

Rack Feed Drills

- The Rack Feed Drill is a semi-fixtured (nose mounted) portable drilling unit. Utilizing a manual feed through an integral “rack and pinion” mechanism to accommodate the approach drilling and retract cycles. This provides the user with complete control of the feed rate during drilling and allows the user to “feel” the feed rate required. Versatile and flexible, especially when drilling laminates and sandwich materials.
- RFD is suitable for drilling/reaming various materials used in the Aerospace industries e.g. Inconel, Titanium, Steel, Aluminium and Composites.
- A wide speed range from 60 rpm to 2800 rpm is available allowing the best speed to be selected to suit the application.
- RFD-100 provides 102mm (4") of adjustable working stroke length with a 13mm (1/2") chuck capacity.
- RFDT-125 provides 127mm (5") of adjustable working stroke length with a No. 2 Morse Taper drive spindle.
- Automatic motor start/stop – can be set to operate at any point within stroke setting for maximum economy of air.
- Various nose configurations can be provided.



RFD Selection

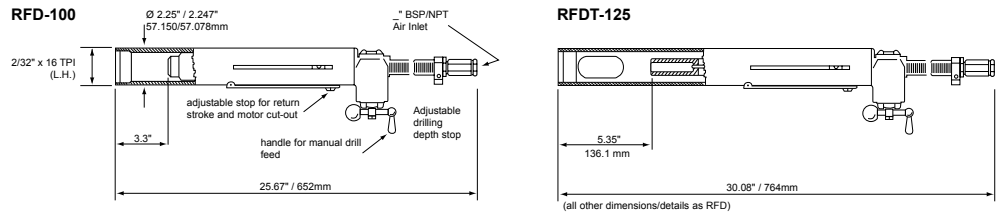
DRILL DIA.	MATERIAL			
	Inconel	Titanium	Mild Steel	Aluminium
	Tool type – r/min			
3mm 1/8"	RFD-330/500 RFDT-330/500	RFD-500 RFDT-500	RFD-2800	RFD-2800
5mm 3/16"	RFD-140/330 RFDT-140/330	RFD-330/500 RFDT-330/500	RFD-1850	RFD-2800
6mm 1/4"	RFD-140 RFDT-140	RFD-140/330 RFDT-140/330	RFD-800 RFDT-800	RFD-1850
8mm 5/16"	RFD-140 RFDT-140	RFD-140/330 RFDT-140/330	RFD-800 RFDT-800	RFD-800 RFDT-800
10mm 3/8"	RFD-85/140 RFDT-85/140	RFD-140 RFDT-140	RFD-800 RFDT-800	RFD-800 RFDT-800
13mm 1/2"	RFD-60/85 RFDT-60/85	RFD-85/140 RFDT-85/140	RFD-500 RFDT-500	RFD-800 RFDT-800
16mm 5/8"		RFD-85/140 RFDT-85/140	RFD-330 RFDT-330	RFD-800 RFDT-800
19mm 3/4"		RFD-60/85 RFDT-60/85	RFD-85/140 RFDT-85/140	RFD-330/500 RFDT-330/500
25mm 1"			RFD-60/85 RFDT-60/85	RFD-140/330 RFDT-140/330

Use selection data as a guide only

All RFD-100 models supplied with 1/2" (13mm) chuck fitted

MODEL	PART NUMBER	FREE SPEED	MAX STROKE		OUTPUT SPINDLE	WEIGHT		AIR CONSUMPTION		AIR INLET	MIN. HOSE BORE		SOUND LEVEL
			in.	mm		lb	kg	cfm	l/s		BSP/NPT	in.	
RFD-100-2800	681214	2800	4	102	1/2"-20 UN	8.6	3.9	25	11.8	1/4	3/8	10	88
RFD-100-1850	681394	1850	4	102	1/2"-20 UN	8.6	3.9	25	11.8	1/4	3/8	10	88
RFD-100-800	680084	800	4	102	5/8"-16 UN	8.6	3.9	25	11.8	1/4	3/8	10	88
RFD-100-500	680164	500	4	102	5/8"-16 UN	8.6	3.9	25	11.8	1/4	3/8	10	88
RFD-100-330	681244	330	4	102	5/8"-16 UN"	8.6	3.9	25	11.8	1/4	3/8	10	88
RFD-100-140	1457364	140	4	102	5/8"-16 UN	8.6	3.9	25	11.8	1/4	3/8	10	88
RFD-100-85	1457374	85	4	102	5/8"-16 UN	8.6	3.9	25	11.8	1/4	3/8	10	88
RFD-100-60	1457384	60	4	102	5/8"-16 UN	8.6	3.9	25	11.8	1/4	3/8	10	88
RFDT-125-800	1445654	800	5	127		12.1	5.5	25	11.8	1/4	3/8	10	88
RFDT-125-500	1445664	500	5	127	No. 2	12.1	5.5	25	11.8	1/4	3/8	10	88
RFDT-125-330	1445674	330	5	127	Morse	12.1	5.5	25	11.8	1/4	3/8	10	88
RFDT-125-140	1445504	140	5	127	Taper	12.1	5.5	25	11.8	1/4	3/8	10	88
RFDT-125-85	1445514	85	5	127		12.1	5.5	25	11.8	1/4	3/8	10	88
RFDT-125-60	1445524	60	5	127		12.1	5.5	25	11.8	1/4	3/8	10	88

Accessories



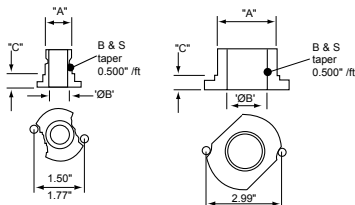
RFD-100 / RFDT-125

ACCESSORIES INCLUDED

	PART NO.	
	RFD	RFDT
• Chuck with key capacity 1/2" (13mm)	29142	
• Extended Nose (1" x 14 TPI LH nose thread)	251043	
• Bayonet Plate – 1.50" (45mm) centers	251063	
• Bayonet Plate – 2.99" (76mm) centers		35323

OPTIONAL ACCESSORIES

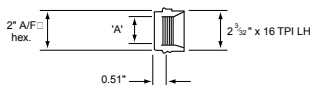
	PART NO.
	RFD
• Chuck Key	29242



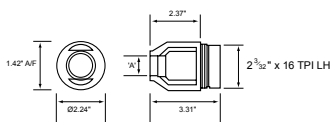
Bayonet Plates

	'A'	'ØB'	'C'	PART NO.
• Locating centers – 1.50" (38mm)	3/4" x 16 TPI (LH)	0.559" (14.2mm)	0.374" (9.5mm)	251053
• Locating centers – 1.50" (38mm)	7/8" x 20 TPI (LH)	0.559" (14.2mm)	0.374" (9.5mm)	30623
• Locating centers – 1.77" (45mm)	1" x 14 TPI (LH)	0.75" (19.05mm)	0.374" (9.5mm)	251063
• Locating centers – 1.77" (45mm)	1 1/8" x 20 TPI (LH)	0.75" (19.05mm)	0.374" (9.5mm)	31113
• Locating centers – 2.99" (76mm)	2 3/32" x 16 TPI (LH)	1.50" (38.1mm)	0.50" (12.7mm)	35323

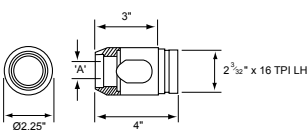
Nose Attachment 1



Nose Attachment 2



Nose Attachment 3

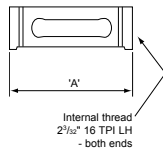


Nose Attachments

Nose type	To suit bayonet plate centers	Thread 'A'	PART NO.
1	1.50" (38mm)	3/4" x 16 TPI (LH)	235773
2	1.50" (38mm)	3/4" x 16 TPI (LH)	251033
2	1.77" (45mm)	1" x 14 TPI (LH)	251043
3	–	1 1/4" x 12 TPI (LH)	235213
3	–	1 1/2" x 12 TPI (LH)	235223
3	–	2" x 16 TPI (LH)	235343

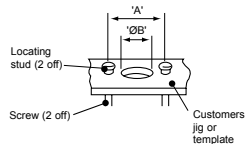
Extension Tubes

Nominal stroke available to drill	Length 'A'	PART NO.
2.36" (60mm)	5.90" (150mm)	250933
3.15" (80mm)	6.69" (170mm)	250923



Jig Plates

Centres 'A'	PART NO.	
	LOCATING STUD	SCREW
1.50" (38mm)	17632	17642
1.77" (45mm)	17632	17642
2.99" (76mm)	18422	18432



1. Push nose into jig



2. Give quarter turn counter clockwise to lock

For dimension 'ØB' please ask for details of our range of drill bushings.

Safety Information

General Safety Instructions for the Operation of Power Tools

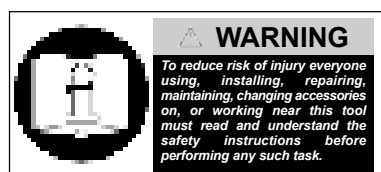
The goal of Chicago Pneumatic and Desoutter is to produce tools that help the operator work safely and efficiently.

The most important safety device for this or any other tool is the operator. Care and good judgement are the best protection against injury.

All possible hazards cannot be covered here, but we have tried to highlight some of the important ones.

Individuals should look for and obey Caution, Warning and Danger signs placed on tools, and displayed in the workplace. Operators should read and follow safety instructions packed with each tool. For a copy of these instructions, contact your local Desoutter representative.

Learn how each tool works. Even if you have previously used similar tools, carefully check out each tool before you use it. Get the 'feel' of it and know its capabilities, limitations, potential hazards, how it operates and how it stops.



All tools are designed to operate at a line pressure of 6.3 bar +/- 0.15bar in accordance with ISO2787. Sound levels +/- 3dB(A)* measured in accordance with CAGI-PNEUROP test code or PNEUROP PN8NTC1.2. Vibration values* measured in accordance with ISO 8662.

*These declared values were obtained by laboratory testing in compliance with stated standards and are not adequate for risk assessments. Values measured in individual work places may be higher than the declared values. The actual exposure values and risk of harm experienced by an individual are unique and depend upon the way the user works, the workplace and the work station design, as well as upon the exposure time and the physical condition of the user. We Desoutter cannot be held liable for the consequences of using declared values, instead of values reflecting the actual exposure, in an individual risk assessment in a work place situation over which we have no control.

Tools are CE marked to comply with European Machinery Directive.

Specifications subject to change without prior notice.

Further occupational health and safety information can be obtained from the following web sites
<http://www.osha.gov> (USA)
<http://europe.osha.eu.int> (Europe).



Compressed Air Hazards

- Air under pressure can cause injury. Never point an air hose at yourself or anyone else. Never blow your clothes free of dust with compressed air. Always direct exhaust air away from yourself and others in the work area.
- Always check for damaged or loose hoses and fittings before using an air tool, and replace if necessary. Whipping hoses can cause serious injury.
- Disconnect the tool from the air supply when not in use, before changing accessories, setting the torque, or when making repairs.
- Do not exceed rated air pressure to increase the output of the tool. This could cause injury and shorten tool life.
- Do not assemble quick coupler on the tool. Vibration can cause breakage resulting in a whipping air hose. Instead, use quick couplers on the end of a short leader hose.
- When universal twist couplings are used, lock pins must be installed to prevent accidental hose disconnection.
- Air tools are not intended for use in explosive atmospheres and are not insulated for contact with electric power sources.



Projectile Hazards

- Always wear impact resistant eye and face protection when involved with or near the operation or repair of tools.



Breathing Hazards

- Proper breathing protection must be worn when working with materials, which produce airborne particles.



Noise Hazards

- Hearing loss can result from prolonged exposure to excessive sound levels.
- Use hearing protection as recommended by your employer or Occupational Health and Safety Regulations.



Vibration Hazards

- Repetitive work motions, awkward positions, and exposure to vibration may be harmful to your hands and arms.
- If numbness, tingling, pain or whitening of the skin occurs, stop using tool and consult a physician.



Entanglement Hazards

- To reduce the risk of injury from entanglement, do not wear loose clothing when using rotating accessories.



Additional Hazards

- Slip/Trip/Fall is a major cause of serious injury or death. Beware of excessive hose/cord left on the walking or work surface.
- Operators and maintenance personnel must be physically fit to perform job tasks, and handle the bulk, weight and power of the tool.
- Deburring tools should be used to reduce the risk of cuts and abrasions due to burrs.
- Wear gloves to protect hands from sharp edges.

Specific Safety Instructions for Power Tool Groups

In addition to the General Safety Instructions, the following are safety instructions and warnings that apply to the safe operation of specific power tool groups.



Compression Tools

- To reduce the risk of injury always keep hands and fingers away from yoke and moving jaws, sets or dies. If possible, hold the tool body with both hands.
- Inspect the yoke daily for cracks. Injury may result if a cracked yoke fails during use.
- All yokes have a life limitation based on cycles and riveting force. This tool and its accessories must not be modified.
- The operator must always read and understand the safety instructions supplied with the tool.



Drills & Tappers

- Keep away from rotating bit and chuck. You can become cut or burned if you come into contact with the drill bit or tap, chips/swarf, or work surface.
- Use intermittent drill feed pressure to avoid long shaved chips/swarf.

- The drill bit or tap can suddenly bind and cause the workpiece or tool to rotate, causing arm and shoulder injuries.
- ANSI recommends use of a support handle on drills with a chuck larger than 3/8" (10mm).



Percussive Tools (Riveting Hammers, Air Scribe)

- All chisels, rivet sets and other associated accessories should be checked for cracks, excessive wear, or other physical damage before each use. Accessories that show signs of damage should be replaced immediately.
- Never use a tool without the proper accessory retainer.



Other Tools (Saws, Deburring, Rivet Milling/Shaving, Vacuum Cleaner)

- Specific instructions/warnings affecting this group of tools are contained in product specific documents accompanying each product.



Accessories

- Always use accessories of correct size and design for the tool. Tool and accessories must not be modified in any way.
- Never use a tool without the proper accessory retainer.
- Do not use a tool or attachment for a purpose not intended by the manufacturer.



For further information on Ergonomics and Workplace Design ask for Desoutter publication LT198