



SHEET METAL TOOLS

Eddie Paul, the creative genius behind those amazing cars in the motion picture "The Fast and The Furious" brings his exceptional talents to the aviation community with a new signature line of sheet metal forming tools.

Sheet metal tools by
EDDIE PAUL

1 - BENCHTOP ENGLISH WHEEL

The English Wheel is the tool of choice to form gradual compound curves and high crown radii down to 2" diameter. It's ideally suited for fabricating patch panels, cowlings, air scoops, wing roots, and wheel fairings. The complete kit includes one fixed wheel and three replaceable small wheels, bearings, adjustment wheel and anvil support with quick release, top wheel, interchangeable Planishing Hammer/English Wheel frame with 22" throat depth and complete instructions. Top wheel measures 4-1/2" by 1-1/2" wide. Bottom wheel measures approximately 1-7/8" by 1-1/2" wide. Does not include mounting frame (see below) or stand.



No. EPEW

2 - PNEUMATIC PLANISHING HAMMER

The Planishing Hammer has been long used in metal fabrication and restoration to smooth large areas of metal, welds and gentle panel crowning. The power head is a heavy-duty aircraft rivet gun (our ATS-4X Pro), not a cheap air chisel. The sturdy frame with a 22" throat depth is beefy enough to smooth 16 gauge aluminum and 18 gauge steel! A quick release allows the lower shaft to slide down, to accept panels with deep flanges. The power head adjustment controls the intensity from light to very powerful hammering. A foot control starts and stops the hammering. The tool includes one 1-1/2" diameter flat top die, 3 anvils with different contours and complete instructions. Does not include mounting frame (see below) or stand.



No. EPPH

3 - ENGLISH WHEEL/PLANISHING HAMMER MOUNTING FRAME

This mounting frame is the perfect companion for the Eddie Paul English Wheel and/or Planishing hammer featured above. It's CNC machined from solid aluminum and will securely hold up to 2 frames so you can mount both an English Wheel and a Planishing Hammer in one compact combo setup as shown. It also features convenient holders for extra english wheel anvils, or planishing hammer anvils.



No. EPTM

4 - EDDIE PAUL INSTRUCTIONAL VIDEO'S

Whether you are a hobbyist just starting out or a seasoned professional looking to learn a few new tricks, these videos have it all. These videos cover everything from the basic set-up to the operation of the English Wheel and the Planishing Hammer. Combining state of the art computer graphics with world-class video this new Instructional Video Series sets a new standard. VHS - Running time Approximately 30 min. .



No. EPVUEW (How to Use the English Wheel).....

No. EPVUPH(How to Use the Planishing Hammer)

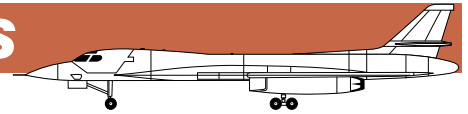
5 - PNEUMATIC SHRINKER/STRETCHER COMBO UNIT

Exactly reproduce such components as cowlings, fairings, skirts, and just about any complex shape. Reproduce almost anything requiring the combination of a curve and an angle. Both tools can produce curves as tight as 3" radius. The pneumatic operated press multiplies the pressure giving the hardened steel jaws tremendous force. Form mild steel up to 18 gauge, stainless steel up to 20 gauge, aluminum up to 16 gauge. Each tool comes assembled with drilled & tapped housings for easy mounting to your bench. The Set includes a Shrinker Jaw and a Stretcher Jaw all on one tool.



No. EPSS

SHEET METAL TOOLS



1 - EXTENDED REACH SHRINKER/STRETCHER

The new Dagger Tools shrinker/stretcher features a deep 8" working depth, and a 6" working height for unmatched versatility. The possible uses for this essential sheet metal tool are endless. Use it to fabricate complex shapes ranging from simple flares, to intricate multi-curved shapes. Work all metals from straight sheets up to and including 2" wide angles. The heavy duty frame is cast from ductile iron and fitted with high carbon jaws to easily form 14 gauge aluminum or 16 gauge mild steel. Each unit comes complete with one set of shrinking jaws, and one set of stretching jaws. Can be bench mounted or individual stand mounted.

No. DTSH-02(complete unit with shrinker & stretcher jaws)



2 - PANEL BEATER AND DOLLY KIT

The most widely used selection of panel beaters and dollies for most metal shaping needs, professional grade tools in a molded plastic box. Each hammer is color-coded for either shrinking (blue) or stretching (red) forming tasks. The three (3) panel beaters included are the dinging, shallow-domed face, and pick hammer combo. The dollies included are the thin toe, utility, curved, and heel shapes, providing the user with the best combination kit on the market.

No. DTCP07K



3 - T-DOLLIES

Simple, but necessary forming tool allows you to create new flanges or straighten out damaged flanges. Can be used effectively by locking in a bench vise. Creating an exact radius edge using any flat faced panel beater or wood slapper.

No. DTD01(1/2" x 4")

No. DTD02(3/4" x 6")

No. DTD03(1" x 8")



4 - BOSSING MALLETS

High quality bossing mallets are lightweight, resistant to wear, and feature non-marring polyethylene heads. When used with a shot bag, the simplest to very complex shapes can be roughed out and finished with either a planishing hammer or english wheel.

| Part No. | Small Radius | Large Radius | Head Dia. | Price |
|----------|--------------|--------------|-----------|-------|
| DTSBM11 | 7/16" | 1" | 2" | |
| DTSBM12 | 1/2" | 1-1/4" | 2-1/2" | |
| DTSBM13 | 1/2" | 1-1/2" | 3" | |



5 - HARDWOOD SLAPPERS

Leather covered wooden slappers are perfect for quick metal shaping without marring the surface. Use it with a leather shot bag to rough form shapes prior to finishing.

| Part No. | Shape Style | Face Length | Face Width | Price |
|----------|-------------|-------------|------------|-------|
| DTSLP1 | Gentle | 8-1/2" | 2-1/4" | |
| DTSLP2 | Medium | 8-1/2" | 2-1/4" | |
| DTSLP3 | Flat | 8" | 2-1/4" | |



6 - SHOT BAGS

Heavy duty shot bags are made from .070"/.090" top grain cowhide for extended life, and to produce a blemish-free metal surface. Approximately 1-1/2" to 2" when filled.

No. DTSB8(8" diameter)

No. DTSB12(12" diameter)

No. DTSB-STAND(12" diameter Shot Bag Stand)





SHEET METAL TOOLS

1 - SHORT FINISHING HAMMER

For close work. 1-1/4" dia. head; 1-1/8" square head; flat faces; 4" long; Wt. 14 oz.

No. 55301



2 - SHRINKING HAMMER

For all-around work and fast finishing; does not stretch the metal, 1-1/4" round serrated head, 1-1/8" square flat head; 4" long; Wt. 14 oz.

No. 55302



3 - BENT SKIN HAMMER

Long shaft and small paddle, folds flanges on skins. 6-1/2" long, Wt. 17 oz.

No. 55356



4 - DINGING HAMMER

Perfectly balanced, for light dinging. 6-1/4" long. 1-1/4" round head; 1-3/16" square head; flat surfaces. Wt. 12 oz.

No. 55358



5 - CURVED FINISHING HAMMER

Chisel end is 3-1/2" long; Round head, flat face. 6-1/4" long; Wt. 11 oz.

No. 55368



6 - SHOT BAG

Heavy-duty leather bag filled with 2-1/2 lbs. of shot. Used to stretch and form metal without nicks or gouges. 4" wide by 6" long.

No. 55115



7 - GENERAL PURPOSE RAIL DOLLY

For bumping, dinging, and finishing. Also has 3 beading and flanging lips. 3"L x 3"W x 2-3/8"H. Wt. 3 lbs.

No. 55105



8 - LARGE TOE DOLLY

Flat and low-crown curved faces for dinging flat surfaces. 7"L x 2-3/8"W x 2"H. Wt. 2 lbs.

No. 55108



9 - LARGE HEEL DOLLY

Used in sharp corners and wide radii areas. 3"L x 2-1/2"W x 1-1/2"H. Wt. 2-1/2 lbs.

No. 55107



10 - LARGE COMMA DOLLY

Use behind brackets, braces, and other reinforcements. 6"L x 2-5/8"W x 2"H, Wt. 3-3/4 lbs.

No. 55112



11 - LOW CROWN DOLLY

Has low crown and wide radius for general purpose contouring. 3-1/4"L x 2-3/4"W x 2"H. Wt. 3 lbs.

No. 55135



12 - ROLLED EDGES DOLLY

Has high crown, radii and contours. 4"L x 3-1/4"W x 2"H. Wt. 3lbs.

No. 55145



13 - SPOON DOLLY

For use in hard to reach places. 14"L x 2-1/2"W x 1"H. Wt. 4-3/4 lbs.

No. 55150



14 - SLAPPING SPOON

The large polished surface provides a broad face to quickly and evenly work the metal. 4" x 2", Wt. 3/4 lbs.

No. 55501



SHEET METAL TOOLS



1 - ROPER WHITNEY HAND PUNCH

Punches up to 1/4" hole through 16 ga. metal. Sold either as an individual tool or as a complete kit in a case with 7 punches and dies for 3/32" to 9/32" holes. NOTE: new style inverted handle allows operation close to work without injury to your hand. Made in U.S.A.

No. 45(Complete Kit)



2 - ADJUSTABLE HOLE CUTTER

Cuts perfect holes from 2" to 12" diameter in 16 ga. metal and wood up to 1" thick. Ideal for cutting out inspection and instrument holes. Uses any air or electric drill.

No. HC1

No. CB.....(Replacement Cutter Bit)



3 - CIRCLE CUTTER

This tool, also known as a "Fly Cutter", uses a flying cutting bit to cleanly cut holes in metal, wood, plastic, and hardwoods from 1" to 5-1/2" diameter. The included 1/4" drill bit automatically forms its own pilot hole prior to cutting. The drill shank is 5/16". We strongly recommend a drill-press and safety gear when using this tool.

No. 5B

No. 555(Replacement Cutter Blade).....



4 - INSTRUMENT HOLE PUNCH

Reversible cutter for both 2-1/4" and 3-1/8" instrument panel holes. Easy to use even with instrument panel installed in aircraft. Allows for close work with other instruments already installed.

No. 123C.....

No. T123C (Instrument Hole Drill Template).....



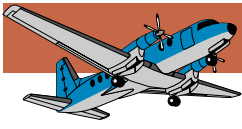
5 - ECONOMY THROATLESS SHEAR

Throatless shears are ideal all purpose metal cutting tools because they permit any desired cut in heavy gauge material, yet handle lighter materials without distortion. Unique shoulder design allows work to be turned in any position during the cut. Geared rack and pinion makes heavy metal cutting easy. Upper and lower blades are positioned to provide a clean, knurl - free cut, regardless of material. Features an 18" handle to give you plenty of leverage for cutting anything from aluminum to stainless steel. Replaceable 4" hardened alloy steel cutting blades. Overall dimensions: 8-1/4"L x 7"W x 27-1/4"H (with handle) 3 holes for mounting. Weight: 16.4 lbs.

No. HF3841

No. HF3841-RB(replacement blades, set of 2).....





SHEET METAL TOOLS

1 - WISS METALMASTER® AVIATION SNIPS

Wiss Metalmaster® snips are advanced metal cutting tools originally developed for cutting extremely tough alloys used in the aircraft industry. The jaws are made of durable and wear-resistant molybdenum steel.

- Ideal for cutting tight curves or intricate patterns in sheet metal
- Fine serrated jaws require very little (if any) cleanup after cutting
- Cuts up to 18ga (.049") aluminum or steel

- No. M1RCuts Left and Straight (RED)
- No. M2R Cuts Right and Straight (GREEN).....
- No. M3RCuts Straight (YELLOW)



2 - WISS METALMASTER® OFFSET SNIPS

Wiss Metalmaster® snips are advanced metal cutting tools originally developed for cutting extremely tough alloys used in the aircraft industry. The jaws are made of durable and wear-resistant molybdenum steel.

- Offset blades keep hands clear of metal
- Fine serrated jaws require very little (if any) cleanup after cutting
- Cuts up to 18ga (.049") aluminum or steel

- No. M6RCuts Left and Straight (RED)
- No. M7R Cuts Right and Straight (GREEN).....



3 - EDGE MARKER BLOCK

This handy device holds a marking pen and has an adjustable guide that runs along the edge of a part. The guide allows variable edge distance for rivet layout. One thumb screw holds the pen and the other screw holds the adjustable stop. Comes ready to use with (1) Pilot marking pen.

- No. AE6352



4 - EDGE ROLLING TOOL

For pre-bending skin edges on lap joints and butt joints before riveting. "Edge rolling" will prevent skin edges from curling up during riveting. Machined round body made from 2024 aluminum. Black anodized finish for wear resistance. Ball bearing style nylon rollers and a spare set of rollers included.

- No. AE1042
- No. AE1040(Spare rollers-2)



5 - LAP JOINT JOGGLE TOOL

Use for lap joint and inspection hole joggles in aluminum skins up to .032" thick. Steel handle with adjustment slots and precision ball bearing rollers. Adjustable for set back (width of joggle) and for different material thickness.

- No. AE465



6 - ATS DELUXE FLUTING PLIERS

Narrow fluting pliers are used for straightening out or coaxing sheet metal into the correct shape. Great for working on spars, ribs, and bulkheads. Smooth polished faces produce very clean flutes without any marring. 3/16" fluting faces

- No. FP21



SHEET METAL TOOLS



1 - IRWIN® ERGONOMIC OFFSET SNIPS



Irwin has once again set the standard for quality snips. Their new Offset Snips feature cold-formed blades that are stronger and sharper than any other brand. The serrated offset jaws are designed to make straight or tight circular cuts with equal ease while keeping your hand safely away from the work. And Irwin's exclusive new Pro-Touch™ ergonomic grips maximize comfort while increasing leverage, creating a snip you can trust every time.

- No. 20SL(Left and straight)
- No. 20SR.....(Right and straight)

2 - OFFSET CUTTING SNIPS



Offset blades allow cut material to flow unobstructed past blades and your hand. Excellent for notching, long cuts, circles, etc. 18 gauge capacity.

- No. 10L.....(Left and straight)
- No. 10R(Right and straight)

3 - AVIATION SNIPS

Blades are drop forged and precision ground to produce a clean burr-free cut.



- No. 863x4..... (Cuts left)
- No. 864x4..... (Cuts right).....
- No. 865x4.....(Cuts straight)
- No. 865-3 (Set of all three).....

4 - TINNER SNIPS



Maneuvers and cuts easily to very tip of blade. Cuts aluminum, plastics and other thin materials without tearing or catching. Hot drop forged from the finest quality high carbon tool steel. Comfortable vinyl coated handles.

| PART NUMBER | LENGTH OF CUT | OVERALL LENGTH | WEIGHT | PRICE |
|-------------|---------------|----------------|--------|-------|
| MD10 | 2-1/2" | 10" | 10 oz. | |
| MD12 | 3" | 12-1/2" | 24oz. | |

5 - JILSON SUPERSNIP® SHEARS



The SuperSnip cuts cleanly and accurately without damage to painted, plated, or polished surfaces! As it cuts, the SuperSnip conveniently snips off the waste curl so that it does not build up and interfere with your progress; and a built-in guard prevents the cut-off waste from flying up and into the eyes. The SuperSnip makes straight or curved cuts in up to 16 gauge aluminum or 18 gauge steel. Interior cuts can be made by first drilling a 1/4" hole.

- No. J1451
- No. JS1251RB(Replacement Blade)

6 - JILSON MONODEX® SHEARS



The Monodex® shears will accurately cut aluminum up to 16 gauge, and mild steel up to 18 gauge without distorting, blurring or curling the edges of the cut. Interior cuts can easily be made by first drilling a 1/4" starter hole to accommodate the blade. The handle is made of a tough, durable plastic, which makes it extremely lightweight.

- No. JS12
- No. JS1251RBReplacement Blade

7 - COMPOUND HAND SHEARS



Offset handle allows protection to user, and aids in the cutting action. Double cut design pierces its own starting hole and removes a curled strip of metal distortion free. 18 ga. (.048") capacity.

- No. 4R

8 - HAND NOTCHER

Notches a neat and uniform 31 degree "V" every time. The throat depth is 3/4".



- No. N1



SHEET METAL TOOLS

1 - HEAVY DUTY HAND SEAMER

Precision hand seamer is drop forged from tool steel so they will not break as some of the cheaper types. The faces are machined perfectly smooth, and aligned to be exactly parallel along the edges. All of which makes for nice flat seams without any signs of pinching or warping. Extra wide 3-3/8" jaws lets you work longer seams faster, but they're still narrow enough to get into small areas. 6" long handles are covered with thick vinyl grip to provide maximum leverage without any discomfort.



No. HS144 (ATS Brand).....

No. A44 (Roper Whitney Brand, USA).....

2 - ECONOMY HAND SEAMER

Locks to work with powerful non-slip grip. Eliminates tire-some hand gripping. Ideal for holding templates or riveting work, welding, etc. Throat depth 1-3/4".



No. S7.....

3 - HAND FLUTING PLIERS

These fluting pliers provides excellent control for making very narrow or contoured flutes. Each unit is adapted from Vise Grip pliers, and provides the same "force multiplying" action so that you can easily flute even the heaviest gauges. Makes a 3/16" flute with a 1.25" reach.



No. 7070

4 - FLUTING PLIERS

Special coating on jaws allows work on aircraft components without marring the surface. Has a 1" reach and will produce a 3/8" flute.



No. FP10.....

5 - HOLE FLANGING TOOL



Excellent for flanging lightening holes or overlapping sheets. Won't mar material. Flanges straight or curved edges up to 1" deep.

No. FT100

6 - OFFSET HAND SEAMER

Bends and flattens metal easily, overhead or in confined areas. Makes permanent, tight fitting seams. Scaled depth marks on jaws are in 1/4" increments. Jaws are made of drop forged high impact steel and are nickel plated.



No. S3.....

7 - HAND CRIMPER

New 5 blade style crimps more evenly. Has 1-1/4" jaw depth. Full 20 gauge capacity. 9" Overall length.



No. C-1 (5 blade double crimper)

No. SC-1(3 blade single crimper)

8 - BURNISHING TOOL

Designed to remove surface blemishes in aircraft sheet metal. Comfort grip handle.



No. 515A.....

9 - EDGE SCRAPER

Ideal for deburring sheet metal edges. Special guard protects users hand.



No. SP201A.....

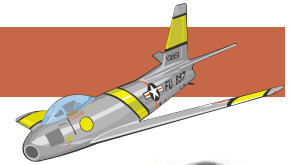
10 - DOUBLE DEBURRING TOOL

Fast, efficient deburring tool designed specifically for sheet metal and composite materials. Replaceable hardened twin cutting wheels deburr sheet metal up to 3/8" thick. Overall length is 7-3/4".



No. G480

SHEET METAL TOOLS



1 - PRECISION SCREW & BOLT SHEAR

This is a precision cutting device manufactured from high quality tool steel, which is machined to very close tolerances to cleanly cut screws and bolts without damaging the threads. Simply insert the screw or bolt into the proper size threaded opening, set the length required, and strike the cutting blade with a hammer to cleave the bolt. The cutting action is similar to a "guillotine" design and is quite effective. It cuts threaded products in sizes of 4-40, 6-32, 8-32, 10-32, 10-24, 1/4-20, and 1/4-28. It will cut steel, stainless steel, aluminum, brass, and even hardened bolts. Comes in a protective pouch and includes complete instructions.



No. SBS1

2 - SPRING CLAMP

Poly-vinyl jaw-tips protect work area.



No. 3202HT..... 2" Reach

3 - HAND TOGGLE CLAMPS

Toggle clamp has a jaw capacity of 1 in. and jaw depth is 1-1/8 in.



No. 145

4 - C-CLAMPS



| NO. | OPENING | DEPTH | PRICE |
|------|---------|--------|-------|
| 144C | 1" | 1-1/8" | |
| 407 | 2" | 1" | |
| 408 | 2-1/2" | 1-3/8" | |
| 409 | 3" | 1-1/2" | |

5 - CAM LEVER CLAMPS



| NO. | REACH | CAPACITY | PRICE |
|-------|--------|----------|-------|
| 29W-1 | 1" | 0-5/32" | |
| 29W-2 | 1-3/8" | 0-5/32" | |

6 - ANDY SNIPS®

Superior quality, heavy-duty snips are only 1/3 the weight of steel types, and give many more years of service. Comfortable, sleek contour aluminum handles have reinforcing ribs to duplicate the strength of steel. Handles will not spring when cutting heavy gauges of sheet metal. Inlaid blades are supreme cutlery grade moly steel, electronically heat treated and tempered for continuous use. Precision ground, beveled cutting edges stay sharp longer and make pattern cutting, even circle cuts an easy job. Blades are resharpenable and also easily replaced when necessary.



No. M12 (12" long, 3" cut).....

No. M14 (14" long, 3-1/2" cut).....

7 - AN BOLT GAUGE

All metal gauge designed to accurately determine the sizes and lengths of AN bolts up to 5/8" diameter. Self-explanatory, easy to use instructions are written directly on the gauge.



No. AN7

No. BG7..... (Pocket Bolt Gauge 3.75" x 6")

8 - SCRIBE

Special heat-treated for long, dependable service.



No. 349

No. 627

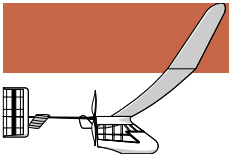
9 - PILOTED BONDING BRUSH

Stainless steel brush used to clean away corrosion and paint buildup. Fits any 1/4" air or electric drill.



| PART NUMBER | PILOT DIAMETER | PRICE |
|-------------|----------------|-------|
| 06721 | 3/32" | |
| 06741 | 1/8" | |
| 06761 | 5/32" | |
| 06781 | 3/16" | |
| 06801 | 1/4" | |

SHEET METAL TOOLS



1 - ATS 2" AIR CIRCULAR SAW

Designed to make precise, controlled cuts in aluminum panels up to 1/4" thick. Leaves a high-luster, burr-free edge that does not require any additional filing or cleanup. Great for cutting out access panels. Excellent balance and smooth operation

- Uses 2" (51 mm) saw blades.
- .080" (2 mm) steel capacity.
- .290" (7.5 mm) aluminum capacity.
- 620 RPM.
- Weight 2.42 lbs (1.1 kg).
- Length 6-7/8" (175 mm).

No. ATS8510
 No. ATS8510-RB (Replacement Blade).....



2 - PANEL SAW

Cuts up to 3/16" aluminum, 1/4" wood. Accepts 1-3/4 dia. blades. Features retractable safety blade guard.

No. PS-526.....(Air, 2200 RPM).....
 No. 157-34 (Replacement blades, 44TPI, pkg. of 12).....
 No. 157-36 (Replacement blades, 60TPI, pkg. of 12).....



3 - ATS HIGH SPEED RECIPROCATING SAW KIT

Heavy duty saw features safety guards and a locking throttle to prevent accidental starts. At 10,000 strokes per minute, this saw will cut through steel or aluminum just as fast and easily as cutting through wood. Complete kit includes the high speed saw, two sets of blades, mini oiler, a swivel connector, accessory tooling, and a blow molded case.

- Cuts up to 16 ga (.060" / 15 mm) steel or aluminum.
- .063" (1.6, mm) Stroke Length.
- 10,000 Strokes Per Minute (SPM).
- Weight 2.1 lbs (1.35 kg.)

No. ATS8202K(Complete Kit)
 No. ATS526 (Replacement blades, 18TPI, pkg. of 10).....
 No. ATS527 (Replacement blades, 24TPI, pkg. of 10)
 No. ATS528 (Replacement blades, 32TPI, pkg. of 10).....



4 - VIBRATION REDUCED SAW KIT

Very low vibration saw is designed to reduce the effects of vibration shock injuries. Cuts at 5000 strokes/min. Complete kit includes Saw, 10 32T Blades, 10 24T Blades, 10 18T Blades, Air Swivel, and Molded Case. Operates at 90 psi.

No. ATS8206K



5 - ATS PUNCH & FLANGING TOOL

When overlapping two pieces of sheet metal, you must "jog" the edge of one sheet so that they will join together seamlessly - and that's just what this tool does. The jogging die places a nice 1/2" jogging flange on the edge of sheet metal up to 16ga. While the other end of the die contains a hole punch that will make a clean 3/16" hole. This tool is a real time-saver if you do a lot of sheet metal work.

- Capacity 16ga (.060"/15mm) steel.
- Flange width 1/2" (12 mm).
- 9-3/4" (248 mm) Overall Length.
- Punch Diameter 3/16" (5 mm).
- Rubber comfort grip.
- 2.75 lbs (1.25 kg).

No. ATS8400



SHEET METAL TOOLS



1 - ATS AIR NIBBLER

Cuts beautiful, burr-free edges in aluminum and steel sheets up to 16ga (.060") thick. Features push-type action to give you a better view of you cutting path.

- Cuts up to 16 ga (.060" / 15 mm) steel or aluminum.
- Easily replaceable punch and die.
- Weight 1.74 lbs (.79 kg).

No. **ATS8300**
 No. **ATS8300-RP** (Replacement Punch).....



2 - HAND NIBBLER

Improved nibbler design provides maximum comfort and ease of use. The extra long handles (7") delivers enough force to easily cut through 18 ga. (.046") aluminum, steel, or plastic. The punch action of the nibbler makes it flexible enough to cut any shape ranging from a straight line down to a 5/16" radius circle. Simply drill a 3/8" starting hole and insert the punch and begin cutting by squeezing the handles together to remove material one slug at a time. That's all there is to it. Your cuts will be clean and completely burr-free. Ideal for creating access areas, instrument holes, lightening holes, and other applications requiring a clean, accurate cut.

No. **64823**
 No. **64823BIT** (Replacement bit)



3 - ATS HIGH SPEED AIR SHEARS

The powerful jaws breeze through 16ga sheet metal at over 50 feet/min. Great for rough cutting, or finish trimming. Triple blade (2 stationary, 1 moveable) design cuts without leaving any edge burrs or distortions.

- Cuts up to 16 ga (.060" / 15 mm) steel or aluminum.
- Replaceable blades may be resharpened for extended use.
- Weight 3 lbs (1.35 kg.)

No. **ATS8500** (Pistol Grip Handle).....
 No. **ATS8501** (Straight Handle).....



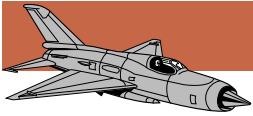
4 - RTN TUBING NOTCHER

The RTN100 (Ol' Joint Jigger) is a bench-mounted tubing notcher designed to make precision angular cuts in both round and rectangular tubing. By using inexpensive BI-METAL hole saws (not included), you can easily and economically notch all types of tubing ranging from mild aluminum to stainless steel. This a "must have" tool for building frames for kitplanes and ultralights. Other features include:

- Easily adjusts in single degree increments to 45 degree angle notches.
- Notch any round tubing up to 2" OD in less than 30 seconds.
- Inverted V vise quadrant automatically centers and aligns round tubes.
- Can be used vertically with a drill press or horizontally with a 1/2" drill.
- Includes adjusting wrench and arbor locking pin to change cutters.

No. **RTN100**
 No. **RTN100B**..... (Base Adapter)
 No. **K1090** (Hole Saw Kit 3/4", 7/8", 1", 1-1/8", and 1-1/4")





SHEET METAL TOOLS

1 - BENCH BENDER BRAKE

Bends and forms up to 90° in metals up to 18 gauge thickness. Provides flanged edges up to 1" in height. Adjustments for stock thickness, sharpness of bends are easy to make. Note: requires the use of two C" clamps (not included)

| PART NUMBER | CAPACITY | BENDING LENGTH | PRICE |
|-------------|----------|----------------|-------|
| 144ST | 18 ga. | 18" | |
| 244ST | 18 ga. | 24" | |
| 364ST | 18 ga. | 36" | |



2 - BAC BENDER BRAKES

Bac Industries bench bender brakes are excellent alternatives to heavy and expensive industrial brakes. Each unit is constructed from aviation grade aluminum for unmatched strength and durability. There are three models available ranging from the lightweight Mighty Mini Bender® to the industrial grade All-Purpose bender.

| Part No. | Working Length | Capacity | Weight | Price |
|----------|----------------|----------|--------|-------|
| MB-18 | 18" | 16ga | 3.5lbs | |
| MB-30 | 30" | 16ga | 11lbs | |
| MB-40 | 40" | 18ga | 50lbs | |



3 - LANCASTER PUMPS® METAL SHRINKER/ STRETCHER

Shrinks and stretches metals, Shrinks metal down to a 2" or 3" radius. Works and forms metal up to, and including, 16 gauge. Mounts easily in a bench vise. Jaws are reversible to increase usage.

| PART NO. | DESCRIPTION | PRICE |
|-----------------|--|-------|
| 4135 | Metal Shrinker | |
| 4136 | Metal Stretcher | |
| 4135/4136 | Set of Both Units (4135 & 4136) | |
| 523 | Replacement Shrinker Jaws | |
| 524 | Replacement Stretcher Jaws | |
| 4135-524 | Shrinker Stretcher Combo Unit 1 Metal Shrinker & 1 Stretcher Jaw | |



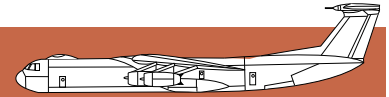
4 - TENNSMITH METAL NOTCHER.

Notcher has a size 6" x 6" cutting area and will notch up to 16 gauge (.060") metal with ease. It is mounted on a 17-1/2" x 12" work table that comes as standard equipment. Angles of more than 90° can be done in two operations. Front gauges are standard. Optional tab-notching blades are available. Shipping Weight is 170 lbs. FOB shipping point.

- No. 16-18(Notcher)
- No. 1618RB(Standard Blades-set of 4)
- No. 1618TB(Tab Blades-set of 4).....
- No. 1618FS.....(Floor Stand).....



SHEET METAL TOOLS



TENNSMITH 

1 - TENNSMITH BENDER BRAKES 4', 6', 8' & 10'

Tennsmith brakes are the industry standard. Their rugged construction and precise control makes them the most sought after tool on the market. Their ease of operation causes less fatigue and boost operations efficiency. FOB shipping point.

| PART NUMBER | WIDTH (Inches) | WEIGHT (Lbs) | FINGERS | CAPACITY | PRICE |
|-------------|---|--------------|----------|--------------|-------|
| S48-22 | 48 | 220 | None | 22ga. (.030) | |
| HBS48-16 | 48 | 460 | None | 16ga. (.060) | \$ |
| HB72-16* | 72 | 1200 | None | 16ga. (.060) | \$ |
| HB97-18* | 97 | 1385 | None | 18ga. (.040) | \$ |
| HB121-18* | 121 | 2350 | None | 18ga. (.040) | \$ |
| U48-22 | 48 | 280 | 2",3",4" | 22ga. (.030) | \$ |
| HBU48-16 | 48 | 495 | 2",3",4" | 16ga. (.060) | \$ |
| HBU72-16* | 72 | 1700 | 2",3",4" | 16ga. (.060) | \$ |
| B48 | Optional Stand (for use with S48, U48, & HBU48) | | | | \$ |

*Free-standing floor models



2 - TENNSMITH INDUSTRIAL SHEARS

Unit is available in 36" or 52" length and comfortably handles up to 16 Ga. mild steel. Comes complete with protractor gauges, slide gauges. FOB shipping point.

| PART NUMBER | WIDTH | WEIGHT | PRICE |
|-------------|-------|----------|-------|
| S-36 | 36" | 700 lbs. | |
| S-52 | 52" | 950 lbs. | |



3 - TENNSMITH SLIP ROLLERS 24", 36", & 42"

Exceptional features including rolls, accurate circle setting and wire grooves. Ideal for tool rooms, sheet metal shops, FBOs, and schools. Simple to adjust and operate for faster set up. Minimum roll radius is 1". FOB shipping point.

| PART NUMBER | ROLL DIA. | CAPACITY | WIDTH | PRICE |
|-----------------------|-------------------|----------|-------|-------|
| SR24 | 2" | 20 Ga. | 24" | |
| SR36 | 2" | 22 Ga. | 36" | |
| SR42 | 2" | 22 Ga. | 42" | |
| Optional Floor Stands | | | | |
| SRFS-24 | For use with SR24 | | | |
| SRFS-36 | For use with SR36 | | | |
| SRFS-42 | For use with SR42 | | | |



4 - TENNSMITH COMBINATION ROTARY MACHINE

This versatile machine with interchangeable rolls (see chart) has many exclusive features to insure fast precise performances. Also will reverse the direction of the arbors. Comes complete with rolls and gauges and table stand. Maximum capacity is 22ga mild steel. Throat width is 7", and shaft roll diameter is 2". Shipping weight is 67 lbs.

No. R22 (Complete kit)





SHEET METAL TOOLS



1 - JET™ COMBINATION SHEAR, BRAKE & ROLL

This tool combines the functions of a shear, bender brake, and a slip roller in one compact unit. The Shear can be used with mild steel, aluminum, soft metals, and plastics. The Brake has removable fingers that permit angle, channel, box and other complex bending operations. The Slip Rolls are precision turned and ground with wire grooves.

| PART NO. | WIDTH (inches) | WEIGHT (lbs) | MIN. ROLL DIA (inches) | CAPACITY | PRICE |
|----------|--------------------------------------|--------------|------------------------|--------------|-------|
| SBR-30N | 30 | 320 | 1-1/2 | 22ga. (.030) | |
| SBR-40N | 40 | 575 | 2 | 22ga.(.030) | |
| SRS-30N | Optional 30" Floor Stand for SBR-30N | | | | |
| SRS-40N | Optional 40" Floor Stand for SBR-40N | | | | |



2 - JET™ HAND BENDER BRAKES

Jet Hand Brakes are constructed to last. All body sections are welded steel plate with heavy truss rods and braces for greater strength. And precise bed and beam alignment ensures accuracy. The HB-1648N features a removable apron nose extension.

| PART NUMBER | WIDTH (Inches) | WEIGHT (Lbs) | FINGERS | CAPACITY | PRICE |
|-------------|----------------------|--------------|---------|--------------|-------|
| HB-2248N | 48 | 210 | None | 22ga. (.030) | \$ |
| HB-1648N | 48 | 430 | None | 16ga.(.060) | \$ |
| S-48N | Optional Floor Stand | | | | \$ |



3 - JET™ BOX AND PAN BENDER BRAKES

Jet Box & Pan Brakes have removable fingers sections to allow the creation of special shapes, such as boxes, pans, channels, or other items requiring complex bends.

| PART NUMBER | WIDTH (Inches) | WEIGHT (Lbs) | FINGERS | CAPACITY | PRICE |
|-------------|---|--------------|----------|--------------|-------|
| BP-2248N | 48 | 260 | 2",3",4" | 22ga. (.030) | \$ |
| BP-1648N | 48 | 480 | 2",3",4" | 16ga.(.060) | \$ |
| BP-1696F | 96 | 1400 | 2",3",4" | 16ga.(.060)) | \$ |
| S-48N | Optional Floor Stand (for 48" units only) | | | | \$ |



4 - JET™ INDUSTRIAL FOOT SHEARS

These units are ideal for precision shearing of mild steel and aluminum up to 16 gauge. Two-way blade configuration provides twice the cutting life.

| PART NUMBER | WIDTH | WEIGHT | PRICE |
|-------------|-------|----------|-------|
| FS-1636N | 36" | 680 lbs. | \$ |
| FS-1652N | 52" | 910 lbs. | \$ |



5 - JET™ THROATLESS SLITTING SHEARS

Capable of shearing aluminum and steel sheets, bars and rods, plus many non-metallic materials. Replaceable high quality stainless steel blades are hardened and tempered for maximum service life. An adjustable hold down clamp aids in securing material. Compound leverage allows the operator to easily perform work within the shear's rated capacity. Includes 35-1/2" handle.

- No. SS-8N (8" Blade, 3/16" Capacity).....
- No. SS-12N (12" Blade, 1/8" Capacity).....

