

MARCH 2024 ANDREWS.AERO





George Andrews founded Andrews Tool Co in 1977 with a forward-thinking, problem-solving mentality and coined the company motto "Our Next Design Is Your Requirement". Together with trusted machinist and engineer Robert "Bob" Sander, he led the company with that overriding sense of purpose until his passing. In 2018, the Kanthack family purchased Andrews Tool Co (ATC) from the Andrews family and in 2021 relocated the company from Arlington, TX to nearby Fort Worth, TX and changed the name to Andrews Aerospace to reflect the company's expanded potential.

Andrews Aerospace's goal is to provide airframe manufacturers with ergonomic, reliable, high precision, portable power feed and positive feed drill motors that limit injury and decrease manufacturing costs.

ATC's extensive lightweight and durable product line includes both air power feed drill and positive feed drill designs in pneumatic and electric enhanced Automated Drilling Unit (eADU®) configurations. ATC's tools are used across various aerospace programs in surface preparation, spot facing, countersinking, and drilling in various material types and mixed material stacks. ATC drilling units are designed to drill close tolerance holes quickly and efficiently within specification the first time, reducing and eliminating non-conforming holes and extremely costly rework, thus lowering the cost per hole.

Andrews Aerospace remains committed to carry forward and expand upon a 40 plus year customer centric, solution-based legacy by designing, delivering, and supporting the capabilities to transport, defend and explore.



Partners



LOCKHEED MARTIN

CLICK BOND



BLUE ORIGIN Raytheon

Contact Us

ANDREWS.AERO
SALES@ANDREWSTOOL.COM
817.274.7418

ANDREWS AEROSPACE 3133 S GROVE ST FORT WORTH, TX 76110



Need help deciding what's right for you? Fill out our application details form today.



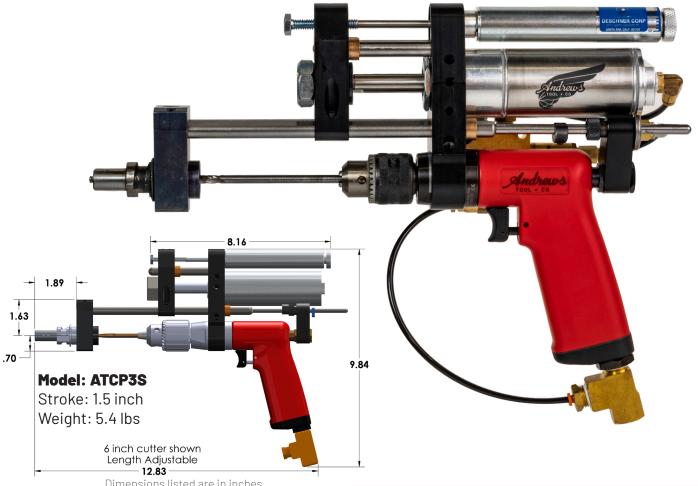
NEW! Buy ABNIR accessories and more on our website! shop.andrews.aero



Legacy Line

Reliable, Proven, Affordable

POWER FEED DRILL MOTOR



Dimensions listed are in inches.

Utilizing a self-colleting Ball Lock nose assembly or a traditional air feed bushing interfacing with a tooling plate, the ATC Pistol Grip Power Feed Drill Motor limits physical stress on the operator with its ergonomic design and produces the precise and consistent close tolerance holes demanded by airframe manufacturers.

MODEL	HORSEPOWER	STROKE	CYLINDER
P3S	.45	1-1.5	170 lb
РЗВ	.45	2-4	170 lb
P4S	.7	1-1.5	170 lb
P4	.9	1-1.5	170 lb
P4B	.7, .9	2-4	170 lb
P5	.7, .9, 1 & 1.5	1-4	300 lb

FEATURES:

- Ergonomic design
- Air power feed
- Adjustable hydraulic feed control
- Easy set-up
- Simple operation
- Low maintenance
- Adjustable to drill length
- Indexable handle
- 250-6,000 rpm
- Standard 3 jaw chuck
- 1 to 4 inch stroke
- Accepts 21,000 to 25,000 series air feed bushings

- Adjustable depth control with automatic retract
 - Double acting feed cylinder
- Adjustable rapid advance
- ATC Floating Spindle Adapter
- Self-colleting ATC Ball Lock nose
- Indexable ATC Knob Lock nose
- ER collet holder
- Air blast
- Onboard lubricator
- Coolant through swivel adapter
- Micro-peck
- Vacuum attachment

POWER FEED COUNTERSINK MOTOR



FEATURES:

- Ergonomic design
- Air power feed
- Adjustable hydraulic feed control
- Easy set-up
- Simple operation
- Low maintenance
- Adjustable to material thickness and cage/cutter length
- Indexable handle
- ATC Floating Spindle Adapter
- Adjustable rapid advance control
- 250-6,000 rpm
- Standard 3 jaw chuck
- 1 or 1^{1/2} inch stroke
- 11/8 to 15 inch reach C frame

OPTIONS:

- U frame
- Delrin no-mar threaded anvil
- Remove ATC Floating Spindle Adapter and motor can be utilized as a Power Feed Drill

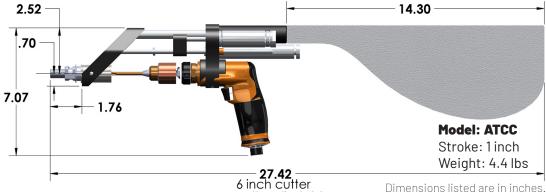
For more accurate and repeatable

countersinks, the Pistol Grip Power Feed Countersink Motor applies consistent pressure from the back side of the material on the spindle centerline to eliminate material deflection and promote normalization of the cage skirt. Operator fatigue and injury are greatly reduced by the ergonomic, lightweight design.

MODEL	HORSEPOWER	STROKE	CYLINDER
P3S	.45	1-1.5	170 lb
РЗВ	.45	2-4	170 lb
P4S	.7	1-1.5	170 lb
P4	.9	1-1.5	170 lb
P4B	.7, .9	2-4	170 lb
P5	.7, .9, 1 & 1.5	1-4	300 lb

POWER FEED VACUUM DRILL MOTOR





FEATURES:

- Ergonomic design
- Air power feed
- Adjustable hydraulic feed control
- Easy set-up
- Simple operation
- Low maintenance
- Venturi vacuum
- Utilizes ATC-2003 disposable vacuum bags or works with existing in-house vacuum systems
- Adjustable to drill length
- Indexable handle
- 2,400, 3,200, 3,800 or 5,200 rpm
- Standard 3 jaw chuck
- 1 to 4 inch stroke
- Accepts 21,000 to 25,000 series air feed bushings

OPTIONS:

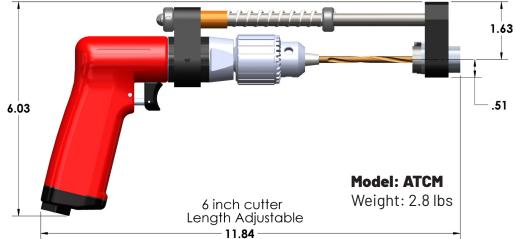
Length Adjustable

- .9 hp available for composite/aluminum stacks
- Adjustable depth control with automatic retract
- Double acting feed cylinders
- Adjustable rapid advance
- ATC Floating Spindle Adapter
- Self-Colleting ATC Ball Lock nose
- ER collet holder
- Onboard lubricator
- Coolant through swivel adapter
- Micro-peck

MODEL	HORSEPOWER	STROKE	CYLINDER
С	.40	1-1.5	Twin 60 lb
S	.9	1-4	Twin 170 lb

MANUAL DRILL ATTACHMENT





Dimensions listed are in inches.

FEATURES:

- Ergonomic design
- Easy set-up
- Simple operation
- Low maintenance
- Adjustable to drill length
- Indexable handle
- .45 and .7 hp
- 300-6,000 rpm
- Standard 3 jaw chuck
- Utilizes standard slip fixed renewable drill bushings

OPTIONS:

- Adjustable hydraulic feed control
- Vacuum attachment

Producing precision holes utilizing simple drill templates is a snap with The ATC

Manual Drill Attachment. Easily locate holes with the shank of a standard slip fixed renewable bushing. The rigid guide rod design promotes perpendicularity and reduces drill breakage. Spring tension is adjustable for controlling break-out. The stop collars prevent drilling too deep and damaging substructure or other components.

SURFACE PREPARATION TOOL



Surface preparation for Bonded Nut Plates has never been easier or faster.

Save time and effort with the ATC Surface Preparation Tool. Locating buttons align with the pilot hole on the front side of the material. With the pull of the trigger, a sanding disc is powered to the backside, quickly and accurately abrading coatings only where needed.

Model: ATCP27 Stroke: 1 inch Weight: 3.6 lbs Length Adjustable 11.54 Dimensions listed are in inches.

FEATURES:

- Ergonomic design
- Air power feed
- Easy set-up
- Simple operation
- Adjustable to material thickness
- Indexable handle
- 500, 1,000, 2,400, 3,300 or 4,500 rpm
- .45 hp
- 1 inch stroke
- 20 lbs applied force on structure through abrasive disc
- 1/4-28 spindle gear
- Adjustable flow control for feed rate adjustment

- Threaded spindle adapters
- Quick change back-up pads
- No-mar Delrin locating buttons
- Combination spindle lock and alignment tool
- Fully adjustable cycle timer
- Custom kits with accessories





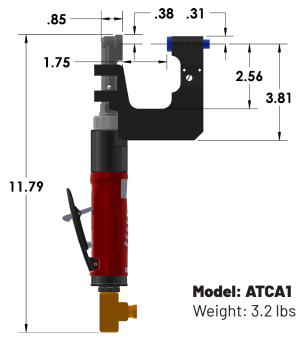
RIGHT ANGLE POWER FEED DRILL MOTOR

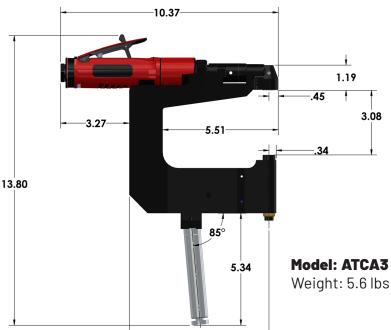




Indexable Pancake Head **FEATURES**:

- Eraonomic design
- Air power feed
- Easy set-up
- Simple operation
- Low maintenance
- .45, .85 or 1.5 hp
- 250-6,000 rpm
- .850 or 1.5 inch stroke
- 100, 120 or 140 lb force
- 10-32, 1/4-28 or 9/32-40 threaded spindles
- Push button or slide feed switch





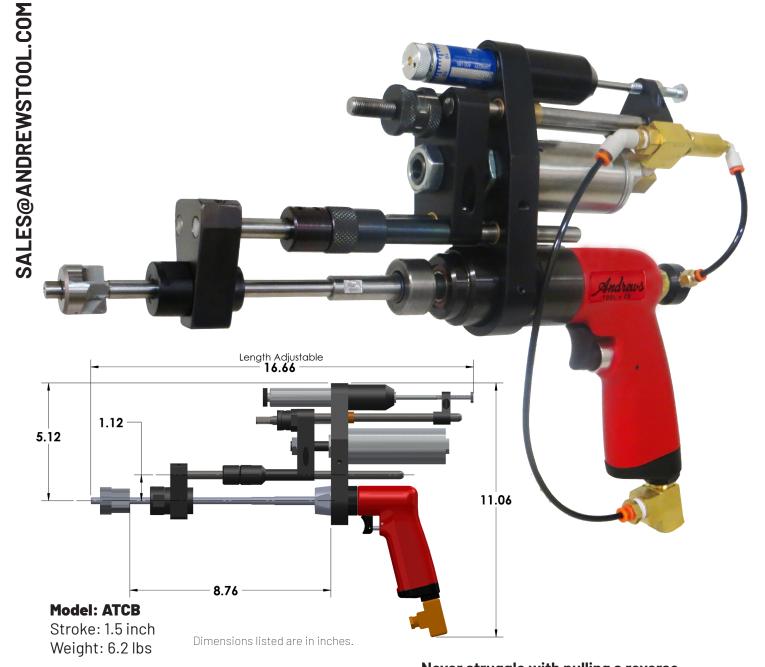
Dimensions listed are in inches.

Designed to drill holes in very tight spaces, the ATC Right Angle Power Feed Drill Motor **provides the force to drill quality holes in**

hard to reach places. The gap and reach can be customized to fit your application.

- Adjustable hydraulic feed control
- Heavy duty 90 degree head
- Extended swing foot
- Snap-in or threaded anvils

POWER FEED BACK SPOT FACER



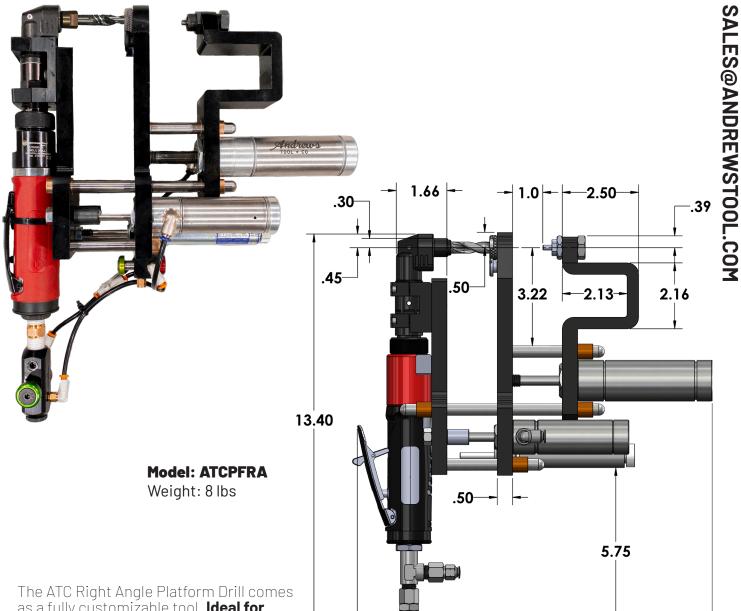
FEATURES:

- Ergonomic design
- Air power feed
- Adjustable hydraulic feed control
- Easy set-up
- Simple operation
- Low maintenance
- Adjustable to material thickness
- Indexable handle
- Floating Spindle Adapter
- 250-6,000 rpm
- Microstop depth adjustment

Never struggle with pulling a reverse counterbore again. The ATC Power Feed Back Spot Face Motor pushes off the front side of the material, pulling the cutter into the opposite side. A micro-stop controls the depth, creating an accurate countersink, counterbore, or spot face with just one pull of the trigger.

- Quick set adjustment
- No-mar nose bushings built to application
- Threaded spindle adapter
- Threaded bayonet
- ATC Floating Spindle Adapter

RIGHT ANGLE PLATFORM DRILL



The ATC Right Angle Platform Drill comes as a fully customizable tool. **Ideal for right angle applications where tight navigation around the structure is needed.** The effective spring loaded pilot hole locator coupled with the strong clamping system enables a secure holding position for optimized drilling. Independant operation of the different mechanisms provides easy set-up.

OPTIONS:

- Fully customizable clamp plate
- Automatic shut-off & retract system
- Heavy Duty Drill Attachment Head

FEATURES:

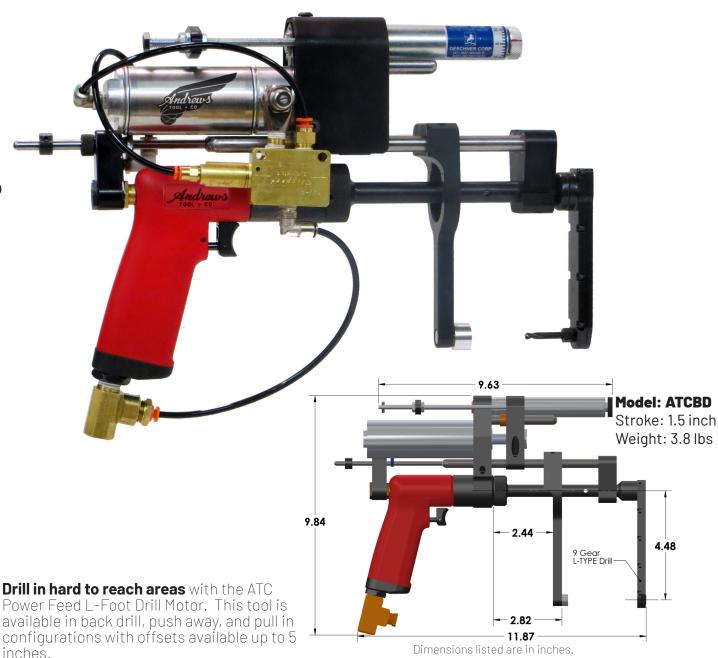
- Ergonomic design
- Adjustable hydraulic feed control
- 1 or 1.5" stroke
- 500-6,000 RPM
- Spring loaded pilot hole locator
- Secure material clamping mechanism
- Light weight hard anodized Al guide rods

-11.63-

Dimensions listed are in inches.

- Self-lubricating bushings
- 176 lbf Feed & 120 lbf Clamp
- 3/8-24, 1/4-28 or 9/32-40 threaded spindle

POWER FEED BACK DRILL



FEATURES:

- Ergonomic design
- Air power feed
- Adjustable hydraulic feed control
- Easy set-up
- Simple operation
- Low maintenance
- Adjustable to drill length and material thickness
- Indexable handle
- .45 hp
- Available in 500-6,000 rpm
- 1 or 1½ inch stroke

- Adjustable depth control with automatic retract
- Double acting feed cylinder
- Adjustable rapid advance
- Self-colleting ATC Ball Lock nose
- Indexable ATC Knob Lock nose for air feed bushings
- Anvils built to application



Industry 4.0 Solutions

RAVEN AETHER



Andrews Aerospace's Pneumatic enhanced Automated Drilling Unit

(eADU®) is an innovative and modular unit well suited to drilling and countersinking applications in a variety of materials and mixed stacks of materials.

APPLICATIONS:

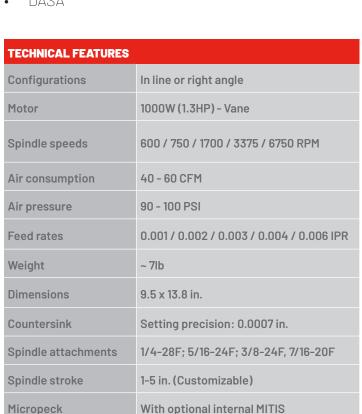
- Drill and ream with countersink:
 - $1000 \text{ W} \text{d} \le 15.875 \text{ mm} (5/8'')$
- Materials (all stacks):
 - Aluminium
 - Carbon
 - Titanium
 - Steel

CONFIGURATION:

- Pneumatic motor
- Mechanical feed

EOUIPMENT:

- Concentric Collet
- Ouarter Turn
- DASA





KEY ADVANTAGES:

- High performance
 - Embedded electrovalve control
- Controlled process
 - Cycle counter
- Sustainable design
 - Through spindle coolant
 - Quick equipment and tool change
 - Easy maintenance
 - Universal head design faciliates upgrade to electric technology

Images, descriptions and technical data are for descriptive purposes only, and may be subject to change.



Andrews Aerospace's Electric enhanced Automated Drilling Unit (eADU®) is an innovative and modular unit well suited to drilling and countersinking applications in a variety of materials and mixed stacks of materials.

APPLICATIONS:

- Drill and ream with countersink:
 - $550 \text{ W} \text{d} \leq 12.7 \text{ mm} (1/2")$
- Materials (all stacks):
 - Aluminium
 - Carbon
 - Titanium
 - Steel

CONFIGURATION:

- Electric motor
- Mechanical feed
- Electronic process control

EOUIPMENT:

- Concentric Collet
- Ouarter Turn

TECHNICAL FEATURES

Controller dimensions

DASA



Configurations In line or right angle Motor 550W - Servo Spindle speed 80 to 6,000 rpm 0.001 / 0.002 / 0.003 / 0.004 / 0.006 IPR Feed rates Tool weight ~ 9lb **Tool dimensions** 9.8 x 13.8 in. Countersink Setting precision: 0.0007 in. 1/4-28F: 5/16-24F: 3/8-24F, 7/16-20F Spindle attachment Spindle stroke 1-5 in. (Customizable) Input voltages 120V / 240V Micropeck With optional internal MITIS Controller weight ~ 18lb

18 L x 14 W x 11 H in.

KEY ADVANTAGES:

- High performance
 - Low power consumption (10 to 20 times less than pneumatic ADUs)
 - Low noise < 70 dB
 - Embedded electrovalve control
- Controlled process
 - Programmable process via controller HMI or web browser interface via RJ45 connection
 - Adjustable spindle speed (electronic)
 - Adjustable Concentric Collet
 - Stable spindle speed
 - Automatic stroke adaptation for varied material stacks and thicknesses
 - Drill depth monitoring
 - Cycle counter
 - Max hole count
 - Cutter wear limits
 - Data logging
- Sustainable design
 - Through spindle coolant
 - Quick equipment and tool change
 - Easy maintenance

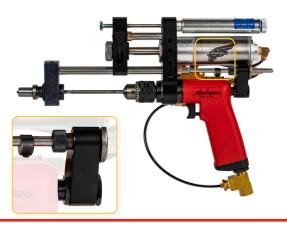
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Accessories

ACCESSORIES

ADJUSTABLE SHUT-OFF SWITCH

- Reduces drilling time
- Prevents over-drilling and damaging other parts
- Counteracts short-cycling a hole
- Repeatable depth control
- Excellent for drill/reamer (dreamers) to ensure the ream is completed every time
- Reliable shut off



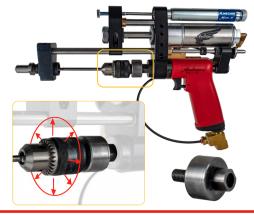
ATC BALL LOCK

- Locks quickly and securely into liner bushing
- No lock screws, lock strip, or lock liners required on tooling plate
- Nose ODs available to accommodate 5/16, 3/8, 7/16, 1/2, 9/16, 5/8,11/16, 3/4 and 7/8 inch ID liner bushings



ATC FLOATING SPINDLE ADAPTER

- Limits runout when drilling through a bushing
- Reduces friction and heat, allowing the drill bit to run smoothly through a drill bushing
- Extends motor bearing, drill bit and drill bushing
- Coolant through available
- 3/8-24, 1/2-20 and other thread options



ATC KNOB LOCK

- Great for tight access drilling applications
- Limits the need to rotate motor when locking tool into a drill fixture
- Reduces burden on the operator by orienting bushing collar to tooling plate lock feature quickly and easily
- Accepts standard air feed drill bushings
- 1/16 NPT port for use with coolant bushings



ACCESSORIES

MINI PIGGYBACK LUBRICATOR

- Portable cutter lubrication system
- Increases cutting tool life
- Improves hole quality
- No electricity required
- Translucent reservoir
- Adjustable output



VACUUM ADAPTER

- Adapts external vacuum to Power Feed or MDA motor
- Reduces chip buildup in tooling plate
- Rotates 270 degrees
- 3/4 inch OD tubé



AIR BLAST

- Helps prevent chips from packing during the drilling cycle
- Improves hole quality
- Clears chips and debris from the end of a coolant bushing



COVER/GUARD

- Additional safety during automatic drilling cycle
- Protects moving parts



ON/OFF SWITCH

- Air flow shut off switch
- Great for longer drilling cycles
- Attaches at air inlet on motor



ER COLLET WITH COOLANT THROUGH SWIVEL

- Threaded collet body adapter
- ER 16 collet range: 1/32 to 13/32
- ER 20 collet range: 1/32 to 1/2
- Coolant nut
- Swivel spindle adapter accepts 1/16 NPT fittings



DEAD HANDLE

- Available for pistol grip motors
- Aids in the handling of larger, heavier models





ATC CONTOUR JIG

- Easily attaches to material with a cleco or a bolt in an adjacent existing hole
- Gimble foot enables drill bushing to gain normality and maintain drill perpendicularity to the surface of the material being drilled
- 21,000 series taper lock, 22,000 series taper lock, ATC Ball Lock or slip fixed renewable configurations



ATC QUICK CHANGE CHUCK ADAPTER

- Multiple chuck adapters can be used with a single tool adapter to swap cutters quickly without fighting a chuck key or the expense of multiple motors
- Chuck adapter locks into the tool adapter easily with just a 1/8 turn
- Tool adapter mounts to 3/8-24 thread spindles
- Chuck adapter accepts 3/8-24 thread chucks



CONCENTRIC COLLET



Tired of inconsistent drill results jeopardizing your precision aerospace projects? Our concentric collet is your mission-critical solution. Engineered for unwavering accuracy and reliability, it ensures every hole you drill, from aft fuselage panels to delicate wing components, meets even the most exacting aerospace tolerances.

RAVEN eADU



Designed for use with our Raven eADU line of tools.

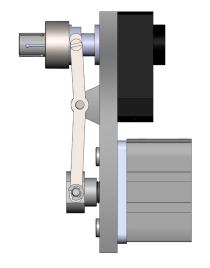
Thanks to the modular design of our eADUs, this concentric collet is compantible and interchangable with either Aether or Elektro models.



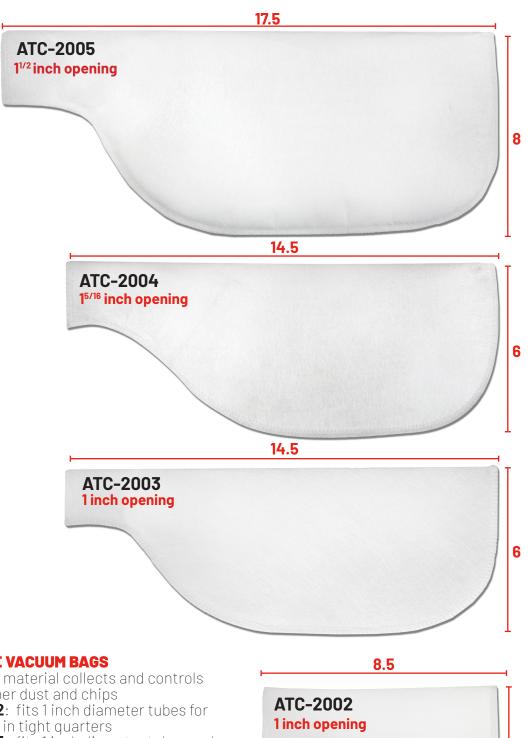
ANDREWS TOOL LEGACY

Designed for use with the Andrews Tool legacy line. Our legacy concentric collet is ready to order as an add-on to future purchases, or contact us today to inquire about retrofitting previously purchased tools.





DISPOSABLE VACUUM BAGS



DISPOSABLE VACUUM BAGS

- Advanced material collects and controls carbon fiber dust and chips
- ATC-2002: fits 1 inch diameter tubes for operating in tight quarters
- ATC-2003: fits 1 inch diameter tubes and smaller - standard bag
- ATC-2003T: fits 1 inch diameter tubes and smaller - standard heat resistant bag
- ATC-2004: fits 15/16 inch diameter tubes and smaller
- **ATC-2005**: fits 1^{1/2} inch diameter tubes and smaller
- Special sizes available upon request



Dimensions listed are in inches.

ABNIR KIT SUPPORT







The Norton / Saint-Gobain Nutplate
Repair Kit distributed
by Andrews Tool Co
contains everything you
need to replenish your
consumable abrasives in
the ABNIR Kit.

Andrews Tool Company is proud to support the defense industry and Lockheed Martin's F-22 and F-35 programs. As part of our commitment to F-22 and F-35 Maintenance, Repair and Overhaul (MRO) and sustainment, we manufacture, stock or distribute many of the items contained in the **Adhesively Bonded Nutplate Installation and Replacement (ABNIR) Kit.**

NUTPLATE SIZE	DESCRIPTION	MFR PART #	FRONT IMAGE	ANGLED IMAGE
3	Abrasive Pad for Mandrels, 3/4" X 0.200" DISC	66261157379		3
4	Abrasive Pad for Mandrels, 1" X 0.26" DISC	66261157382		4
5	Abrasive Pad for Mandrels, 1" X 0.330" DISC	66261157383		5
6	Abrasive Pad for Mandrels, 1" X 0.380" DISC	66261157384		6.
3 08	Abrasive Pad for Mandrels, 1" X 0.200" DISC	69957312311		3 - 5
6 0S	Abrasive Pad for Mandrels, 1.30" X 0.380" DISC	69957312418		0-
CR3	Abrasive Pad for Nut Plate Surface Abrasion Tool DIB ZMD 1.30" X .26"	69957309470		CR3
CR4	Abrasive Pad for Nut Plate Surface Abrasion Tool DIB ZMD 1.3" X 0.35"	69957309472		CR4
CR5	Abrasive Pad, for Nutplate Surface Abrasion Tool DIB ZMD 1.3" X 0.50"	69957309473		OR S
CR6	Abrasive Pad for Nut Plate Surface Abrasion Tool DIB ZMD 1.3" X 0.58"	69957309474		CRG
CR3	Abrasive Pad for Andrews Tool Surface Prep 3/4" X 0" QUICK CHANGE DISC	69957317253		
CR3 (OS), CR4, CR5, CR6	Abrasive Pad for Andrews Tool Surface Prep 1" X 0" QUICK CHANGE DISC	69957317252		
CR6(OS)	Abrasive Pad for Andrews Tool Surface Prep DIB ZMD 1.3" X 0"	69957344851		

ABNIR KIT SUPPORT

Andrews Tool Company's Surface Preparation Tool is an essential component of the ABNIR Kits and we fully support its proper setup and maintenance. We also stock the necessary consumables including quick change back up pads, locating buttons and Norton abrasive discs. Contact us also for regularly scheduled maintenance of the tool.



These parts available on the shopen drawstool.com



ABNIR PART #	DESCRIPTION	ATC PART #
CB535ATACA1	Torlon Cutter Adapter, 10-32 Thread, Quick Change	ATAC-A-1
CB535ATM191	Locating Button, Standard, Delrin, .191 Dia	ATC00254D-191
CB535ATM250	Locating Button, Standard, Delrin, .250 Dia	ATC00254D-250
CB535ATM312	Locating Button, Standard, Delrin, .312 Dia	ATC00254D-312
CB535ATM375	Locating Button, Standard, Delrin, .375 Dia	ATC00254D-375
CB535ATM483	Back Up Pad, Quick Change, Type III, TR, 1" Dia.	ATC00483
CB535ATM484	Back Up Pad, Quick Change, Type III, TR, 3/4" Dia.	ATC00484
CB535ATM531	Combination Alignment and Spindle Lock Tool	ATC00531





CUSTOM KITTING



OPTIONS:

- Case size and color
- Foam type and color
- Overlay text and color
- Lid sticker design
- Custom parts manufactured
- Anodizing available in multiple colors

We can help you create a kit that meets your needs. From sourcing to final kit design we can assist you in creating a kit that you and your customers will love. Whether your parts are "off the shelf" or you need parts manufactured, we've got you covered. With multiple cases, foam types, and materials to choose from we will find a solution that matches your budget.





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