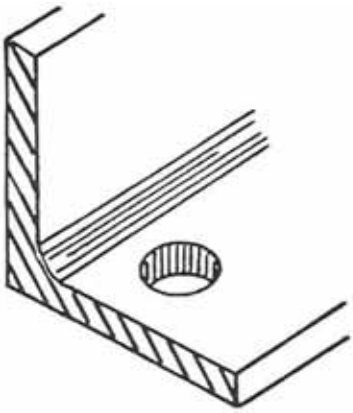


APPLICATION INFORMATION

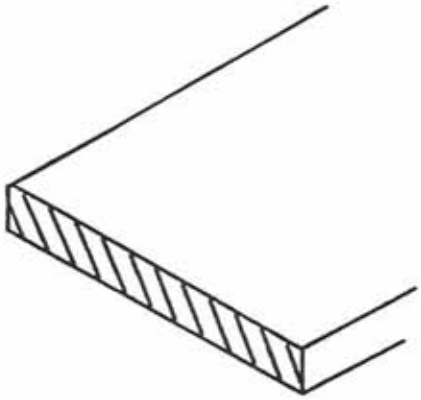
For Models:

56B, 56BMP, 560S, 56BM-C

DP-24-M, DP-24-B, DP-24-S

DP-24-X (with X model attachments)

HP-24 (with appropriate horn)



kidder
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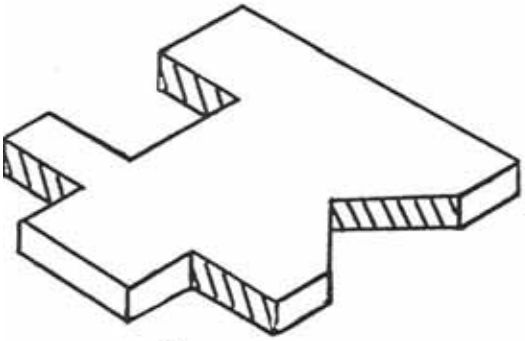
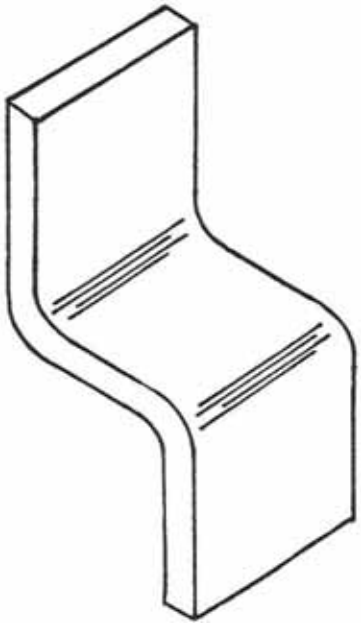
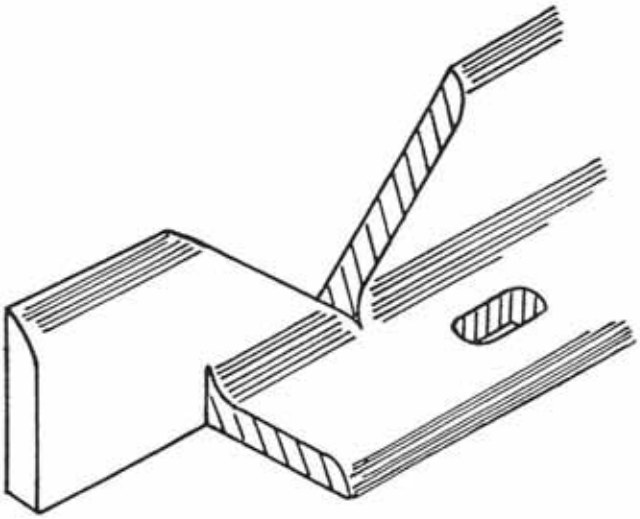
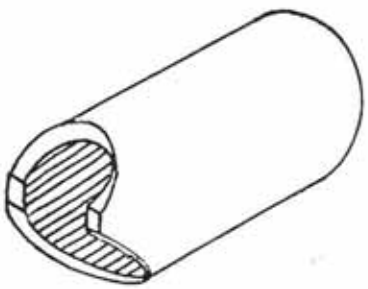


Made in the USA

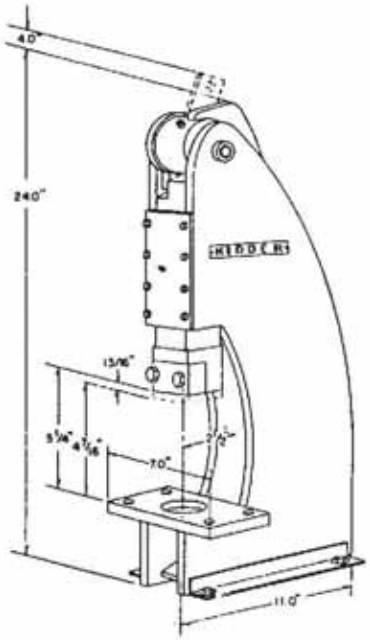






INTRODUCTION

Mitepac 56B, 56BMP, 560S, 56BM-C



The Mitepac Series Kidder machines combine in one machine an ironworker, bending press, angle shear, flat shear, v notcher,forming press, arbor press, and pipe notcher. These machines are rated at 12 tons. The machine is available in 4 configurations:

56B - Hand operated press.

56BMP - Bench mounted 12 ton hydraulic press. Multiple units may be used for gang punching

560S - Stand mounted 12 ton hydraulic press.

56BMC - The famous portable hydraulic press. One man moves the machine on 8" diameter ball bearing wheels, to the work. Hands are free to position work piece. Plugs into properly grounded 115 VAC circuit.

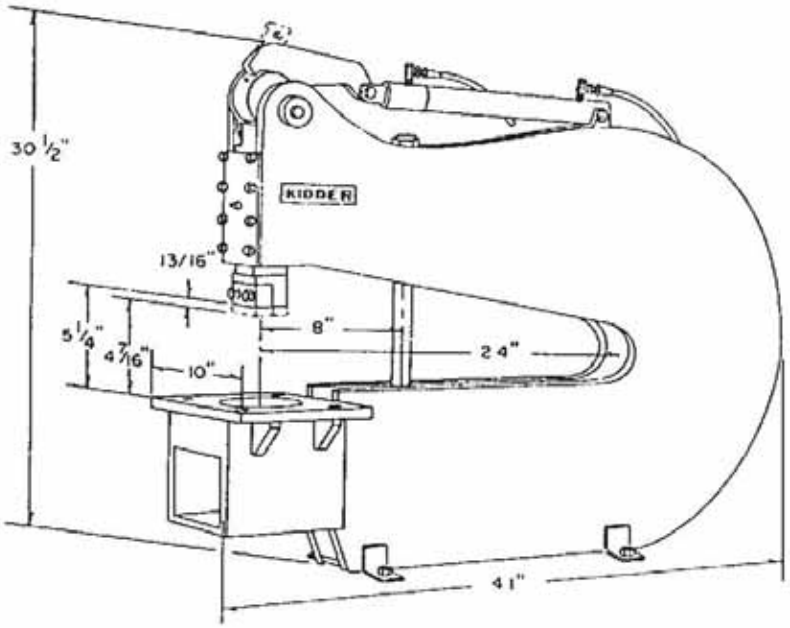
Druthers Press - DP-24-S, DP-24-B, DP-24-M

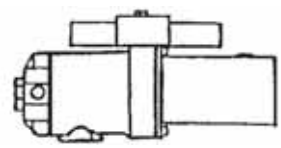
A metalforming shop in one machine. With stay bolt removed (9 tons), punches to the center of a 48" sheet, holes up to 5" round. With stay bolt in place (12 tons, 8" throat) this press handles all iron working attachments for up to 2" x 2" 1/4" angle.

DP-24-S Far and away the most popular Druthers press, this is a completely set up hydraulic machine on its own stand.

DP-24-B Bench mounted hydraulically powered

DP-24-M Manual machine stand mounted





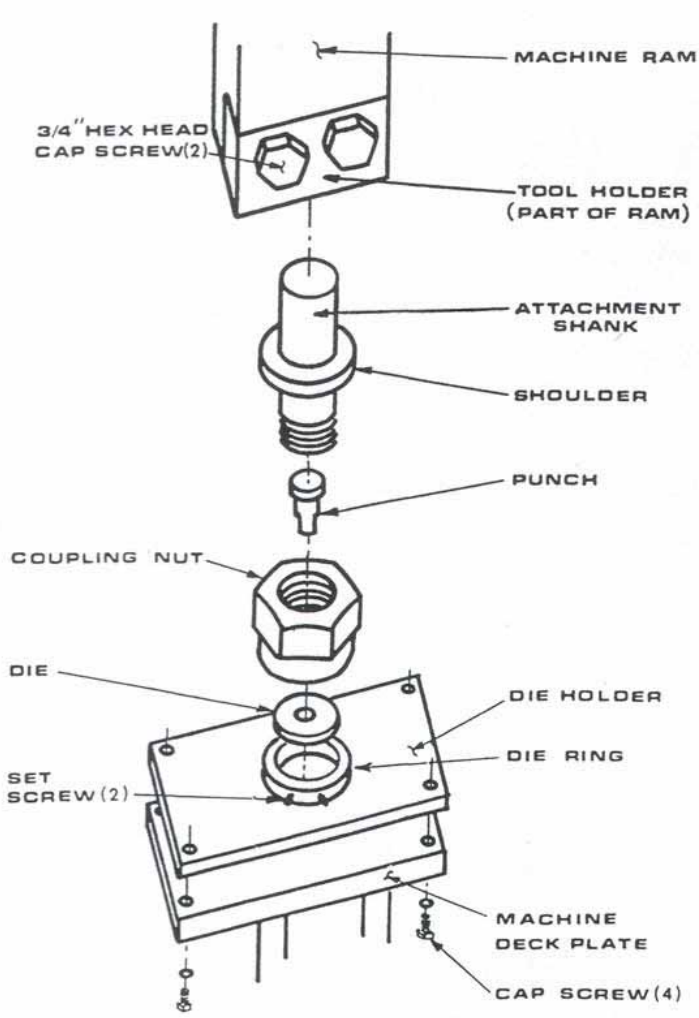
EMP-II Hydraulic System

Both the Mitepac & Druthers Press are powered by this sophisticated, compact 3000 p.s.i. hydraulic unit. The EMP II is totally self contained and operates virtually touble free on 115VAC.

SPECIFICATIONS

	DP-24-M	DP-24-X	DP-24-S	HP-24	56B	560-S
Rating (Tons)	9 + 12 *	25	9 + 12 *	12	12	12
Throat Depth	24	24	24	24	2 1/2	2 1/2
Throat Depth w/stay bolt	8"	--	8"	--	--	--
Stroke	13/16"	2"	13/16"	2"	13/16"	13/16"
Shut Height -Open	5 1/4"	7"	5 1/4"	Varies	5 1/4"	5 1/4"
Width - Inches	10"	29"	20"	20"	7"	21 1/2"
Depth - Inches	41"	35"	42"	41"	11"	24"
Height - Inches	30"	70"	30"	64"	24"	56"
Cycle Time	--	3 sec.	6 sec.	3.5 sec.	--	6 sec.
Bed Plate Size	8" x 10"	8" x 12"	8" x 10"	--	3 1/2" x 7"	3 1/2" x 7"
Electrics Volts	--	240 VAC	115VAC	115VAC	--	115 VAC
H.P.	--	3	1	1	--	1
Amps	--	10	20	20	--	20
Phase	--	3	1	1	--	1
Handle Length - Inches	63,43,22	--	--	--	63	--
Mount (bench or stand)	B/S	S	S	S	B/S	S
Operation	Hand	Hydraulic	Hydraulic	Hydraulic	Hand	Hydraulic
Shipping Weight (lbs.)	550	1000	775	1000	170	300

*Rating with stay bolt in place



ATTACHMENT SET-UP

1. With machine ram in up position, insert attachment shank into tool holder. Tighten cap screws lightly.

2. Install lower Portion of attachment on machine deck plate tighten cap screws.

3. For punching attachments, next install punch securely either with coupling nut or set screws. Place die ring and tighten set screws securely with a wrench.

4. Bring ram down slowly adjusting orientation of upper section to the lower. Upper portion of attachment should be loose enough to tighten by hand. When orientation is complete tighten the two 3/4" hex head cap screws tightly with a wrench. Be sure that the attachment shoulder is tight against the base of the tool holder/ram. Check blades or punch and die to be sure that they are tight against the attachment.

5. Adjust lower part of the attachment to the upper. In the case of punches and dies be sure that clearance is equal all around the punch. (Lower punch until it just enters the die to check clearance. For blade attachments be sure that clearance (usually 10% of material thickness) is even.

   Tighten the 4 lower cap screws evenly and alternately. Be sure that clearance is even after tightening screws.

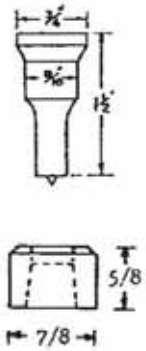
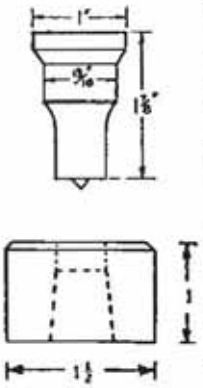
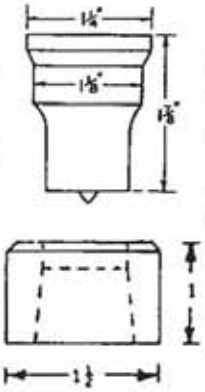
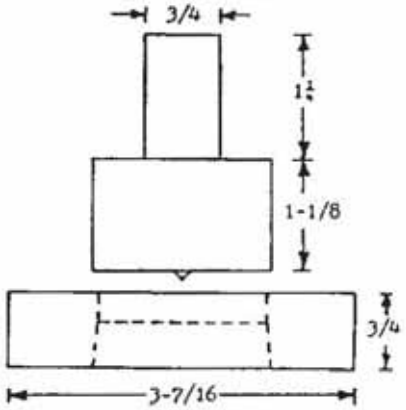
6. Straight shear (AS-F and BS-F) and angle shear (AS-A and BS-A require that back-up screws (3/8" square heads) be snugged against machine deck plate to prevent blades from separating during operation.

7. Install appropriate strippers, hold downs or guards as needed.

Punch Attachments

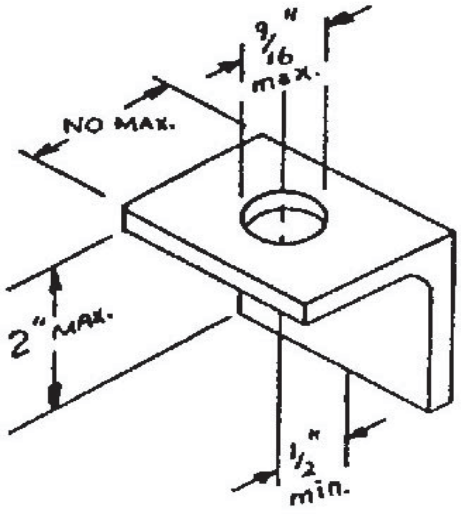
There are 3 basic punch and die styles available for either the Miteypac (56 series) or the Druthers (DP-24 series) presses. The ironworking (headed) punches are used for holes up to 1-1/8" in heavy metal. Straight Shank punches and dies are primarily used for sheet metal work in sizes up to 5 inches.

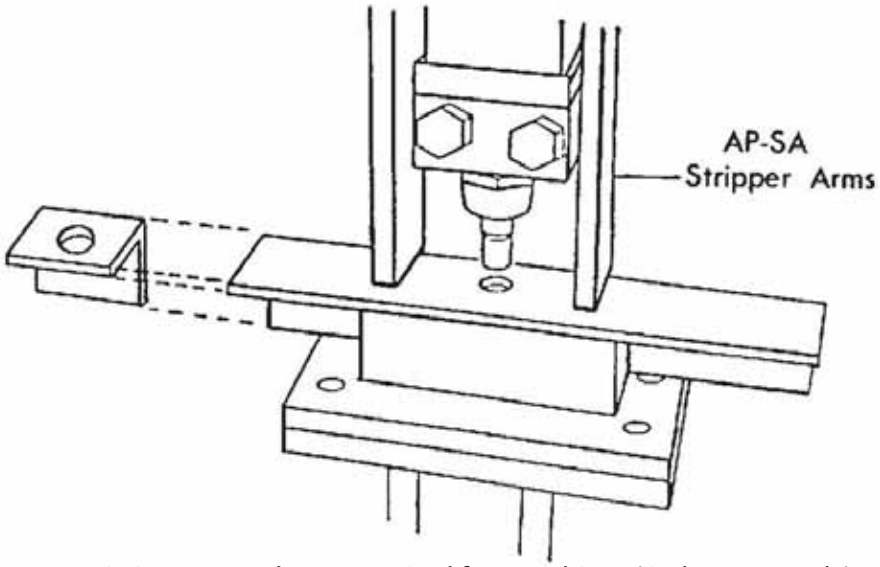
Kidder Standard Punch and Dies

Punch Holder	AP3-BP3	AP4-BP4	AP4 w/over size coupling	APSS-BPSS		
Punch Die	 #3	 #4	 #4 o/s	 Straight Shank (SS)		
Die Holder	AD-3 BD-3	AD-4 BD-4	AD-4 BD-4	AD-3-7/16 BD-3-7/16	BD-4-5/8	BD-5-15/16
maximum hole size	9/16	13/16	1-1/8	1-7/8 2-1/2	3	5

Number 3 Punches and Dies
AP-3 or BP-3 and AD-3 or BD-4 Attachments

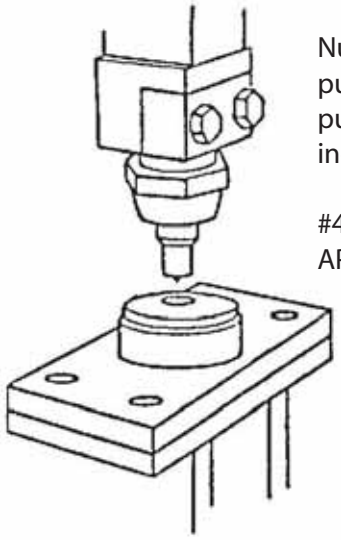
This combination is used principally to punch structural sections close (within 1/2 inch) or a vertical leg. Die block is elevated 2 inches. Maximum round hole diameter is 9/16 inch. There are many shapes available and Kidder can custom make any special punch and die.





Strippers are always required for punching. (Order separately)

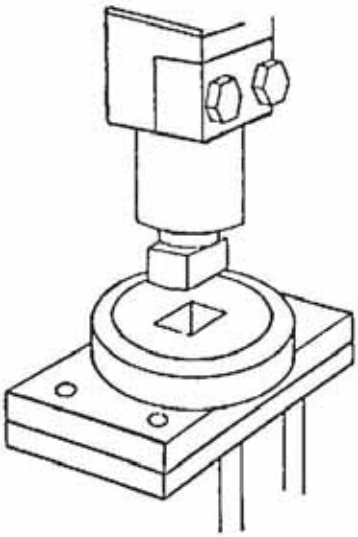
#4 & #4 Oversize Punches & Dies



Number 4 and 4 oversize (O.S.) punches and dies are used for punching holes up to 1-1/8 inches in heavy sections.

#4 O.S. punches require an AP-CN coupling nut.

Straight Shank Punches & Dies



Straight shank (S.S.) punches and dies are generally used in lighter gauge material such as sheet metal.

Maximum hole size for the Miteypac is 1-7/8 inch and 5" for the Druthers press.

Hundreds of shapes and specials are available.

Three different sizes of die holders are available for the Druthers press.

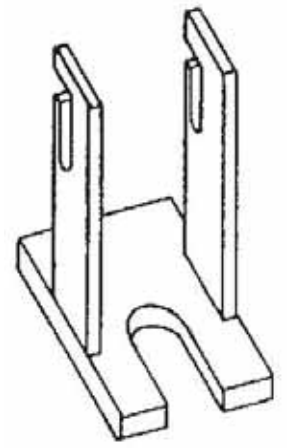
Force, in tons required to punch hot rolled mild steel (without shear)

Round Hole Diameter		1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"
Ga.	In.																						
20	.036	.4	.5	.7	.9	1.1	1.2	1.4	1.6	1.8	1.9	2.1	2.3	2.5	2.6	2.8	4.2	5.6	7.0	8.5	9.9	11.3	14.1
18	.048	.5	.7	.9	1.2	1.4	1.6	1.9	2.1	2.4	2.6	2.8	3.1	3.3	3.5	3.8	5.5	7.5	9.4	11.3	13.0	15.0	18.7
16	.062	.6	.9	1.2	1.5	1.8	2.1	2.3	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.7	7.0	9.5	11.7	14.0	16.5	18.8	23.5
14	.075	.7	1.1	1.5	1.8	2.2	2.6	2.9	3.3	3.7	4.0	4.4	4.8	5.1	5.5	5.9	8.8	11.7	14.7	17.6	20.5	23.5	29.3
12	.105	1.0	1.5	2.1	2.6	3.1	3.6	4.1	4.6	5.1	5.7	6.2	6.7	7.2	7.7	8.2	12.3	16.4	20.5	24.5	28.8	32.8	41.1
11	.120	1.2	1.8	2.4	2.9	3.5	4.1	4.7	5.1	5.9	6.2	7.1	7.6	8.3	8.8	9.4	14.0	18.8	23.5	28.2	32.7	37.6	47.1
10	.135	1.3	2.0	2.6	3.3	4.0	4.6	5.3	5.9	6.6	7.3	7.9	8.6	9.2	9.9	10.6	15.9	21.0	26.5	31.7	37.0	42.2	52.8
3/16	.188	–	2.8	3.7	4.6	5.5	6.4	7.4	8.3	9.2	10.1	11.0	12.0	12.9	13.8	14.8	22.0	29.5	36.8	44.2	51.5	60.0	73.6
1/4	.250	–	–	4.9	6.1	7.4	8.6	9.8	11.1	12.3	13.5	14.7	16.0	17.2	18.4	19.7	34.4	39.3	49.0	60.0	68.7	78.5	98.2
5/16	.312	–	–	–	7.8	9.2	10.7	12.3	13.9	15.4	17.0	18.5	20.0	21.5	23.0	24.6	43.0	49.0	61.5	73.5	86.0	98.0	123
3/8	.375	–	–	–	–	11.1	12.8	14.8	16.5	18.5	20.2	22.1	23.8	25.8	27.5	29.5	51.5	59.0	73.6	88.4	103.0	118.0	147

Chart multiplier for other materials:

Aluminum - 1/2 Hard	.40
Copper	.60
Brass - 1/2 Hard	.70
Steel ASTM-A36	1.20
Steel - Cold Drawn	1.20
Stainless Steel	1.40

Strippers



Stripper arms (AP-SA, BP-SA) are sold in pairs and may be used with or without stripper plates (AP-SP, BP-SP)

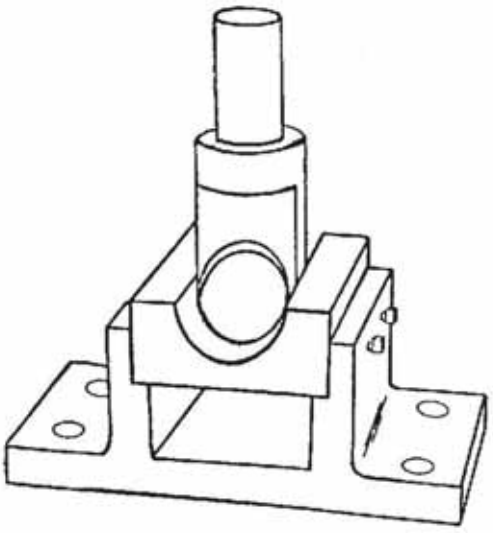
Stripper plates are screw mounted and may be ordered in 3 sizes - clearance for up to 9/16", 1-1/4" or 2" punches. (Note: Special custom sizes are available.

Shear

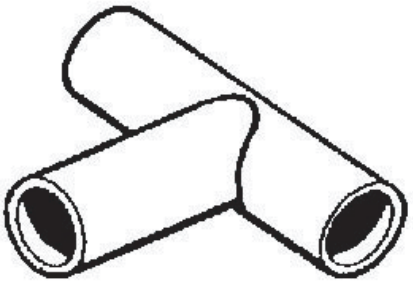
Depending on the size of the punch and material thickness, shear on a punch (or die) can decrease force requirements by 25 to 50%.

INTRODUCTION

Pipe Notcher - APN, BPN



Used in radiusing and notching of pipe and tubing prior to welding. Notches one side at a time - manual indexing is quick and positive.



Consists of 4 parts:

APN-P - Punch, tool steel
APN-PH - Punch Holder
APN-D - Die, tool steel
APN-DH - Universal die holder

Standard sizes are 1", 1-1/4", 1-1/2" and 2" pipe (Schedule 40)
Other wall ticknessess and tubing sizes manufactured to order.

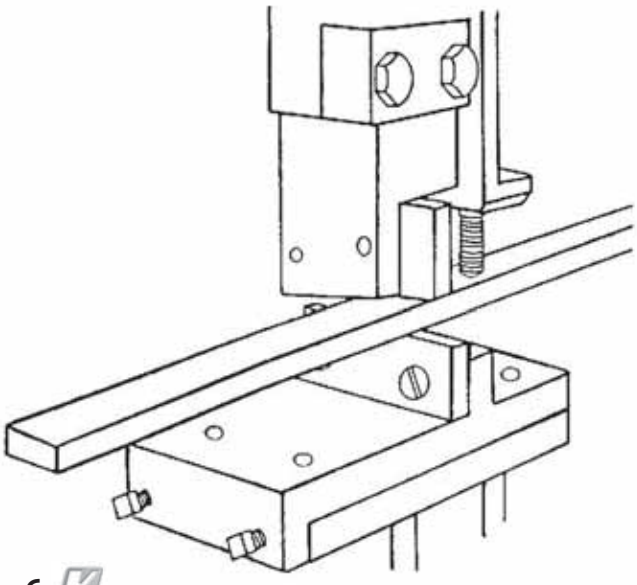
Die holder fits all sizes. Different punch, punch holder and die required for each size of pipe to be notched.

Straight Shear - AS-F, BS-F

Consists of 3 parts - upper, lower and holddown. Blades (one upper, one lower) are replaceable. Use of holddown is essential.

Single stroke capacity is 3" x 3/8" flat. Wider flats may be sheared using multiple strokes.

Rod shearing blades can be purchased to fit this attachment. Capacity is to 5/8" round or square up to 3 rounds in one set.



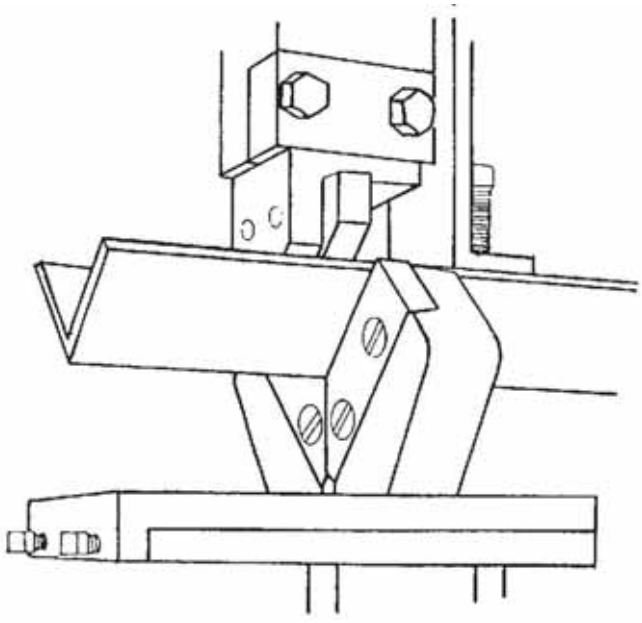
Angle Shear - AS-A, BS-A

Consists of 3 parts - upper, lower and holddown. Blade (one upper, two lower) are replaceable.

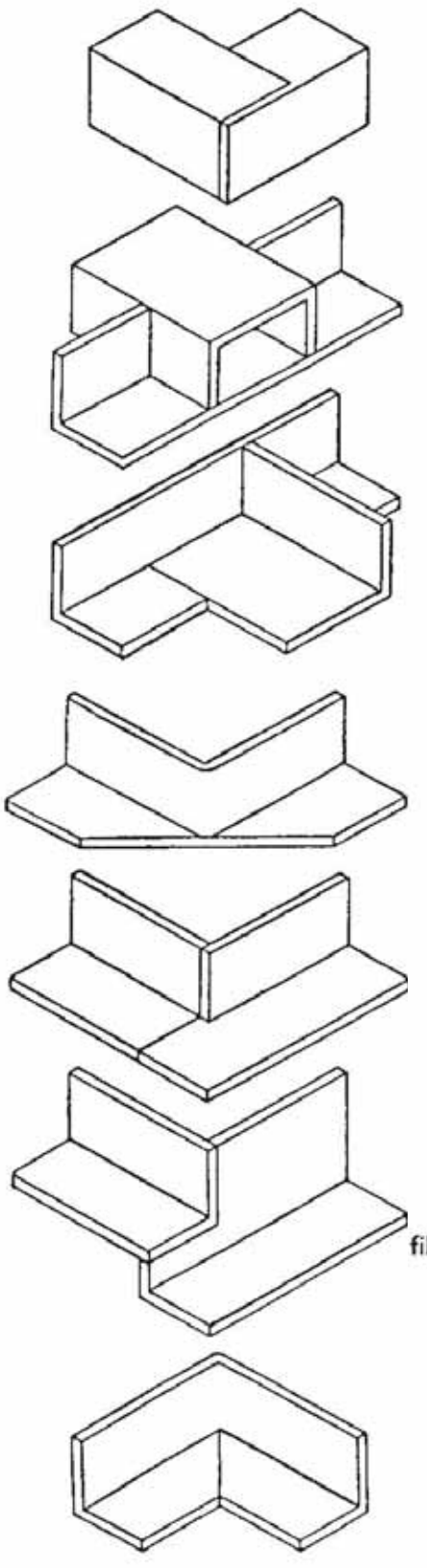
Cuts 2" x 2" x 1/4" angle easily.

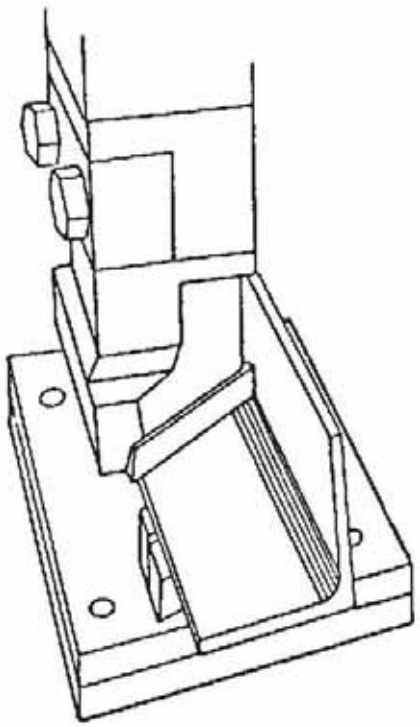
Distortion from shear angle of blades is on one side only. Cut section 3/8" to 1/2" long, reverse and shear to finish length to avoid this distortion.

Use of holddown is essential.



Notcher - AN-A, BN-A





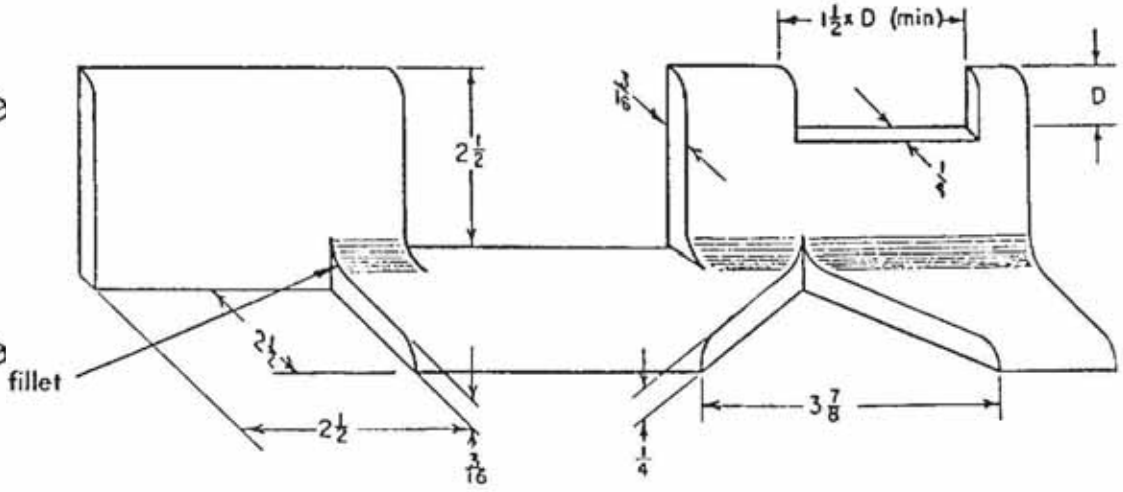
This notching attachment is used for notching or clipping angle sections prior to bending, coping ends to make leg-in 90 degree cut in flat, angle or Z sections. Examples of work which can be done in a single set up are shown on the left.

Exclusive blade design ensures that the fillet of the angle is completely removed, permitting a clean, bulge free bend with good fit-up for welding.

Because the upper blade is pierce cutting, that is, it initiates the cut at its apex, the attachment can be used for 3 sided coping. (Three sided copes must be at least 1-1/2 times as long as they are deep.)

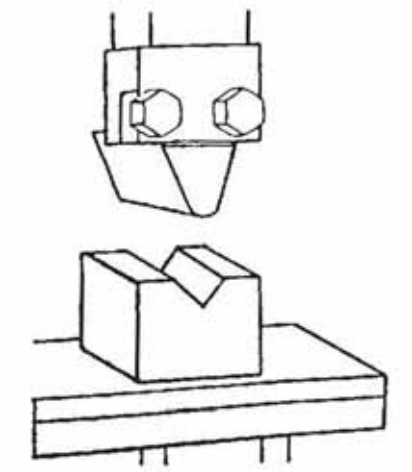
The attachment is reversible. Best visibility results from the set-up pictured above.

Capacities for different cuts are shown below.



When long sections of fillet are cut out material thickness should be limited to 3/16" mild steel. This does not apply to notching or short ended copes where the amount of heavy gauge fillet to be removed is small

AB-3, BB-3



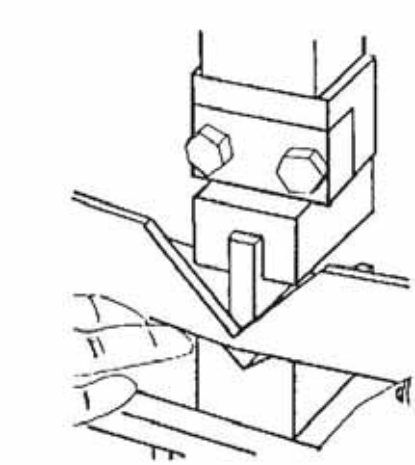
Scroll Bending

Makes an excellent tool for cold form of radii, rings, scrolls, etc. even in heavy gauge material.

The jog control either up or down makes forming to any desired shape easy.

Use for any curved ornametnal or structural shape.

AB-4, BB-4



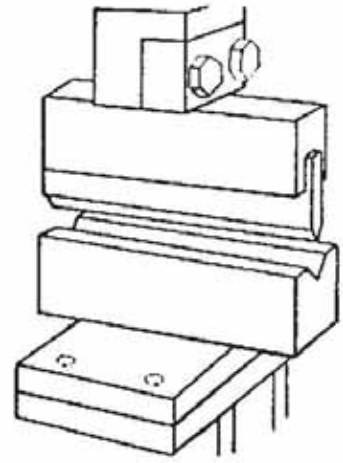
Heavy Bending

Ideal for bending 2" x 2" x 1/4" angle or similar relatively heavy material after nothcing

Smooth hydraulic power over entire stroke allows work to stretch and form perfect match-ups for fast welding.

Tool steel punch with case hardened die bock.

AB-6, BB-6

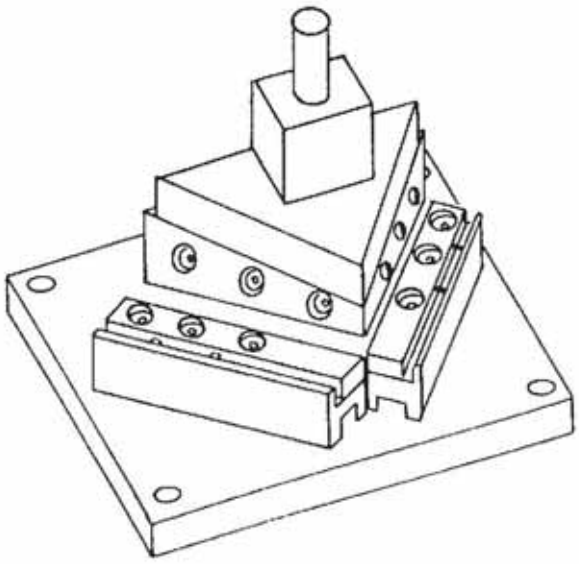


Light Bending

Primarily designed for use on light gauge-3/16" or less. Can be used as a small press brake set-up.

Horn type projection on front premits bending of closed shapes as short as 2-1/2" and widths to 1-1/2" (11 gauge or under). Tool steel upper blade.

MAXIMUM CAPACITY					
THICKNESS	WIDTH	THICKNESS	WIDTH	THICKNESS	WIDTH
½''	3''	¼''	4''	⅛''	5½''



AN-C, BN-C 5" x 5" Notcher

This heavy duty notching attachment may be used with either the Miteypac or Druthers Press. Maximum capacity is 5" x 5" in 3/16" (7 gauge) mild, hot rolled steel.

Full corner notches are possible when used with the Druthers press.

Blades are removeable for replacement or resharpening.

Because both Miteypac and Druthers press are powered along the entire stroke maximum shear is built into these blades. Shearing forces are thereby reduced.

A blade guard, which mounts on the upper portion of the attachment is recommended (order separately)