

Single Point Diamond Dresser





Single Point Diamond Dresser

The Single Point Diamond Dresser is more versatile dressing tool, which is used for turning and dressing of grinding wheel. They are made of carefully selected raw diamonds mounted in holders by means of special bonds. The dressing tool takes care of two main functions, it removes abrasive grains which have become completely worn out, and it recreates the correct geometric shape of the grinding wheel.

JDT offers 3 grades to refinish the wheel

- ☞ when the wheel become dull.
- ☞ The pores between the grains become loaded with the material ground.



Selection of the Diamonds

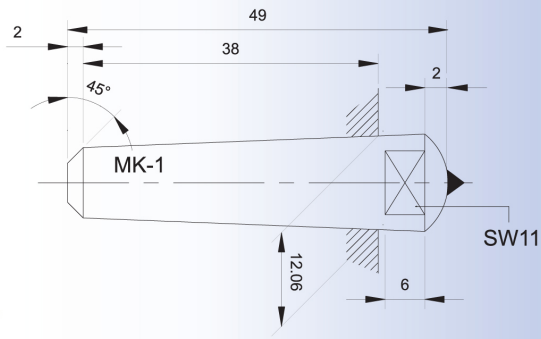
The selection of the diamonds depends upon the dimension of grinding wheel, its hardness, grit size, abrasive type, and individual dressing operation.

We recommend the following thumb rule for selecting the size of diamond

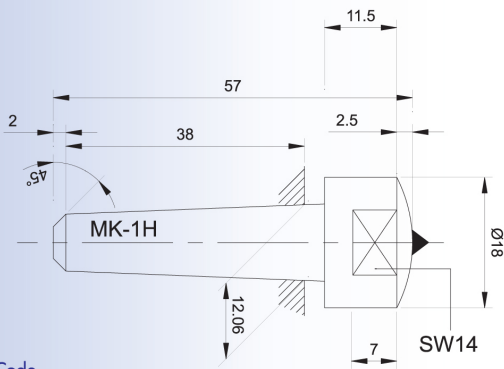
$$(\text{Radius of wheel} + \text{width}) \times 0.004 = \text{Carat size of diamond}$$

(1 carat = 0.2gm)

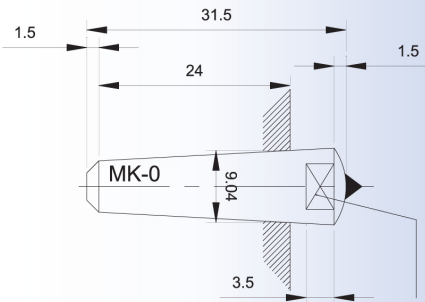
Grinding wheel Dimension in mm			Recommended Diamond size		
Diameter	Width	In Carat	Diameter	Width	In Carat
100	12	0.25	450	50	1.75
150	12	0.30	600	50	2.00
175	12	0.50	600	75	2.50
250	40	0.75	600	150	3.00
350	25	1.00	750	75	3.00
350	30	1.25	750	100	3.50
350	50	1.50	900	75	4.00



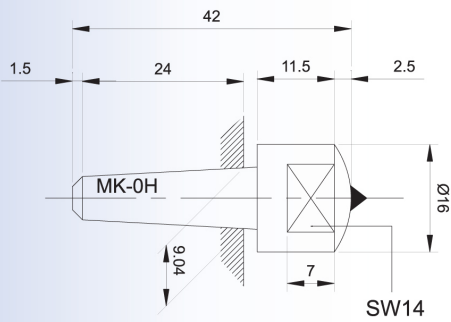
Tool Code
SP101



Tool Code
SP102



Tool Code
SP103



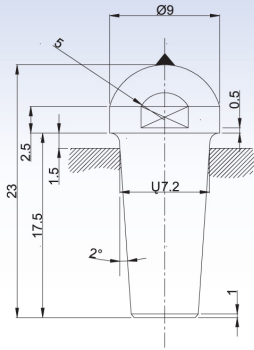
Tool Code
SP104



SINGLE POINT DIAMOND DRESSER

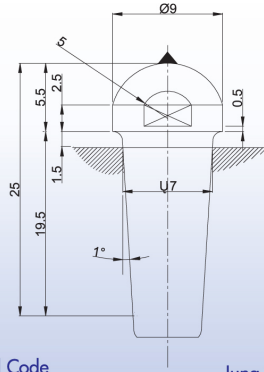


Single Point Tools



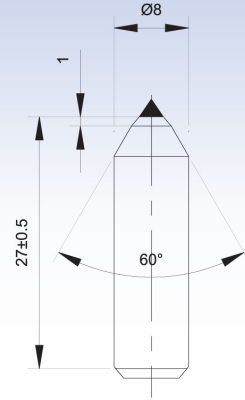
Tool Code
SP105

Jung Taper
1:13.15

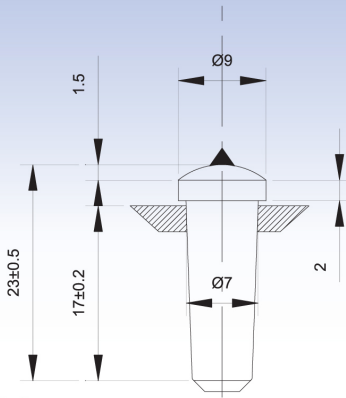


Tool Code
SP106

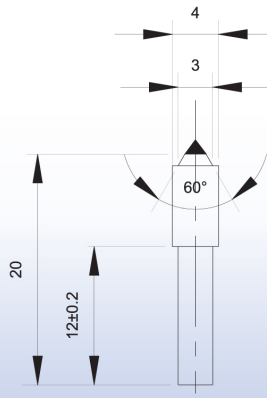
Jung Taper
1:20



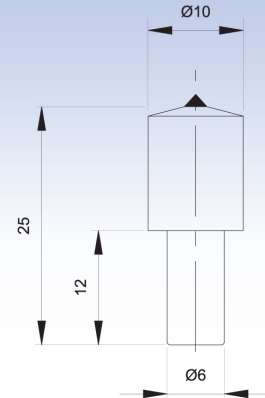
Tool Code
SP107



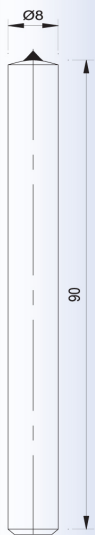
Tool Code
SP108



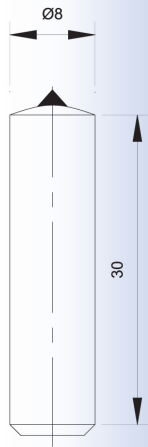
Tool Code
SP109



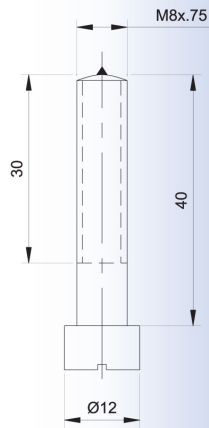
Tool Code
SP110



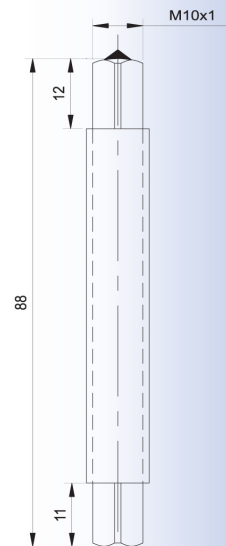
Tool Code
SP111



Tool Code
SP112



Tool Code
SP113



Tool Code
SP114

To get the maximum tool life

- 👉 Use the proper size Diamond.
- 👉 Diamond tools should be mounted rigidly in the tool holder, to reduce the vibration .
- 👉 Select the clamping length 'a'(Distance from diamond point to Fixture) as short as possible to reduce the vibration. (Fig: 1)
- 👉 Incline Tool 10° to 15° to radius of wheel in the direction of wheel rotation to avoid dulling of the Diamond point. (Fig: 2)
- 👉 Rotate the Diamond shank frequently by 90° to present new cutting edge. (Fig: 3)
- 👉 Always apply plenty of coolant while dressing, because Diamonds are very heat sensitive and can be destroyed by excessive heat generation (Fig: 4)
- 👉 For dry dressing do not apply the tool for a long continuous period. Allow the stone to cool naturally before using again. Do not cool the diamond by quenching.
- 👉 The depth of cut per dressing pass should (generally) not exceed the range of 0.02 to 0.03 mm.(20 to 30 micron). Never traverse the grinding wheel without any depth of cut. This would blunt the grinding wheel and lead to burning .
- 👉 If possible dress the wheel at a speed lower than normal grinding speed.
- 👉 Diamond is the hardest material because of this property diamond is brittle. It does not require a very hard blow to damage a Diamond. (Fig: 5)
- 👉 Diamond is sensitive to shock and impact. It may be fractured or broken by striking any hard substance such as the bed of a machine or concrete floor.
- 👉 Protect and store the Diamond tool properly when not in use.

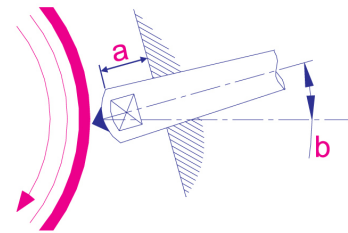


Fig: 1

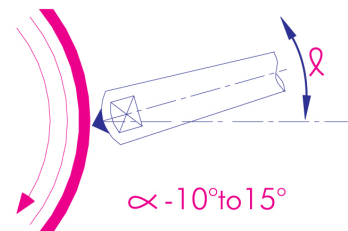


Fig: 2

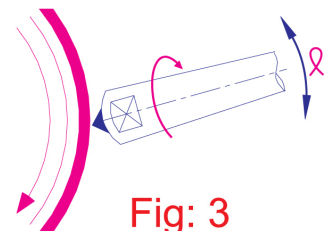


Fig: 3



Fig: 4



Fig: 5