must be a perfect fit between the holder of the diamond dressing tool and the dressing device. Otherwise dimensionally stable dressing with a true profile is not possible. There is also a risk of the diamond being damaged.
- ✓ Carefully place the diamond on the grinding wheel.

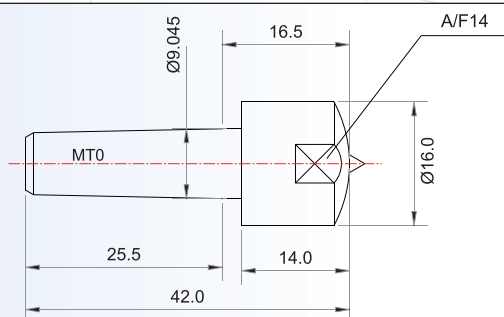
DRAWING FOR SINGLE POINT DIAMOND DRESSERS



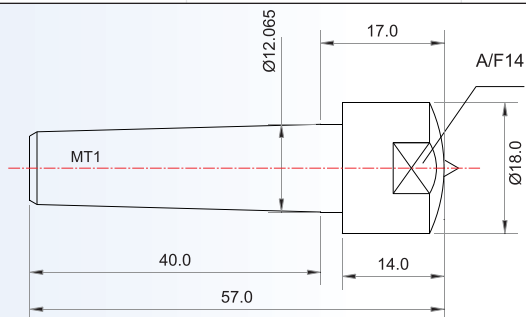
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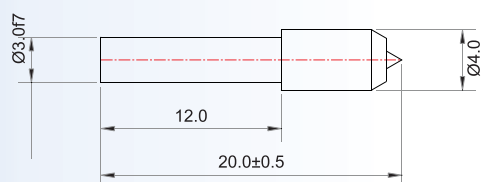
TOOL CODE
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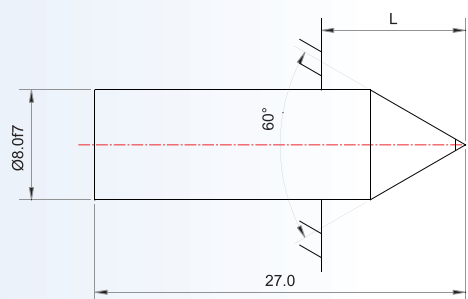
TOOL CODE
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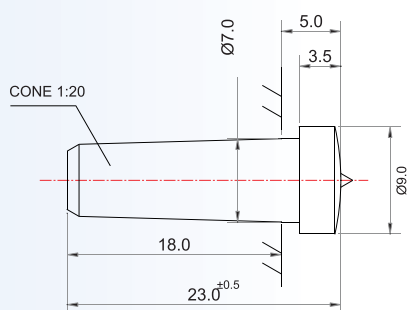
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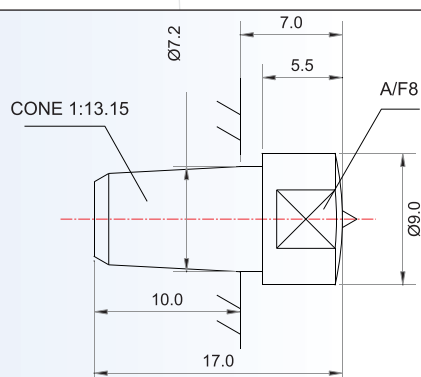
TOOL CODE
SPD-05



TOOL CODE
SPD-06

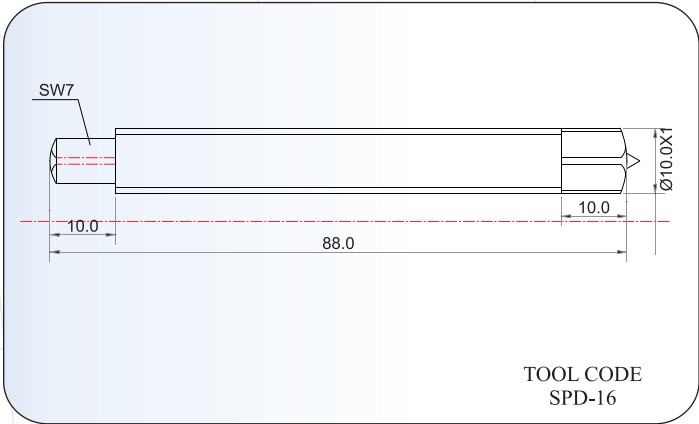
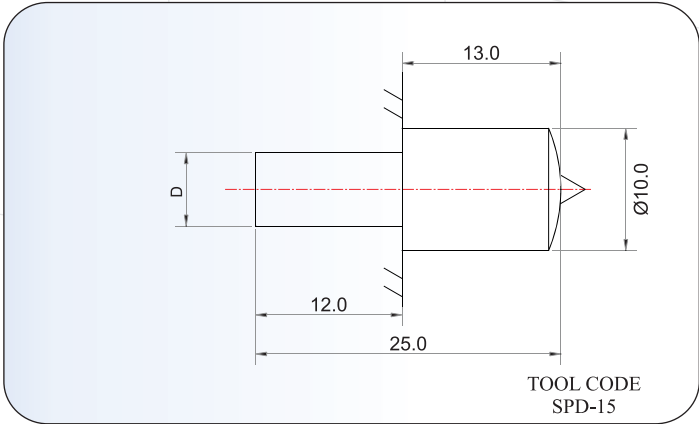
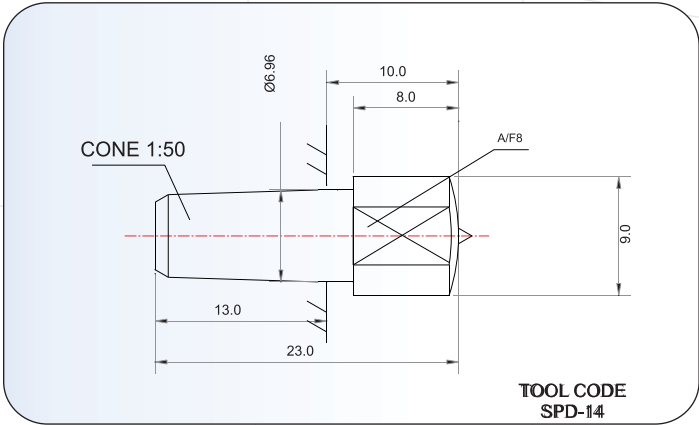
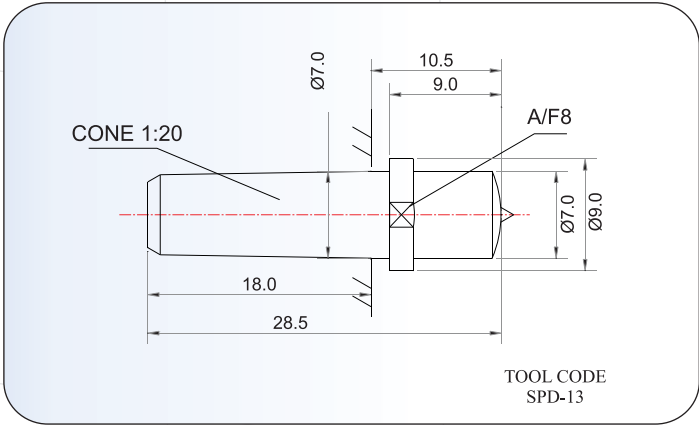
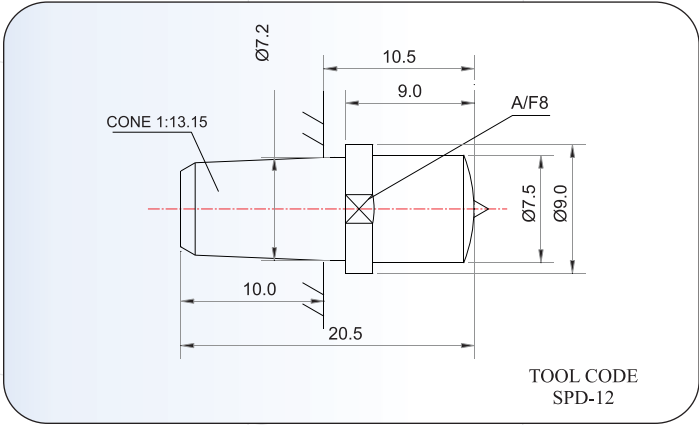
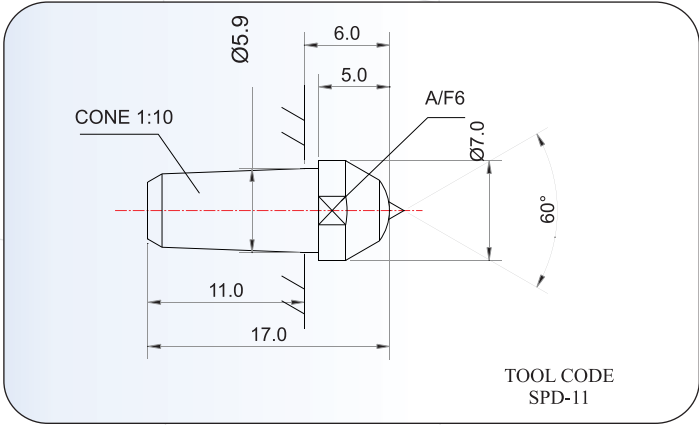
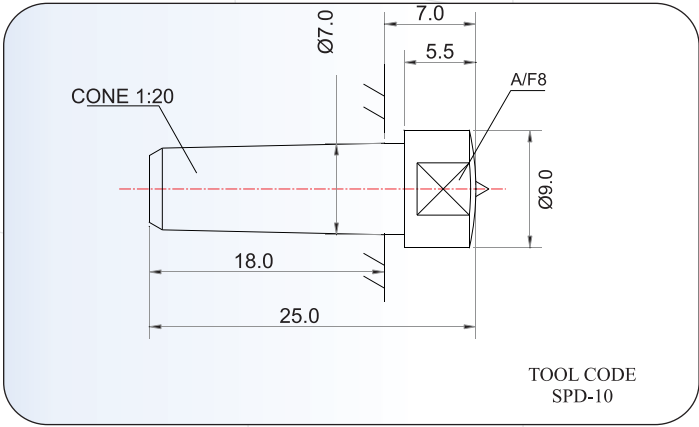
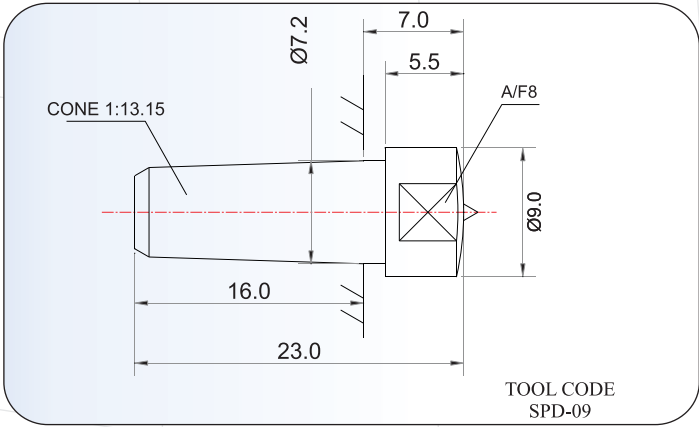


TOOL CODE
SPD-07

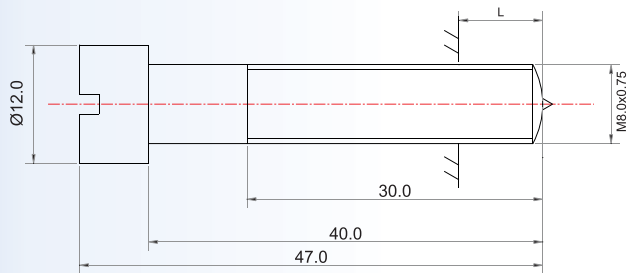


TOOL CODE
SPD-08

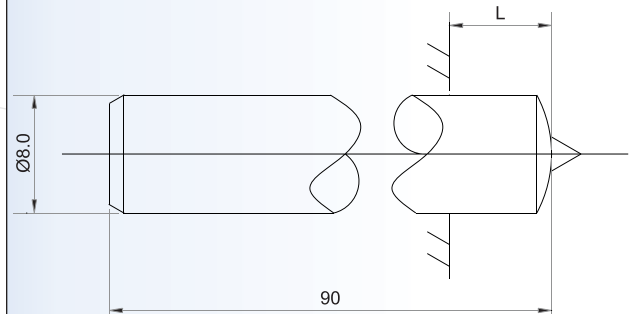
DRAWING FOR SINGLE POINT DIAMOND DRESSERS



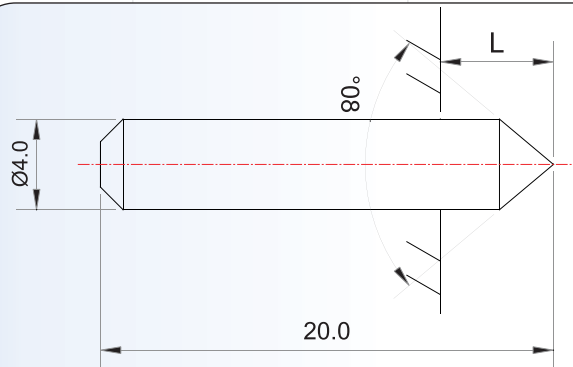
DRAWING FOR SINGLE POINT DIAMOND DRESSERS



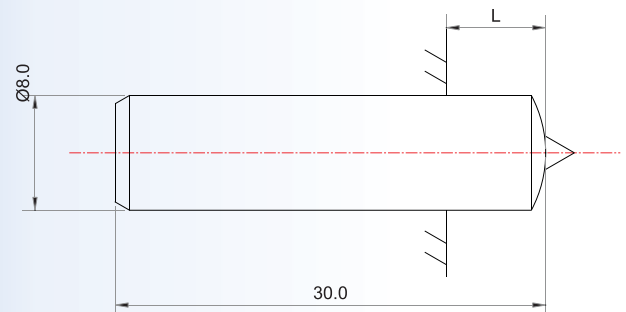
TOOL CODE
SPD-17



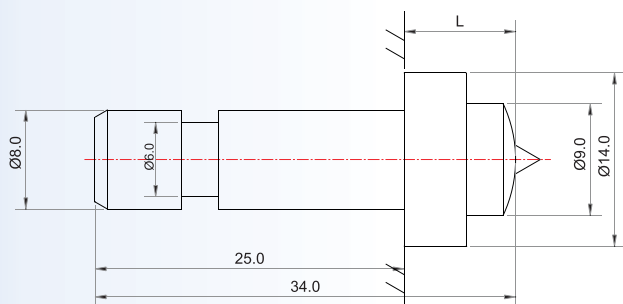
TOOL CODE
SPD-18



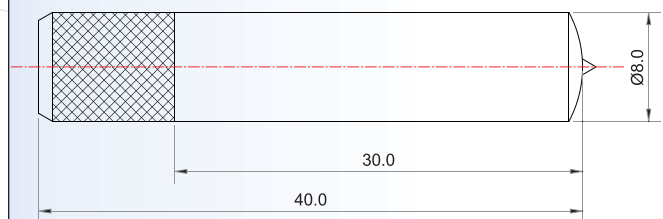
TOOL CODE
SPD-19



TOOL CODE
SPD-20



TOOL CODE
SPD-21



TOOL CODE
SPD-22

MULTIPOINT DIAMOND DRESSERS



➤ Description

Multi point Diamond Dressers manufactured by JPT is fixed with number of natural diamonds of a quality crystal character fixed into a special wear resistant bond. The diamonds are arranged in different pattern in single layer or multiple layers, depending upon the field of operation. The contact between diamond point and wheel face reduces the unit pressure on each point resulting in a longer tool life with full utilization. Multipoint Diamond Dressers are used for large wide grinding wheels

➤ Application tips

- ✓ Set the multipoint tool into the center of the grinding wheel
- ✓ Depth of cut should not exceed more than 0.01-0.04 mm
- ✓ Use plenty of coolant to increase the tool life
- ✓ The mounting must be vibration free, with the clamping length as short as possible

Advantages

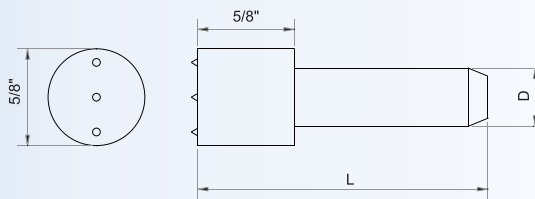
No resetting

No re-lapping

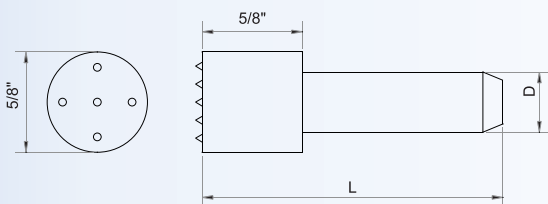
Maintenance free

Higher output

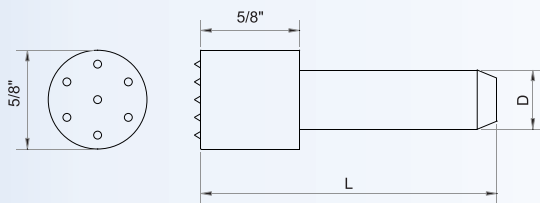
Longer service life



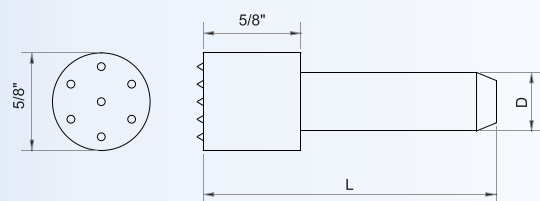
TOOL CODE	DIAMOND LAYERS	DIAMOND QTY
MPD -3A	1	3
MPD- 3B	2	6
MPD -3C	3	9
MPD -3D	4	12



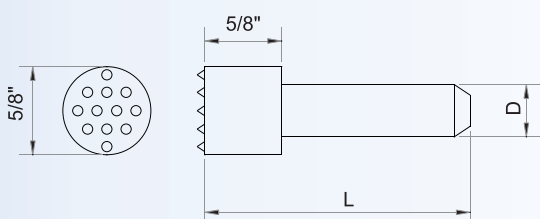
TOOL CODE	DIAMOND LAYERS	DIAMOND QTY
MPD -5A	1	5
MPD- 5B	2	10
MPD -5C	3	15
MPD -5D	4	20



TOOL CODE	DIAMOND LAYERS	DIAMOND QTY
MPD -7A	1	7
MPD- 7B	2	14
MPD -7C	3	21
MPD -7D	4	28



TOOL CODE	DIAMOND LAYERS	DIAMOND QTY
MPD -9A	1	9
MPD- 9B	2	18
MPD -9C	3	27



TOOL CODE	DIAMOND LAYERS	DIAMOND QTY
MPD -12A	1	12
MPD- 12B	2	24
MPD -12C	3	36

IMPRIGNATED GRIT TYPE DIAMOND DRESSERS



➤ Description

Imprignated Diamond Dressers contain diamond grits holding in sintered bond. In this dresser the crushed diamond grit in both Natural & Synthetic grades are set in a several layers in random pattern. With this type of tool, the dressing work is carried out by several small diamonds which together result in excellent performance. To achieve good results, the diamond particles must have at least double the grinding wheel grain to be dressed. Tools with higher diamond content are more efficient in this case. These tools are more suitable for fine and sensitive grinding wheels where a lower surface finish is required.

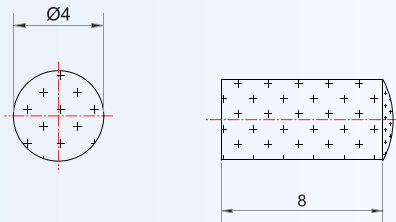
➤ Range of application

- ✓ Dressing of resin, vitreous and rubber bond fine grit grinding wheels.
- ✓ Dressing of boron carbide grinding wheels.
- ✓ Dressing of single profile threaded and V – profile grinding wheel.
- ✓ Dressing operations on centerless, cylindrical and surface grinding machines.

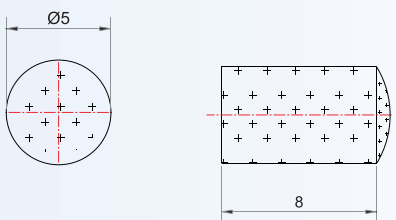
➤ Advantages of Imprignated tool

- ✓ Reduced Dressing Timing
- ✓ The tool is completely used upto final grain particle
- ✓ Setting times can be reduced
- ✓ Less initial cost for dressing

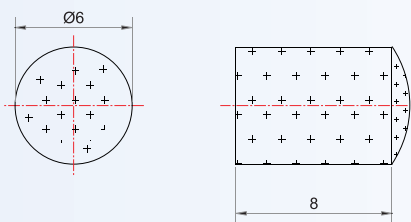
DRAWING FOR GRIT DRESSERS



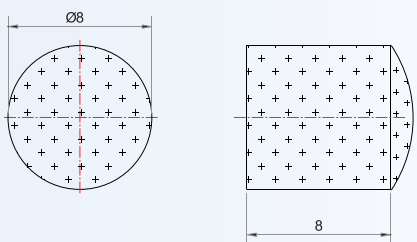
TOOL CODE	GRIT SIZE	BOND
DG 4A	25/30	J
DG 4B	40/80	J
DG 4C	60/70	J
DG 4D	80/100	J



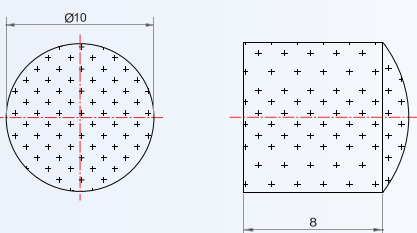
TOOL CODE	GRIT SIZE	BOND
DG 5A	25/30	J, W
DG 5B	40/80	J, W
DG 5C	60/7	J, W
DG 5D	80/100	J, W



TOOL CODE	GRIT SIZE	BOND
DG 6A	18/20	J, W
DG 6B	25/30	J, W
DG 6C	40/80	J, W
DG 6D	60/70	J, W
DG 6E	80/100	J, W

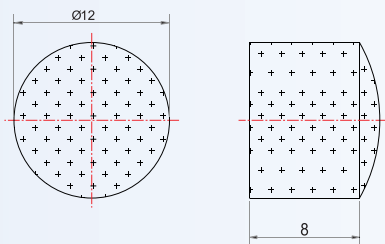


TOOL CODE	GRIT SI	BOND
DG 8A	25/30	J, W
DG 8B	40/80	J, W
DG 8C	60/70	J, W
DG 8D	80/100	J, W

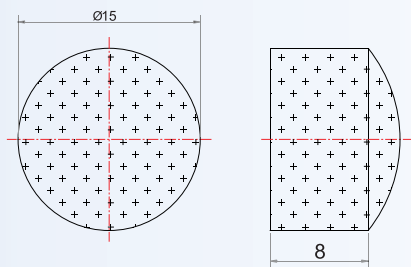


TOOL CODE	GRIT SIZE	BOND
DG 10A	25/30	J, W
DG 10B	40/80	J, W
DG 10C	60/70	J, W
DG 10D	80/100	J, W

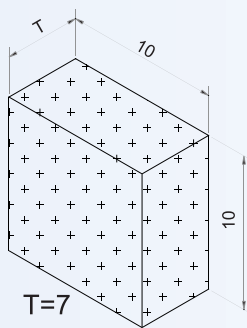
TECHNICAL DRAWINGS



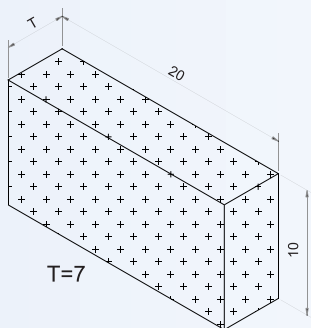
TOOL CODE	GRIT SIZE	BOND
DG 12A	25/30	J, W, H
DG 12B	40/80	J, W, H
DG 12C	60/70	J, W, H
DG 12D	80/100	J, W, H



TOOL CODE	GRIT SIZE	BOND
DG 15A	25/30	J, W, H
DG 15B	40/80	J, W, H
DG 15C	60/70	J, W, H
DG 15D	80/100	J, W, H



TOOL CODE	GRIT SIZE	BOND
DG BL-A	25/30	J, W, H
DG BL-B	40/80	J, W, H
DG BL-C	60/70	J, W, H
DG BL-D	80/100	J, W, H



TOOL CODE	GRIT SIZE	BOND
DG BL-A	25/30	J, W, H
DG BL-B	40/80	J, W, H
DG BL-C	60/70	J, W, H
DG BL-D	80/100	J, W, H

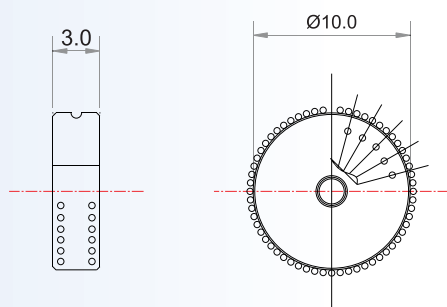
ROLLER DIAMOND DRESSERS



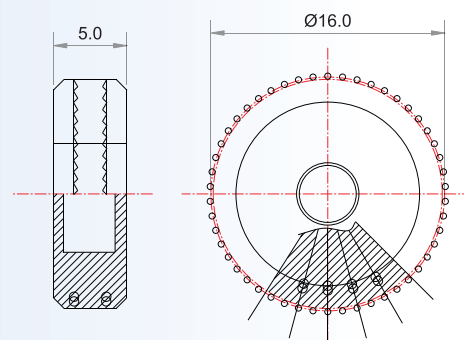
➤ Description

Roller Diamond Dressers manufactured by JPT in which Diamonds are arranged evenly on circumference and in rows. The Diamonds are natural diamond stones, needle shaped or Flat Shape with a specially designed sintered bond.

The equal dressing of grinding wheel is possible with these roller type diamond dressers with smooth surface finish.

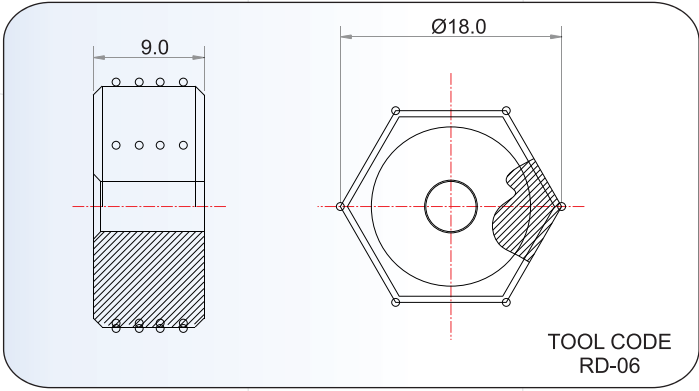
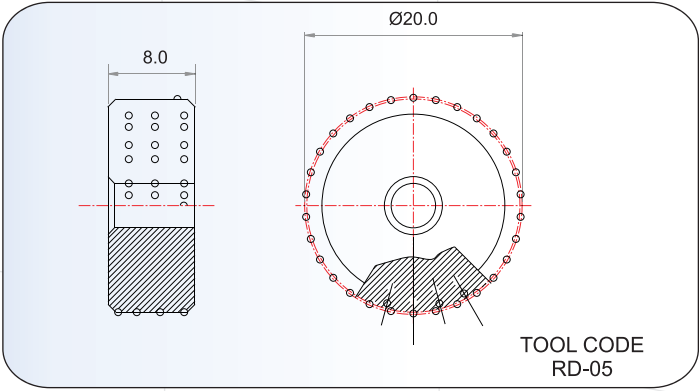
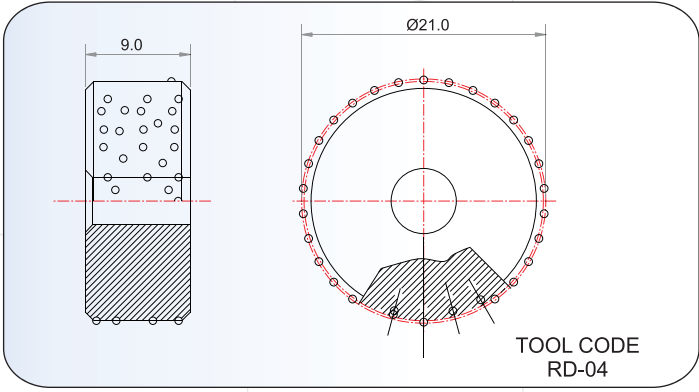
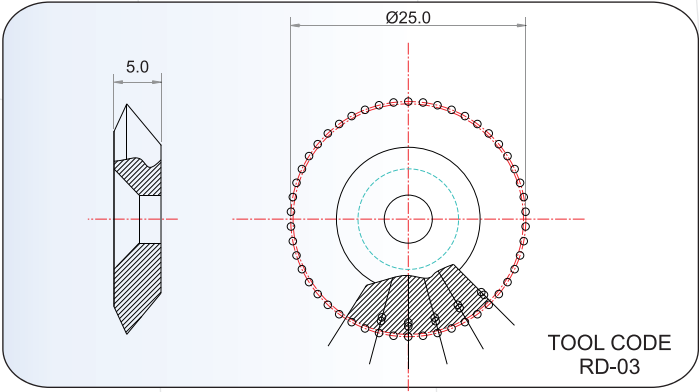


TOOL CODE
RD-01

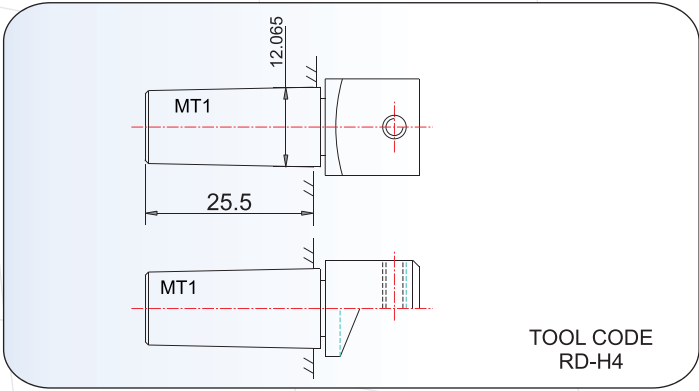
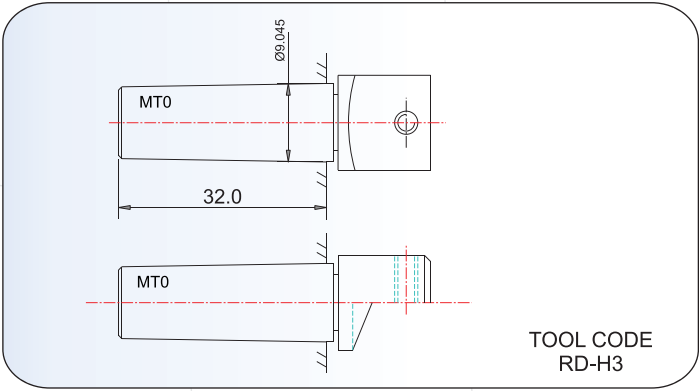
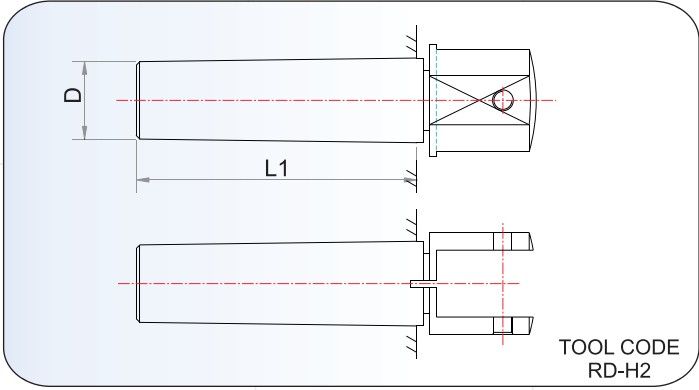
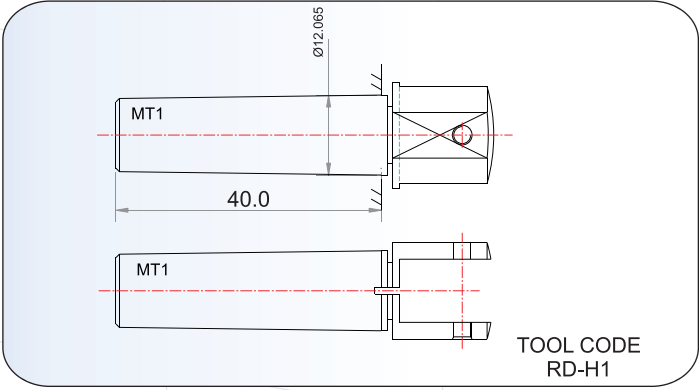


TOOL CODE
RD-02

TECHNICAL DRAWINGS



Adjustable Holder Drawings



DIAMOND GAUGING FINGER



➤ Description

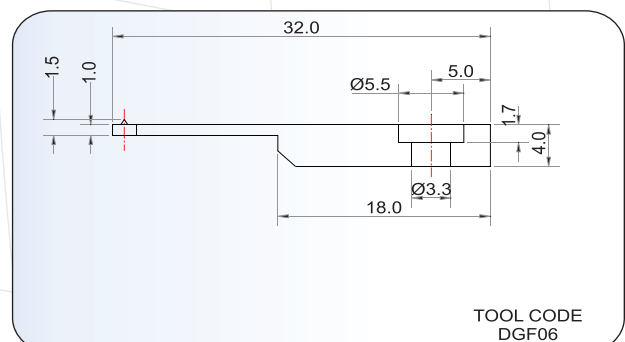
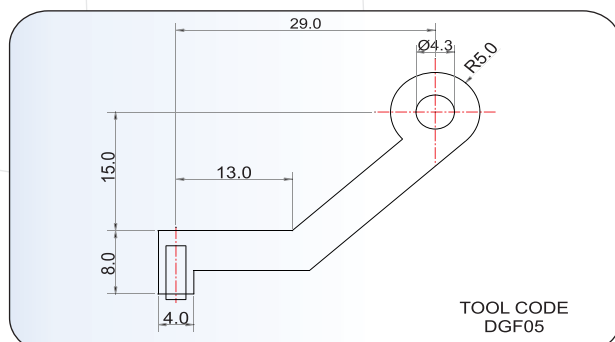
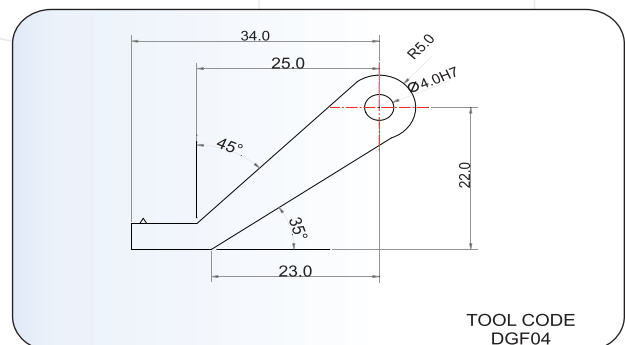
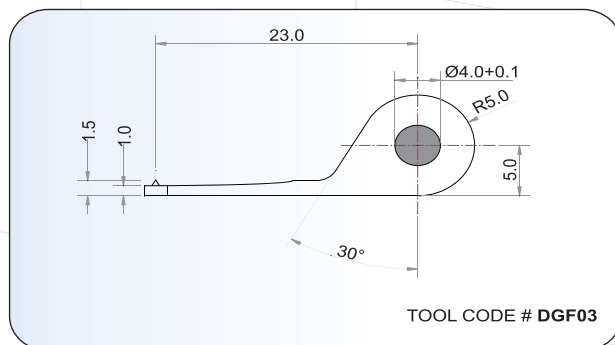
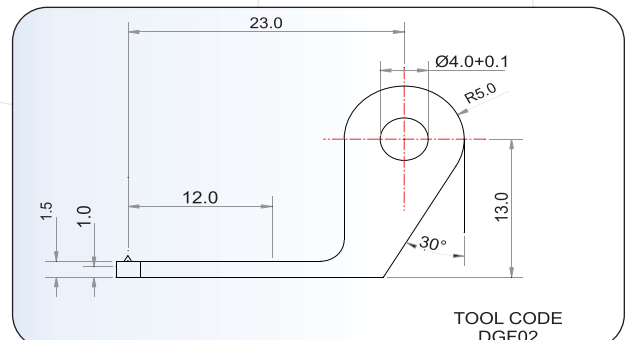
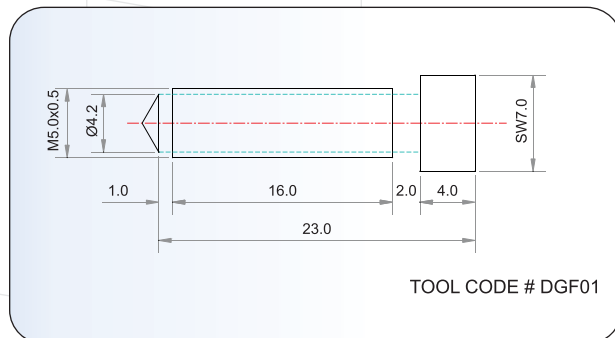
Diamond gauging finger is an instrument for measuring the component during the grinding operation. This system is creating confidence and 100% measurement results in the precision finished products in mass production.

The diamond gauging fingers are in different types in dimensions and shape.

It depends upon the systems attached and component to be measured. All types of gauging fingers are made from GEM quality diamonds duly lapped with included angle and radius on tip and mounted on stainless steel blank which is non-magnetic.

➤ Application area

The major requirements of diamond gauging fingers are in bearing industries for measuring I.D & O.D of inner & outer rings. In automatic grinding machines for digital display gauging fingers acts as sensors. Hence, ensuring the consistency & durability is required for longer life & economy.

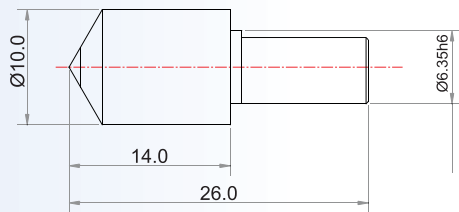


DIAMOND HARDNESS INDENTERS

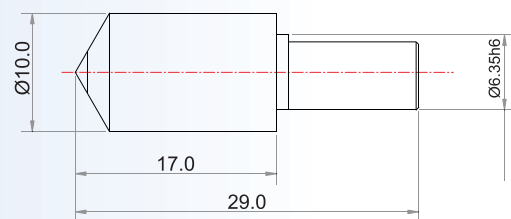


➤ Description

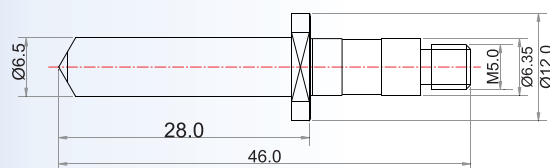
JPT Produces diamond hardness indenter according Rockwell and Viker scale with the application procedures and standards. Due to a premium grade diamond and the correct lapping with the accurate 120 degree the hardness is determined by respective standards.



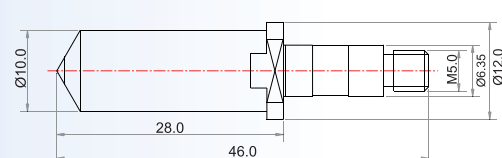
Rockwell Indenter-01
0.2R 120°



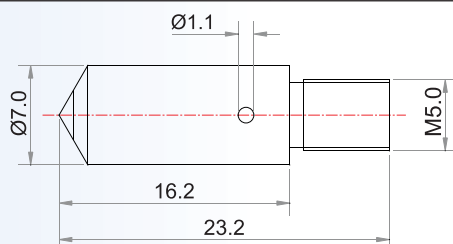
Rockwell Indenter-02
0.2R 120°



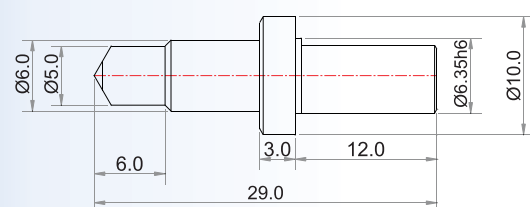
REICHERTER INDENTER-01
0.2R 120



REICHERTER INDENTER-02
0.2R 120°



Doremst
0.2R 120°



Testor-Automat



➤ Description

JPT manufactures wide range of Diamond files that are used for various purposes. These are manufactured using high quality steel which makes them resistant to corrosion and offer durability.

Our range of Diamond Plated Files is known for its sharpness, high tensile strength and abrasiveness. Manufactured using high quality diamond powder along with full mechanical supports.

These files are prepared using 100% virgin “man made” diamond grains plated on top of precision high strength steel blanks. Each file exposes sharp diamond grains that are used for fast stock removal and long wear resistance.

➤ Applications area

- ✓ Hard metal
- ✓ Moulds die plates, punches
- ✓ Quartz and carbon fibers
- ✓ Graphite
- ✓ Glass
- ✓ Hardened and nitrated steel
- ✓ Ceramics
- ✓ Hard and precision stones

ELECTROPLATED DIAMOND/CBN POINTS



➤ Description

"JPT" electroplated diamond & cubic boron nitride (CBN) mounted points (grinding pins) are manufactured in a state-of-the-art plant, incorporating automatic process control & unique plating technology. Specially selected grades of blocky natural or synthetic diamond & CBN are used for our \ pins. This ensures smooth free cutting action with minimal heat buildup & long service life. Our unique plating process provide exceptionally high bond strength, reducing the risk of premature pull-out of diamond / CBN abrasive grains.

The blanks are made of medium carbon steel, which is tougher than ordinary mild steel, in order to minimize bending of the shank during use.

➤ Application Area

- ✓ The pins can be used for external & internal grinding of a wide variety of materials. Diamond pins are used for fibre-glass, bakelite (printed circuit boards), carbides, ferrites, graphite, ceramics, glass, etc.
- ✓ CBN pins are used for high speed steels, tool & die steels, cast irons, hardened steels (45 Rc & up) etc.
- ✓ Standard pins are available in a range of 1mm to 30 mm diameter.

Note: We can manufacture custom made pins to your specifications and we also undertake Diamond CBN coating of blanks supplied by you.

DIAMOND LAPPING PASTE



➤ Description

'JPT' Brand of Diamond Lapping Paste are manufactured from pure accurately graded diamond powder. JPT's diamond lapping paste achieves scratch free surface with the highest degree of super fine finish. Many additional forming compounds are readily available for specific applications with natural and synthetic diamond. This carrier have been specially formulated to maintain a constant viscosity over a wide temperature range, are heat resistant and thus ensures maximum utility of the diamond powder. The above properties make the paste an efficient tool in the very high precision industries where finish and cleanliness are of importance. The lapping of computer read/write heads, tape recorder heads, optical lenses, watch jewels, sapphire, watch glass, tungsten carbide parts etc., can be successfully done with these compounds. Available in 5 gram syringes and 50 gram containers in oil soluble and universally soluble and universally soluble base and in different concentration.

➤ Applications

- ✓ Aluminium Inserts
- ✓ Carbide & Diamond Wire Drawing Dies
- ✓ Ball Bearing Races
- ✓ Ceramic & Carbide Seals
- ✓ Extrusion Dies
- ✓ Punches
- ✓ Valves & Seats
- ✓ Watch Jewels
- ✓ Optical Lenses
- ✓ Wear Parts
- ✓ Plastic Injection Moulds
- ✓ Plug, Ring & Thread Gauges
- ✓ Precious & Semi - Precious Stones

➤ Important Application Factors

- ✓ Material of the lap.
- ✓ Grit concentration and chemical composition of the compound.
- ✓ Size of the powder.
- ✓ Working pressure.
- ✓ Sliding Speed.

DIAMOND AND CBN WHEELS

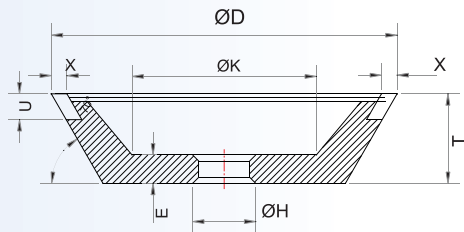


➤ Description

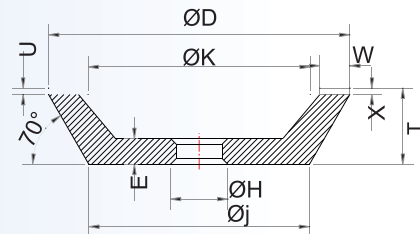
JPT Produces Resin/ Metal Bond Diamond Wheel that is used for maximum performance which reduces production time and increases profits. These wheels help in cutting and grinding various material efficiently and at the lowest possible cost. Bond matrixes are available for dry, mist & flood applications and their advanced bonding technology provides faster cutting and grinding.

➤ Application of Resin bonded wheel/ Metal bond wheel

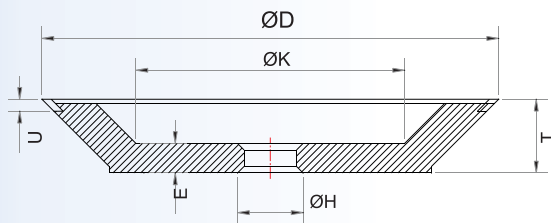
Precision grinding cylindrical, centerless, surface and internal grinding of carbide tools, cutters, dies, gauges etc. Grinding chip breaker grooves Grinding threads in carbide taps and gages Sharpening carbide reamers, drills, inserted tooth milling cutters, etc.
Cut - off, slitting, cutting sintered carbide to size where fast cutting is important. Hand Grinding Sharpening single point tools where fast cutting action is required. Grinding new carbide single point tools on a production basis.



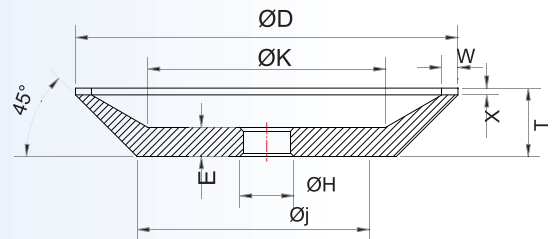
11V9



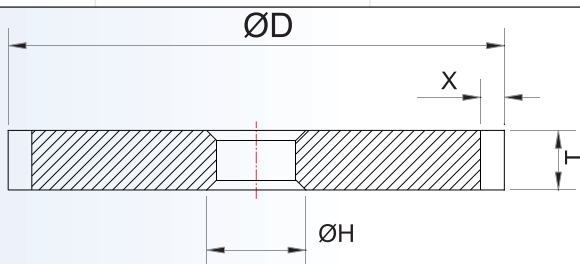
11A2



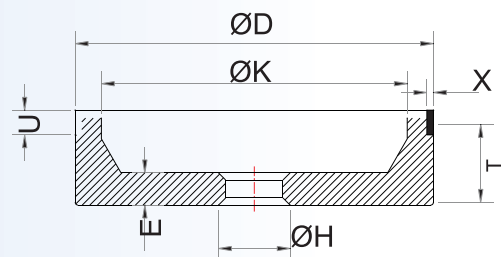
12V9-45°



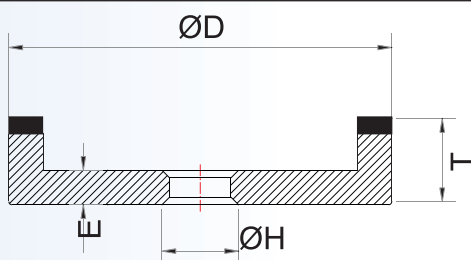
12A2-45°



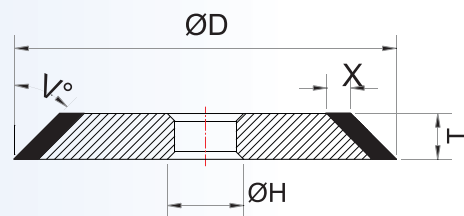
1A1



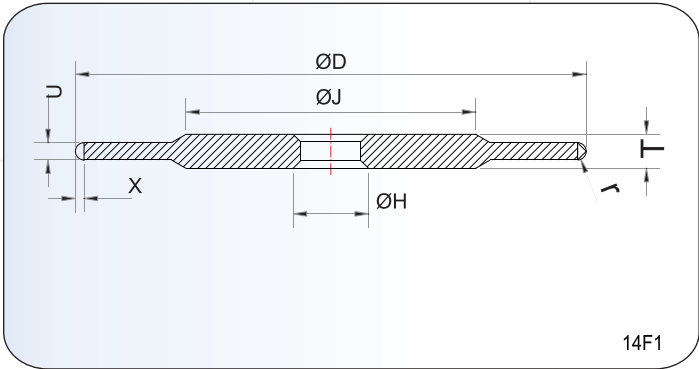
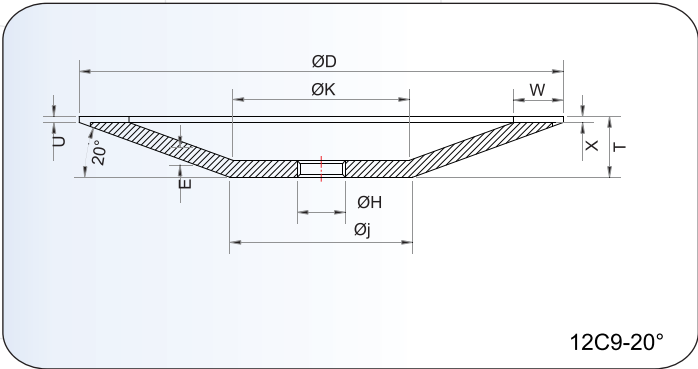
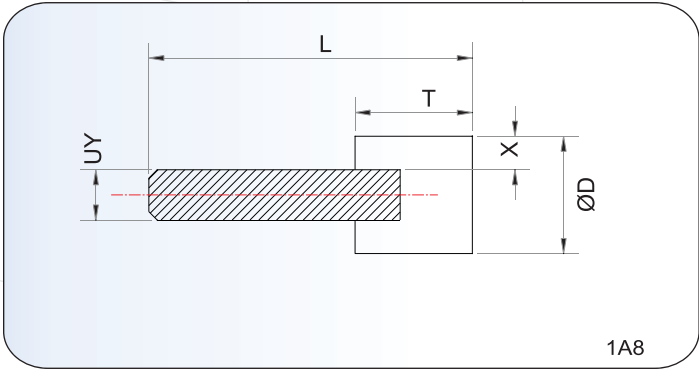
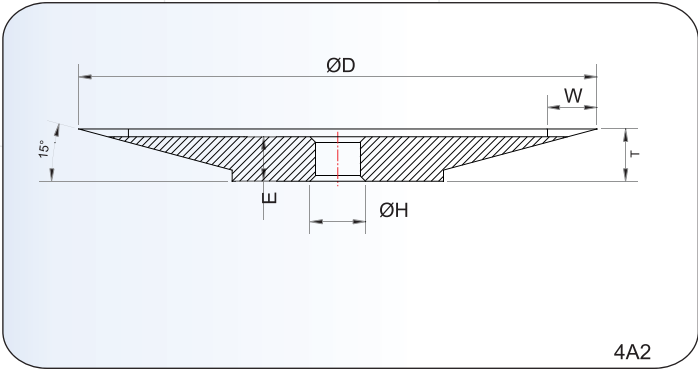
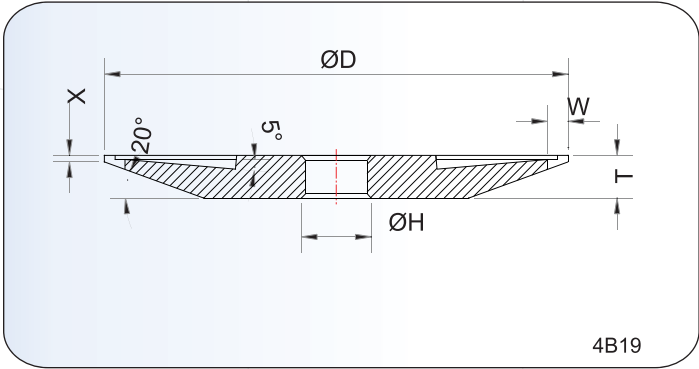
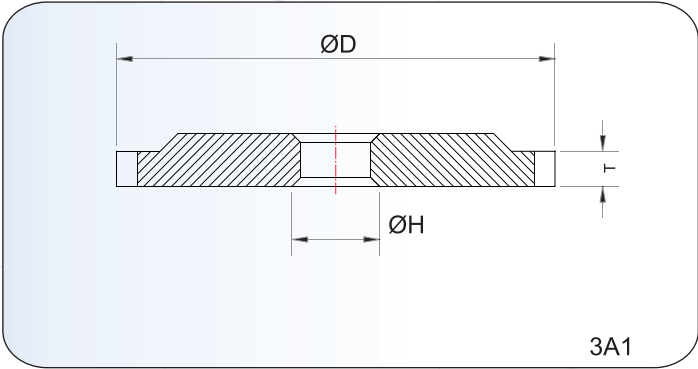
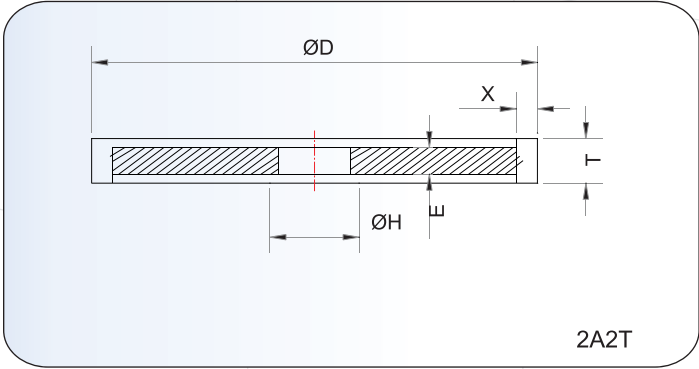
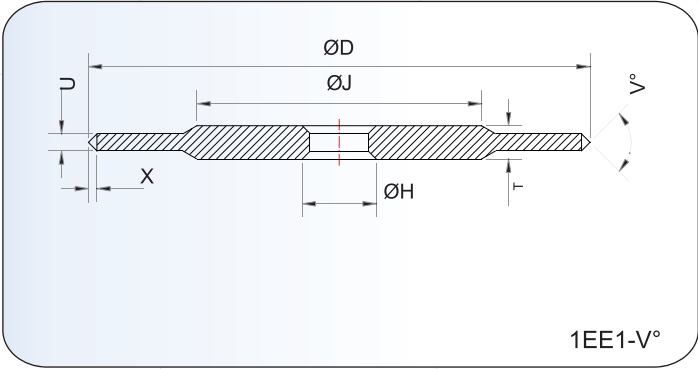
6A9

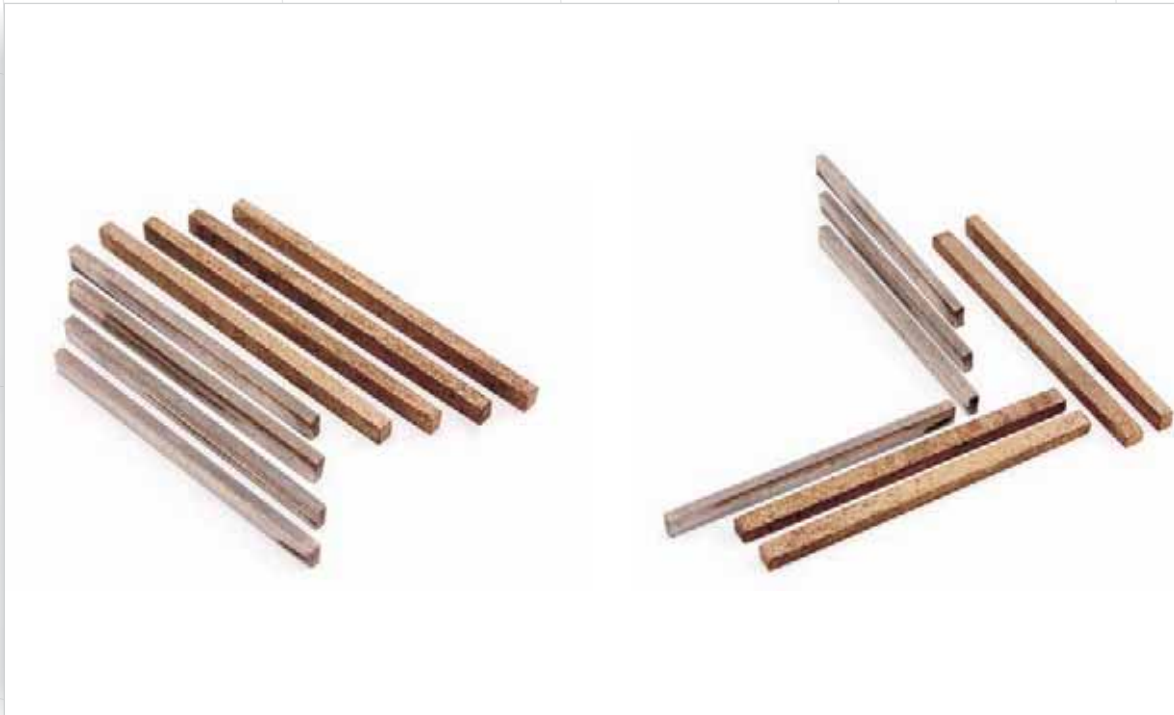


6A2



1v1





➤ Description

The dimension of the honing stone depends on the design of the honing holder / mandrel. In particular, the height of the abrasive layer is defined by the possible in feed path of the holder. For the sake of clarity.

➤ Type of honing stones are given as below :

Standard honing stone

Honing stones having abrasive layer on steel base. Honing stone is soldered on honing shoe / carrier.

To write dimension: W X H X L X A

Slotted standard honing stone

Same as standard honing stone but with a slot longitudinally for better cutting, cooling and chip removal.

To write dimension: W X H X L X AS

Solid honing stone

This stone consists only the abrasive (No steel base) and is also soldered on the honing shoe / carrier or holder segment.

To write dimension: W X H X L X A

➤ **Compact honing stone**

Honing stones for direct fitting into the body of the honing holder. This type of stone is generally used for very small bore honing.

To write dimension: W X H X L X A

Drawing of the stone required for manufacturing.

W = Width (mm) H = Height (mm) L = Length (mm) A = Abrasive height (mm)

S = Slot width (mm)

➤ **Solution Better Use Various influences determine the result of the honing**

The characteristics of a honing stone as well as a fine tuning of all the different parameters make it possible to achieve the required result. In addition to high quality in manufacturing, both a short processing time and a long life of the stones can be achieved.

➤ **Applications**

- ✓ Engines, gears and fuel injection system
- ✓ Cylinders, control valves, pumps & compressors used in hydraulic & pneumatic systems
- ✓ Steering and brake systems
- ✓ Element barrels & Connecting Rods
- ✓ Machines and tools
- ✓ Aerospace and defence



Application of Diamond Dressing Tools

Company

Technical advice to improve results:
Quotation:
Order:

1. Work piece

1.1 Drawing of work piece:
1.2. Work piece material:
1.3. Surface finish required:

Ra, Rt, Rz

2. Machine

2.1 Manufacturer:
2.2 Model/type:
2.3 Grinding process:
2.4 Cooling lubricant:

Angular plunge grinding [] Straight plunge grinding []

3. Grinding wheel

3.1 Dimensions in mm:
3.2 Specification:
3.3 Manufacturer:

4. Diamond Dresser in use

4.1 Designation:
4.2 Dimensions:
4.3. Specification:

mm

5. Dressing process

5.1 Straight dressing:
5.2 Copy dressing / profile dressing:

Circumferential [] On the face []

6. Current dressing insert data

6.1 Grinding wheel cutting speed during dressing v_{sd} =
6.2. Dressing in feed/stroke A_{ed} =
6.2. Dressing in feed/stroke F_{ad} =

m/s

mm

mm

7. General Problem for Dressing:



TECHNICAL POINTS

[illegible]



JAIN PRECISION TOOLS

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