

RT 100 T Deep Hole Drill - Procedures and Cutting Parameters

- Minimum of 250 PSI coolant pressure recommended -



Procedure:

- Machine a pilot hole with an m7 toleranced series 5514 RT 100 drill to a minimum pilot depth of 1 to 1.5 x D.
- Enter the pilot hole at a speed of approx. 300 RPM, and with a feed rate of approx. 19 - 20 IPM
- Start high coolant pressure and increase RPM.
- Continuous drilling to complete hole depth without peck cycle.
- For through holes with oblique exit, reduce the feed rate v_f to 40% approx. 1 mm prior to break-through.
- After reaching hole depth reduce machine spindle RPM and withdraw.



All deep hole drills must utilize a pilot hole.

Deep hole drills must never operate at full speed without support in the pilot hole.

$$\text{IPM} = \text{IPR} \times \text{RPM}$$

$$\frac{\text{HOLE DEPTH in.}}{\text{IPM}} \times 60 = \text{CutTime (seconds)}$$

$$\text{RPM} = \frac{\text{SFM}}{\text{DIAM. in.}} \times 3.82$$

$$\text{mm} = \text{in.} \times 25.40$$

$$\text{m/min.} = \text{SFM} \div 3.28 \quad \text{Bar} = \text{PSI} \div 14.50$$

$$\text{mm/rev.} = \text{IPR} \div 25.40 \quad \text{Liter} = \text{Gal.} \div 3.79$$

RT 100 T Deep Hole Drilling Solutions

