

Spiral Panel Pilot Router Bits



Drill end point which allows you to plunge into material. Open cutting operations such as windows and doors.

High Speed Steel - 1/4" Spiral Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH212	1/4	3/4	2-5/8	1-1/8

High Speed Steel - 3/8" Spiral Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH213	3/8	7/8	3-1/2	1-5/8

High Speed Steel - 1/2" Spiral Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH214	1/2	1-3/4	4-1/2	1-1/2

1 Flute Straight Router Bits



Drill end point which allows you to plunge into material.
Open cutting operations such as windows and doors.

High Speed Steel - 1/4" Straight Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH195	1/4	3/4	2-5/8	1

High Speed Steel - 3/8" Straight Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH198	3/8	7/8	3	1-1/8

High Speed Steel - 1/2" Straight Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH211	1/2	1	3-1/2	1-1/8

2 Flute Straight Cut "V" Flute Router Bits

A



B



Made from High Speed Steel. Use 2 flute router bits when you require a good final cut. A versatile router bit excellent for various types of cuts such as dados, rabbets, plunge routing, mortise cuts, edging, trimming, sizing, etc. Recommended for natural woods, plastics and aluminum.

C

High Speed Steel - 1/4" Shank

D

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH111	3/16	5/8	2	11/16
RH117	1/4	3/4	2	1
RH119	1/4	1	2-1/4	7/8

E

F

High Speed Steel - 3/8" Shank

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Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH126	3/8	1-1/4	2-3/4	11/16

H

High Speed Steel - 1/2" Shank

I

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH129	1/4	3/4	2-3/8	9/16
RH132	5/16	1-1/4	2-3/4	1/2
RH135	3/8	1-1/2	3	1/2
RH141	1/2	1-1/4	2-3/4	1/2
RH144	1/2	2	4	1-1/16
RH147	5/8	1-1/4	2-3/4	1/2
RH149	3/4	1-1/4	2-3/4	5/8
RH153	7/8	1-1/2	3	1-1/4
RH156	1	1-1/4	2-3/4	1-1/4
RH159	1-1/4	1-1/4	2-3/4	1-5/16

J

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1 Flute Straight Cut "O" Flute Router Bits



Made from High Speed Steel. Use 1 flute router bits when you require a freer cutting bit using high feed rates. A versatile router bit excellent for various types of cuts such as dados, rabbets, plunge routing, mortise cuts, edging, trimming, sizing, etc. Recommended for natural woods, plastics and aluminum.

High Speed Steel - 1/4" Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH162	1/16	1/4	1-15/16	1-3/16
RH165	3/32	3/8	2	7/8
RH168	1/8	5/8	2-3/16	1-1/4
RH171	5/32	1/2	2	7/8
RH174	3/16	3/4	2-13/16	1-7/16
RH179	1/4	3/4	2	13/16
RH183	1/4	1	2-1/4	13/16
RH186	1/4	1-1/4	2-1/2	7/8

High Speed Steel - 1/2" Shank

Part No.	Cutting Diameter	Cut Edge Length	Overall Length	Shank Length
RH192	1/2	1-1/4	3-1/8	13/16

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Twist Drills & European Hinge Bits



Has a 10 x 26 shank with a machined flat and adjusting screw. For European boring machines. Used for the concealed hinge systems.

Carbide Tipped European Hinge Bits

Part No.	Cutting Diameter	Overall Length	Shank Diameter	Shank Length
BC212	15	57.5	10	26
BC213L	15	57.5	10	26
BC214	20	57.5	10	26
BC215L	20	57.5	10	26
BC216	25	57.5	10	26
BC219L	25	57.5	10	26
BC222	35	57.5	10	26
BC225L	35	57.5	10	26

Twist Drills & European Hinge Bits

A



Shanks are 10mm with a machined flat and adjusting screw.
Provides clean through holes on the back side of the material.

B

For Through Holes - Carbide Tipped

C

	Part No.	Cutting Diameter	Overall Diameter	Flute Length	Shank Size
	BC186	5	57.5	10	R
D	BC189L	5	57.5	10	L
	BC192	5	70	10	R
E	BC195L	5	70	10	L
	BC198	8	70	10	R
F	BC211L	8	70	10	L

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Countersink, Counterbore Drills & Brad Point Dowel Drills



Shanks are 10mm with a machined flat and adjusting screw. For use on European boring machines. Used for adjustable shelving and concealed hinges.

Standard Drills - Carbide Tipped Dowel

Part No.	Cutting Diameter	Overall Length	Flute Length	Shank Size
BC149	5	57.5	30	10x20
BC153L	5	57.5	30	10x20
BC156	6	57.5	30	10x20
BC159L	6	57.5	30	10x20
BC162	8	57.5	30	10x20
BC165L	8	57.5	30	10x20
BC168	10	57.5	30	10x20
BC171L	10	57.5	30	10x20

Long Drills - Carbide Tipped Dowel

Part No.	Cutting Diameter	Overall Length	Flute Length	Shank Size
BC174	5	70	35	10x30
BC177L	5	70	35	10x30
BC179	8	70	35	10x30
BC183L	8	70	35	10x30

Countersink, Counterbore Drills & Brad Point Dowel Drills

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Double fluted for fast chip removal. Drill is held by split and set screw. Bores smooth flat bottom holes.

Adjustable Counterbore - 1/2" x 2" Shank - Carbon Steel

Part No.	C-Sink Diameter	Drill Size	Twist Length	Overall Length
B236	3/8	3/16	2-1/2	4-1/2
B239	7/16	7/32	2-1/2	4-1/2
B242	1/2	3/16	2-1/2	4-1/2
B245	1/2	7/32	2-1/2	4-1/2
B248	1/2	1/4	2-1/2	4-1/2

Center Drill not included

Countersink, Counterbore Drills & Brad Point Dowel Drills



82 degree countersink design. Double fluted for fast chip removal. Drill is held by split and set screw. For seating flathead screws.

Adjustable Countersink - 1/2" x 2" Shank - Carbon Steel

Part No.	C-Sink Diameter	Drill Size	Twist Length	Overall Length
B229	3/8	3/16	2-1/4	4-1/2
B233	1/2	3/16	2-1/4	4-1/2

Center Drill not included

- A
- B
- C
- D
- E
- F
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- H**
- I
- J
- K

Drill & Brad Point Center Drills

A



B

Provides longer tool life and wear over carbon steel. Shank diameter is the same as the cutting diameter. Designed for cross-grain boring and other boring operations. Used with the counterbore and countersink tools on page 32.

C

4-1/2" Long - High Speed Steel - Straight Shank Drill Point

Part No.	Cutting Diameter	Twist Length	Overall Length	Shank Size
BH131	1/8	2-1/4	4-1/2	1/8
BH132	3/16	2-1/4	4-1/2	3/16

E

6" Long - High Speed Steel - Straight Shank Drill Point

Part No.	Cutting Diameter	Twist Length	Overall Length	Shank Size
BH113	1/8	2-1/4	6	1/8
BH111	3/16	2-1/4	6	3/16
BH115	5/32	2-1/4	6	5/32
BH116	7/32	2-1/4	6	7/32

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Drill & Brad Point Center Drills



Provides longer tool life and wear over carbon steel. Shank diameter is the same as the cutting diameter. Used with counterbore and countersink tools.

4-1/2" Long - High Speed Steel - Straight Shank Brad Point

Part No.	Cutting Diameter	Twist Length	Overall Length	Shank Size
BH126	1/8	2-1/4	4-1/2	1/8
BH129	3/16	2-1/4	4-1/2	3/16

6" Long - High Speed Steel - Straight Shank Brad Point

Part No.	Cutting Diameter	Twist Length	Overall Length	Shank Size
BH112	1/8	2-1/4	6	1/8
BH114	5/32	2-1/4	6	5/32
BH117	3/16	2-1/4	6	3/16
BH119	7/32	2-1/4	6	7/32
BH123	1/4	2-1/4	6	1/4

Brad Point Spur Machine Drills



Provides longer tool life and wear than super wear steel. Use for man-made materials such as plastics, chip core and other hard to drill materials.

Carbide Tipped

Part No.	Cutting Diameter	Twist Length	Overall Length	Shank Size
BC111	1/4	3	5	1/2x2
BC114	5/16	3	5	1/2x2
BC117	3/8	3	5	1/2x2
BC119	7/16	3	5	1/2x2
BC123	1/2	3	5	1/2x2
BC126	5/8	3	5	1/2x2
BC129	3/4	3	5	1/2x2
BC132	1/4	4	6	1/2x2
BC135	5/16	4	6	1/2x2
BC138	3/8	4	6	1/2x2
BC141	7/16	4	6	1/2x2
BC144	1/2	4	6	1/2x2
BC147	5/8	4	6	1/2x2

Brad Point Spur Machine Drills



Provides longer tool life and wear than the carbon steel drills. Used for cross-grain boring and other work where smooth accurate holes are required. Two spurs cut in advance of the chip lifter.

Super Wear Steel

Part No.	Cutting Diameter	Twist Length	Overall Length	Shank Size
BW147	3/16	3	5	1/2x2
BW149	1/4	3	5	1/2x2
BW153	9/32	3	5	1/2x2
BW156	5/16	3	5	1/2x2
BW159	11/32	3	5	1/2x2
BW162	3/8	3	5	1/2x2
BW165	7/16	3	5	1/2x2
BW168	1/2	3	5	1/2x2
BW171	1/4	4	6	1/2x2
BW174	9/32	4	6	1/2x2
BW177	5/16	4	6	1/2x2
BW179	11/32	4	6	1/2x2
BW183	3/8	4	6	1/2x2
BW186	13/32	4	6	1/2x2
BW189	7/16	4	6	1/2x2
BW192	1/2	4	6	1/2x2
BW195	17/32	4	6	1/2x2
BW198	9/16	4	6	1/2x2
BW211	5/8	4	6	1/2x2
BW212	11/16	4	6	1/2x2
BW213	3/4	4	6	1/2x2
BW214	13/16	4	6	1/2x2
BW215	7/8	4	6	1/2x2
BW216	15/16	4	6	1/2x2
BW219	1	4	6	1/2x2

Brad Point Spur Machine Drills

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These machine drills are ground from hardened steel to maintain their accuracy. Two spurs cut in advance of the chip lifter. Versatile machine drills widely used for cross-grain boring and other applications that require smooth accurate holes.

Carbon Steel

C

Part No.	Cutting Diameter	Twist Length	Overall Length	Shank Size
B147	3/16	3	5	1/2x2
B149	7/32	3	5	1/2x2
B153	1/4	3	5	1/2x2
B156	5/16	3	5	1/2x2
B159	7/16	3	5	1/2x2
B162	3/16	4	6	1/2x2
B165	7/32	4	6	1/2x2
B168	1/4	4	6	1/2x2
B171	5/16	4	6	1/2x2
B174	11/32	4	6	1/2x2
B177	3/8	4	6	1/2x2
B179	7/16	4	6	1/2x2
B183	1/2	4	6	1/2x2
B186	9/16	4	6	1/2x2
B189	5/8	4	6	1/2x2
B192	3/4	4	6	1/2x2
B195	1	4	6	1/2x2

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Brad Point Dowel Drills



Extended shank provides stability and rigidity especially when using small cutting diameters. Designed primarily for the Bell 24 Double End Miter and Boring Machine. Can also be used on other machines where runout/walking is a problem. Provides Rigidity.

Super Wear Steel - Screw Shank

Part No.	Cutting Diameter	Twist Length	Overall Length	Threaded Shank	Rotation Direction
BW111	3/16	3	4-1/2	7/16-14	R
BW114	1/4	1-1/4	4-1/2	7/16-14	R
BW117	9/32	3	4-1/2	7/16-14	R
BW123	3/8	3	4-1/2	7/16-14	R
BW126	7/16	3	4-1/2	7/16-14	R
BW129	1/2	3	4-1/2	7/16-14	R

Brad Point Dowel Drills



Manufactured from Super Wear Steel. Requires less tool changes for sharpenings. Provides excellent wear and tool life characteristics.

Super Wear Steel - Extended Screw Shank

Part No.	Cutting Diameter	Twist Length	Overall Length	Threaded Shank	Rotation Direction
BW138	3/8	1-3/4	4-1/2	7/16-14	R
BW141	7/16	1-3/4	4-1/2	7/16-14	R
BW144	3/8	1-3/4	4-1/2	7/16-14	L

Brad Point Dowel Drills



Made of the finest carbon steel and heat treated. Precision ground for exacting tolerances. Shoulder on shank has a pin hole for easy removal on the machinery. Used for drilling clean holes in natural wood for doweling operations. Economical drill with good wear and tool life characteristics.

Carbon Steel-Screw Shank

Part No.	Cutting Diameter	Twist Length	Overall Length	Threaded Shank	Rotation Direction
B111	1/8	3	4-1/2	7/16-14	R
B141L	3/8	3	4-1/2	7/16-14	L

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Replacement Bearings



Replacement sealed bearings for long life and trouble free performance.

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Part No.	Reference Number	Outside Diameter	Inside Diameter	Bearing Type
RP117	B1	3/8	1/8	Sealed
RP119	B2	3/8	3/16	Sealed
RP123	B3	1/2	3/16	Sealed
RP125	B9	1/2	1/4	Sealed
RP126	B4	3/4	1/4	Sealed
RP129	B5	7/8	5/16	Sealed
RP132	B6	5/8	1/4	Sealed
RP135	B7	5/8	3/16	Sealed
RP138	B8	3/4	3/16	Sealed
RP137	B11	1-1/8	1/2	Sealed
RP139	B20	3/4	5/16	Sealed
RP140	B25	1-1/8	5/16	Sealed
RP142	B26	1-3/8	5/16	Sealed
RP143	B27	5/8	5/16	Sealed

Replacement Cutters



Slotting cutters are an excellent choice for cutting slots to accept “T” mouldings, Extrusions, etc. Available in a variety of kerfs that are typically found in this industry. By selecting various bearing sizes the depth of cut can be controlled.

3 Wing Slotting

Part No.	Cutting Diameter	Bore Size	Kerf Decimal	Fractional Inch
RC990	1-7/8	5/16	.062	1/16
RC991	1-7/8	5/16	.094	3/32
RC992	1-7/8	5/16	.125	1/8
RC993	1-7/8	5/16	.156	5/32
RC994	1-7/8	5/16	.250	1/4

Replacement arbor with a threaded 5/16 end and includes a B5 bearing which will produce a 1/2 depth of cut. Use the following chart to determine the correct bearing to order for additional depths of cut.

- Use B5 bearing for a 1/2 depth of cut
- Use B20 bearing for a 9/16 depth of cut
- Use B25 bearing for a 3/8 depth of cut
- Use B26 bearing for a 1/4 depth of cut
- Use B27 bearing for a 5/8 depth of cut

Arbors for Slotting

Part No.	Shank Size	Threaded End	Overall Length	Includes Bearing
RP101	1/4	5/16	2-3/8	B5
RP102	3/8	5/16	2-3/8	B5
RP103	1/2	5/16	2-3/8	B5
RP104	1/2	5/16	4	B5

Includes a B5 bearing for a 1/2" depth of cut

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2 Flute Half Round & "V" Groove Router Bits



90° "V" Groove



60° "V" Groove

The 90B produces a true 90B cut and is designed for decorative work only. It is not intended for use with V-fold or mitering systems. Use for freehand and machine routing. Designed for intricate sign making and decorative cuts. Use the 60B for veining, incised sign lettering and decorative cuts.



60° & 90° Angles "V" Groove

Part No.	Cutting Diameter	Shank Diameter	Cutting Depth	Overall Length
90° "V" Groovers - Decorative				
RC486*	1/4	1/4	1/4	1-1/2
RC489	3/8	1/4	1/2	1-11/16
RC492	1/2	1/4	1/2	1-3/4
RC495	3/4	1/2	5/8	2-1/8
RC499	1-1/2	1/2	1	3
60° "V" Groovers - Veining and Sign Lettering				
RC501*	1/4	1/4	1/4	1-1/2
RC502*	1/2	1/4	1/2	2
RC503	1/2	1/2	1/2	2-1/4

*Solid Carbide Router Bit

Nexus Series Router Bits

Mortise Compression Spirals



Technical Information

Nexus Series solid carbide router bits are designed for fast feed rates with an excellent finish. The short upcut allows a mortise cut with downcut action. Best for mortising and routing of double sided laminates and hardwoods.

All measurements are in inches unless otherwise specified.

Part No.	Flutes	Hole Diameter	Edge Length	Upcut Length	Shank Size	Overall Length	Helix Angle
551-2A00	Two Flute	1/4	7/8	.200"	1/4	2-1/2	30°
551-2A01	Two Flute	3/8	7/8	.200"	3/8	3	30°
551-2A02	Two Flute	1/2	7/8	.200"	1/2	3	30°
551-2A03	Two Flute	1/2	1-3/8	.200"	1/2	3-1/2	30°
551-2A04	Two Flute-LH	1/2	1-3/8	.200"	1/2	3-1/2	30°
551-2A05	Two Flute	3/8	1-1/4	.200"	1/2	3	30°
551-2A06	Two Flute	1/2	1-1/8	.200"	1/2	3-1/2	30°
551-3700	Three Flute	3/8	7/8	.200"	3/8	3	30°
551-3701	Three Flute	1/2	7/8	.200"	1/2	3	30°
551-3702	Three Flute	1/2	1-3/8	.200"	1/2	3-1/2	30°
551-3703	Three Flute	1/2	1-1/8	.200"	1/2	3	30°

Nexus Series Router Bits

Compression Spirals



All measurements are in inches unless otherwise specified.

Technical Information

Nexus Series solid carbide router bits are designed for fast feed rates and optimum edge finishes on both sides of laminated material. Use for routing double sided laminated materials, hardwoods and wood composites.

Part No.	Flutes	Hole Diameter	Edge Length	Shank Size	Overall Length	Helix Angle
551-2900	Two Flute	1/4	7/8	1/4	2-1/2	30°
551-2901	Two Flute	3/8	1-1/8	3/8	3	30°
551-2902	Two Flute	1/2	1-3/8	1/2	3-1/2	30°
551-2903	Two Flute	1/2	1- 5/8	1/2	4	30°
551-2904	Two Flute - LH	1/2	1-5/8	1/2	4	30°
551-2905	Two Flute	5/8	2-1/2	5/8	5	30°
551-2906	Two Flute	3/4	2-1/2	3/4	6	30°
551-2907	Two Flute	1/2	1-1/8	1/2	3	30°
551-3600	Three Flute	3/8	1-1/8	3/8	3	30°

AirPRO

Cost-Effective & User-Friendly
DUST EXTRACTION



Works with
STANDARD ROUTER BITS

Greatly Reduces Floor and Airborne Dust

Cleaner Workpiece and Safer Work Environment

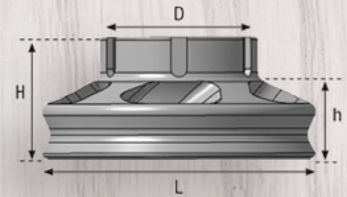
*Use with **ER32**, **ER40**, or **SYOZ25** Collet Chucks*

Dust Removal can become a time-consuming health and safety problem if the dust extraction on your CNC router is inadequate. The new AirPRO from Techniks removes dust from nested cutting operations so it never has a chance to accumulate. Sawdust is ventilated directly into the CNC dust collection hood by the AirPRO, leaving a cleaner cut and clean air behind.



Part Number	Description	Min RPM	Max RPM	D	L	H	h	Weight
453200	ER32 AirPRO	18,000	24,000	1.97"	3.77"	1.77"	1.24"	1.1 lb
454000	ER40 AirPRO	18,000	24,000	2.48"	4.06"	1.81"	1.13"	1.4 lb
452500	SYOZ25 AirPRO	18,000	24,000	2.36"	3.92"	1.97"	1.13"	1.3lb

Part Number	Description	Optimal Gap	Max Chip Load	Wrench	Adapter	Torque
453200	ER32 AirPRO	.070"	.020"	200TH	04604-32	100 lb.ft
454000	ER40 AirPRO	.070"	.020"	200TH	04605-40	130 lb.ft
452500	SYOZ25 AirPRO	.070"	.020"	200TH	03690-25	90 lb.ft



SETUP INSTRUCTIONS

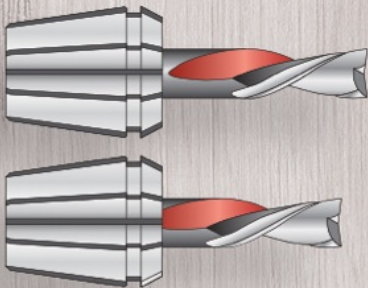
1 Every time you setup an AirPRO, inspect the AirPRO, toolholder, collet, and cutting tool for signs of wear or other damage. Do not use worn or damaged tools with the AirPRO.



2 Remove all dust or other contaminants from the AirPRO, ER collet, and toolholder, making sure the threads are clean.

3 Snap the collet into the AirPRO.

4 Insert the cutter into the collet making sure the tool reaches all the way to the bottom of the collet so proper holding power is applied.



5 Use the cutter pre-set jig (sold separately) to accurately set the cutter to the correct depth to maintain .070" clearance between AirPRO and material. Clearance from .060" up to .200" is acceptable, but .070" is optimal.

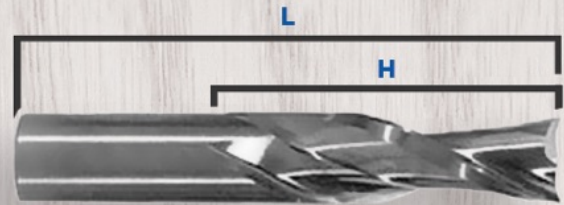
6 Hand tighten the AirPRO, collet, and cutter assembly into your toolholder.

7 Insert the assembly into a tightening stand and tighten to correct specification using a torque wrench (see above table for torque specifications).



RECOMMENDED CUTTING TOOL DEPTH

For optimal performance setup the AirPRO and cutting tool depth to maintain .070" gap between the face of the AirPRO and the material surface.



Material Depth	L Min	L Max	H Min	H Max
1/4"	2 1/2"	2 1/2"	1/2"	1"
3/8"	2 1/2"	2 1/2"	1/2"	1 1/8"
12mm	2 1/2"	3"	5/8"	1 1/4"
1/2"	2 1/2"	3"	5/8"	1 1/4"
5/8" - 16mm	3"	3"	3/4"	1 3/8"
18mm	3"	3"	7/8"	1 1/2"
3/4" - 19mm	3"	3"	1"	1 5/8"
20mm	3"	3"	1"	1 5/8"
1" - 25mm	3"	3 1/2"	1 1/8"	1 3/4"
1 1/8"	3 1/2"	3 1/2"	1 1/4"	1 7/8"
1 1/4" - 32mm	3 1/2"	3 1/2"	1 3/8"	2"

AirPRO

The safe operation and effective use of the AirPRO requires set-up in strict compliance with AirPRO set-up instructions, use within AirPRO operating parameters, and a dust containment system kept in good operating condition with sufficient negative air pressure maintained at all times to allow dust directed into the dust collection hood to be evacuated into the dust containment system. The AirPRO should be used only with on-size precision ER collets, with the AirPRO, collet and cutter assembly tightened to required torque specifications using a tightening stand, torque wrench and proper adaptor. Techniks Industries hereby disclaims any liability resulting from use of the AirPRO in a manner inconsistent with the foregoing requirements. Use of the AirPRO outside specified AirPRO operating parameters constitutes misuse, for which no liability shall attach to Techniks Industries.

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