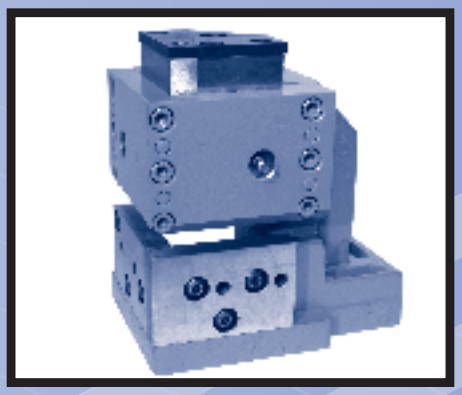
UNITTOOL

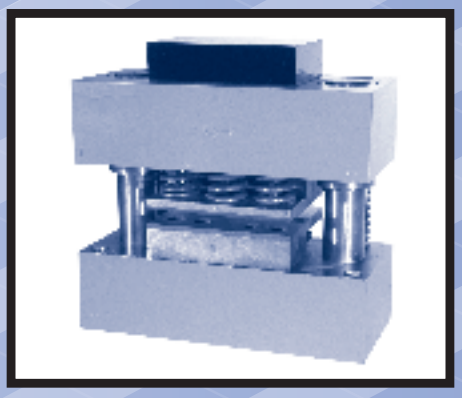
NOTCHING UNITS

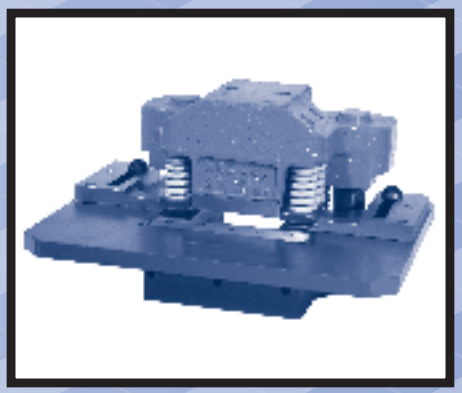
Corner Notch • V Notch
Edge Notch

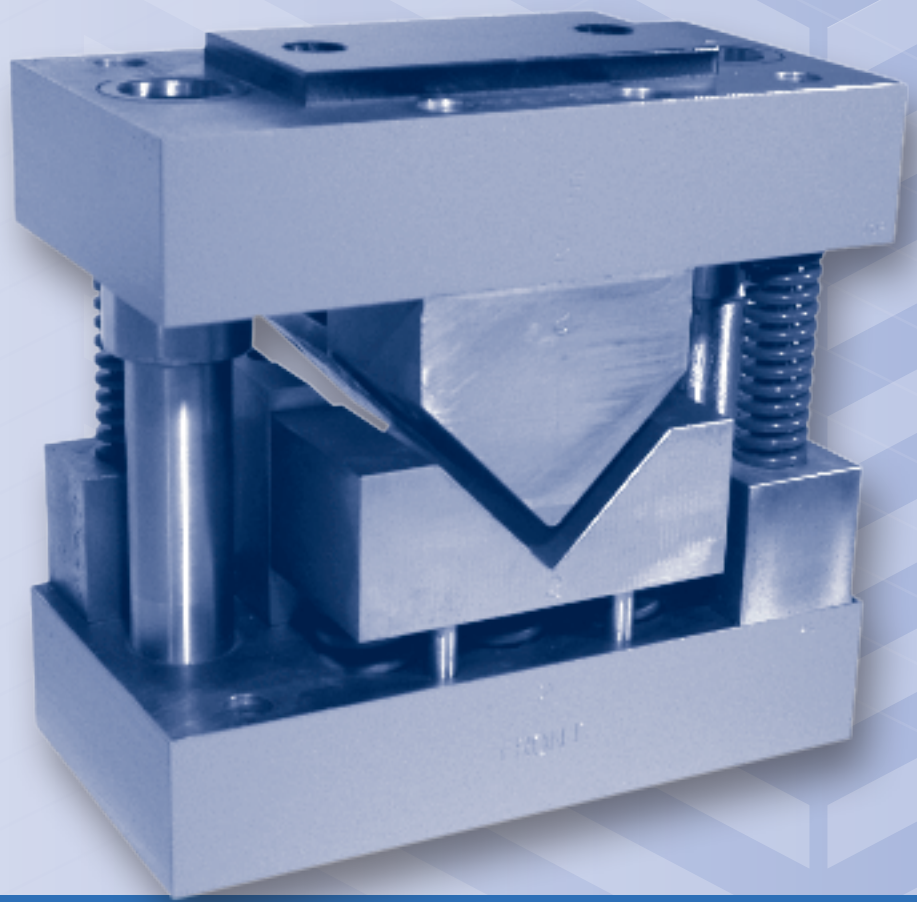
For Material Thickness up to ¼" Mild Steel

Self contained units for quick and accurate setups - with nothing attached to the ram of the press. Pilot pins are provided on the base of the unit for the accurate alignment of the unit on jig bored base plates or templates. The units have a standard shut height and die height. Punching units can be used in the same setup with multiple punching and notching operation. A die clearance of .003 per side is provided on all corner notchers and vee to accommodate light gauge material. All units are manufactured with a slug ejection chute. To prevent "Jam-Up," the slugs should occasionally be removed.

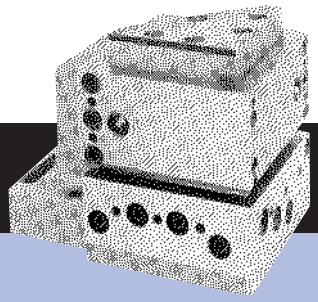








UNITTOOL PUNCH & DIE COMPANY INC.
20 Norris St. Buffalo, New York 14207 | Phone: 1-716-873-8453 | Fax: (USA Only) 1-800-25Punch (257-8624)
Email:Info@Unittool.com

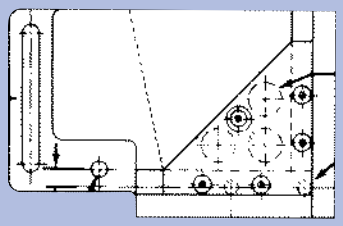


Series H-100

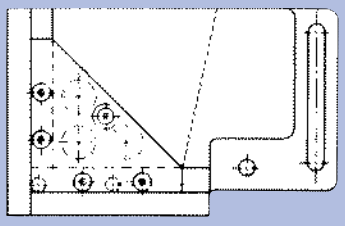
5×5 Heavy Duty 90° Corner Notching Units

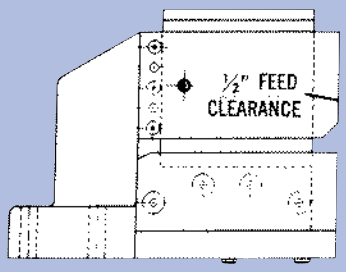
Maximum Material Capacity – 1/4" Mild Steel

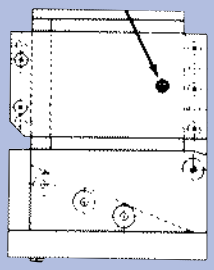
LEFT HAND UNIT

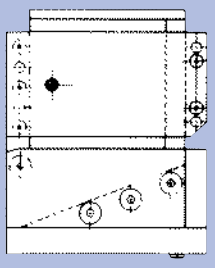


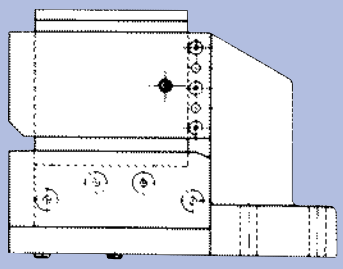
RIGHT HAND UNIT









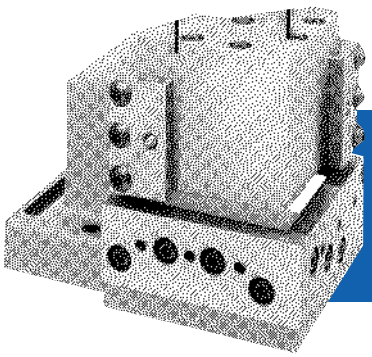


	Cat. No.	Weight
LEFT HAND UNIT	H-55-LCN	105 lbs.
RIGHT HAND UNIT	H-55-RCN	105 lbs.

LEFT — RIGHT

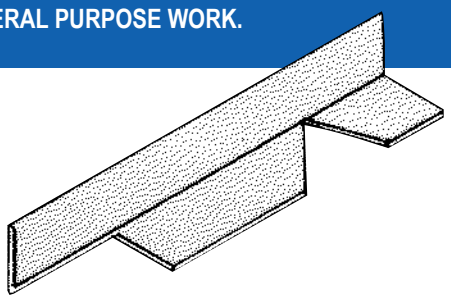
UNITTOOL'S LEFT HAND AND RIGHT HAND 90° CORNER NOTCHING UNITS ARE DESIGNED TO NOTCH UP TO 4 CORNERS OF A PART PER PRESS STROKE. VEE NOTCHING UP TO 3½" DEPTH CAN ALSO BE ACCOMPLISHED WITH THIS UNIT.

RIGHT — LEFT



GIB DESIGN

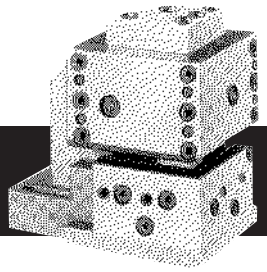
SAME AS UNIT LISTED ABOVE EXCEPT PROVIDED WITH EXPOSED PUNCH BLADE FOR NOTCHING ANGLES. NOT RECOMMENDED FOR GENERAL PURPOSE WORK.

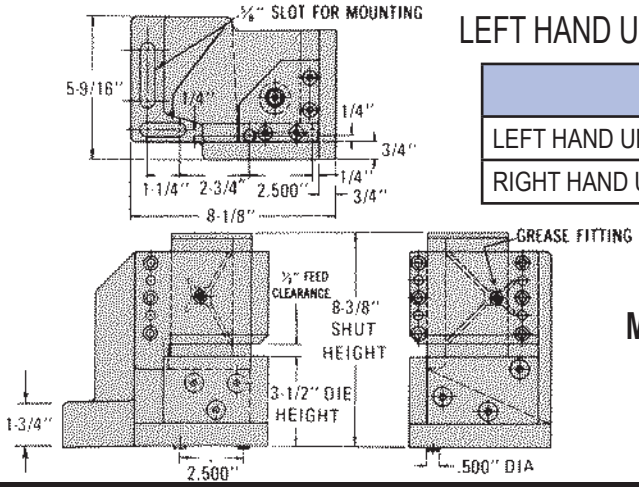


	Cat. No.	Weight
LEFT HAND UNIT	H-55-LCN-G	102 lbs.
RIGHT HAND UNIT	H-55-RCN-G	102 lbs.

Series H-100

3×3 Heavy Duty 90° Corner Notching Units

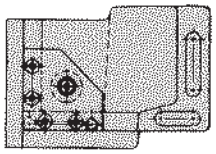




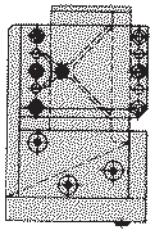
LEFT HAND UNIT

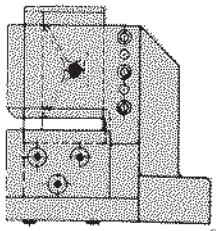
RIGHT HAND UNIT

	Cat. No.	Weight
LEFT HAND UNIT	H-33-LCN	65 lbs.
RIGHT HAND UNIT	H-33-RCN	65 lbs.

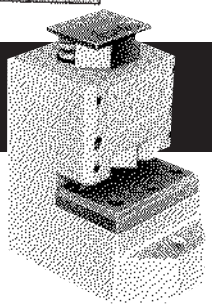


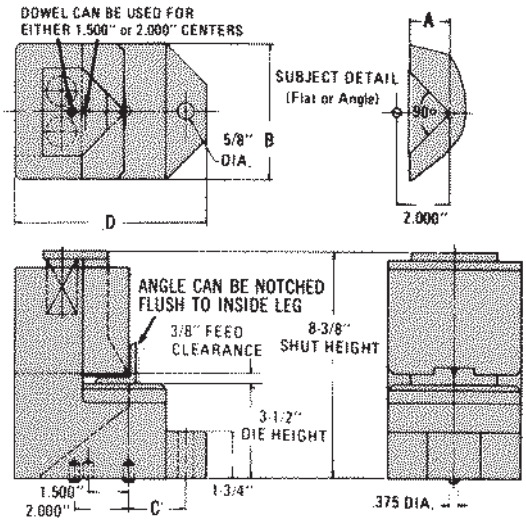
Maximum Material Capacity – 1/4" Mild Steel



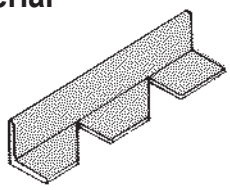


Heavy Duty 90° Vee Notching Units





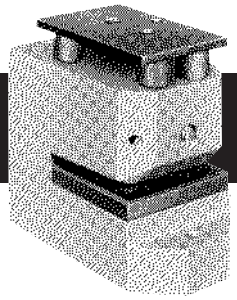
Maximum Material Capacity – 1/4" Mild Steel

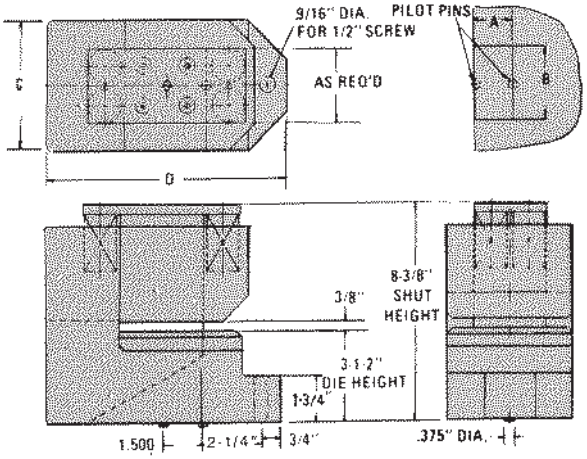


Cat No.	Dimensions				Weight
	A	B	C	D	
HV-1	1	3-1/2	1-11/16	6-1/8	34 lbs.
HV-1½	1-1/2	5	2-1/8	7	41 lbs.

Units for 60°, 45°, 30°, and other sizes are available.
Ask for Quotation.

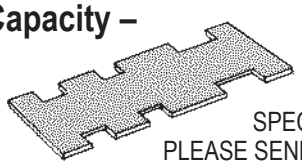
Heavy Duty Edge Notching Units





Maximum Material Capacity – 1/4" Mild Steel

When Ordering – specify material thickness to be notched

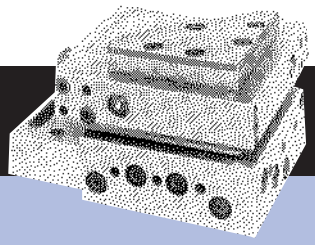


SPECIAL UNITS AVAILABLE
PLEASE SEND SKETCH FOR QUOTATION

Catalog Number	Depth A	Width B	C	D	Catalog Number	Depth A	Width B	C	D	Catalog Number	Depth A	Width B	C	D
HEN-2Dx1W	2	1	4	8¼	HEN-2Dx5W	2	5	9	8¼	HEN-2Dx9W	2	9	15	8¼
HEN-3Dx1W	3	1	4	9¼	HEN-3Dx5W	3	5	9	9¼	HEN-3Dx9W	3	9	15	9¼
HEN-2Dx2W	2	2	5	8¼	HEN-2Dx6W	2	6	10	8¼	HEN-2Dx10W	2	10	16	8¼
HEN-3Dx2W	3	2	5	9¼	HEN-3Dx6W	3	6	10	9¼	HEN-3Dx10W	3	10	16	9¼
HEN-2Dx3W	2	3	6	8¼	HEN-2Dx7W	2	7	12	8¼	HEN-2Dx11W	2	11	17	8¼
HEN-3Dx3W	3	3	6	9¼	HEN-3Dx7W	3	7	12	9¼	HEN-3Dx11W	3	11	17	9¼
HEN-2Dx4W	2	4	8	8¼	HEN-2Dx8W	2	8	13	8¼	HEN-2Dx12W	2	12	18	8¼
HEN-3Dx4W	3	4	8	9¼	HEN-3Dx8W	3	8	13	9¼	HEN-3Dx12W	3	12	18	9¼

FOR INTERMEDIATE SIZES — Specify A & B Dimensions

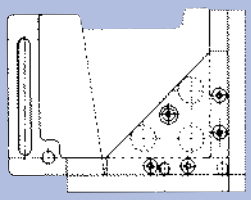
Vee & Edge Notching Units must be returned to factory for punch and die replacement.

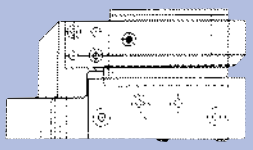


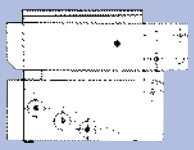
Series M-100

5×5 Medium Duty 90° Corner Notching Units

LEFT HAND UNIT

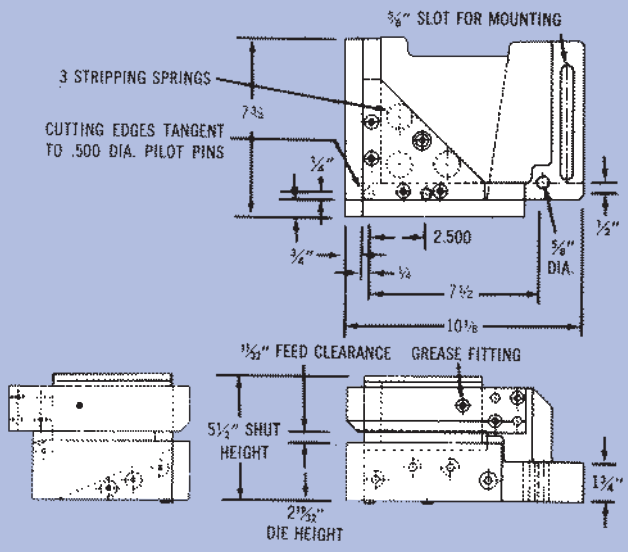






Maximum Material Capacity – 10 Gauge Mild Steel

RIGHT HAND UNIT

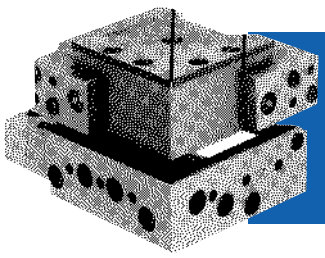


	Cat. No.	Weight
LEFT HAND UNIT	M-55-LCN	54 lbs.
RIGHT HAND UNIT	M-55-RCN	54 lbs.

LEFT — RIGHT

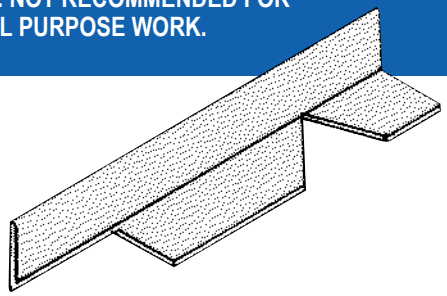
UNITTOOL'S LEFT HAND AND RIGHT HAND 90° CORNER NOTCHING UNITS ARE DESIGNED TO NOTCH UP TO 4 CORNERS OF A PART PER PRESS STROKE. VEE NOTCHING UP TO 3½" DEPTH CAN ALSO BE ACCOMPLISHED WITH THIS UNIT.

RIGHT — LEFT



GIB DESIGN

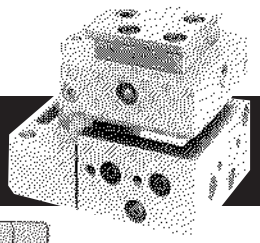
SAME AS UNIT LISTED ABOVE EXCEPT PROVIDED WITH EXPOSED PUNCH BLADE FOR NOTCHING ANGLES. NOT RECOMMENDED FOR GENERAL PURPOSE WORK.

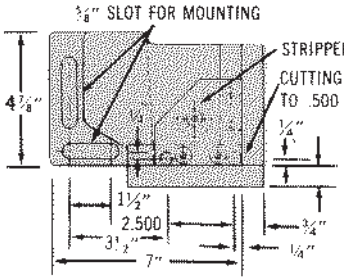


	Cat. No.	Weight
LEFT HAND UNIT	M-55-LCN-G	52 lbs.
RIGHT HAND UNIT	M-55-RCN-G	52 lbs.

Series M-100

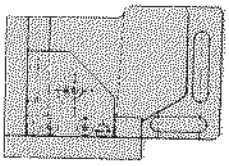
3×3 Medium Duty 90° Corner Notching Units





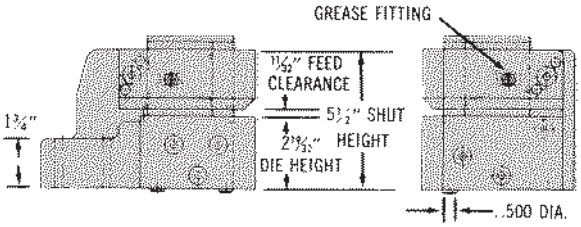
LEFT HAND UNIT

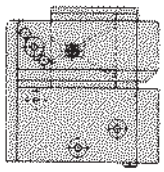
RIGHT HAND UNIT

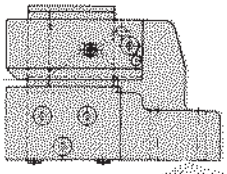


	Cat. No.	Weight
LEFT HAND UNIT	M-33-LCN	38 lbs.
RIGHT HAND UNIT	M-33-RCN	38 lbs.

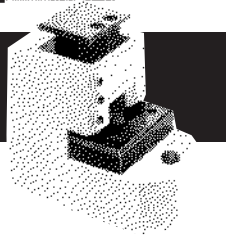
Maximum Material Capacity – 10 Gauge Mild Steel

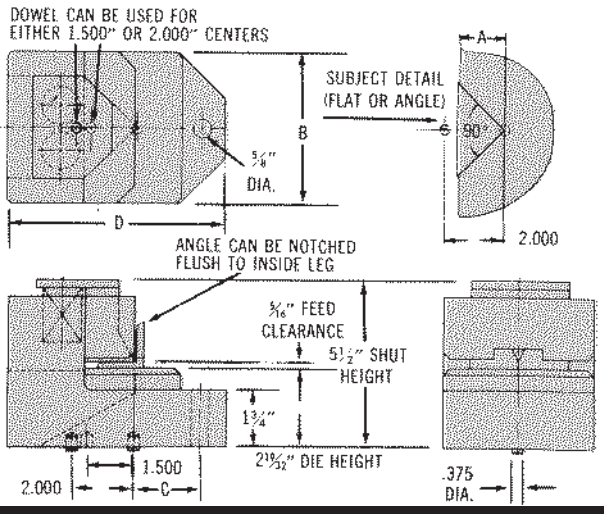




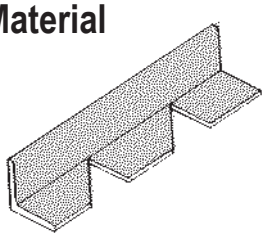


Medium Duty 90° Vee Notching Units





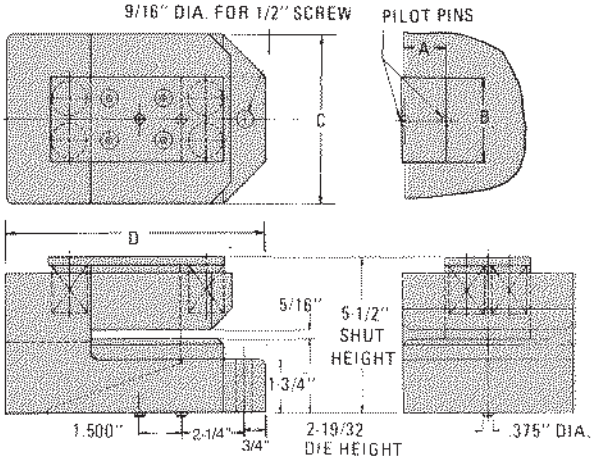
Maximum Material Capacity – 10 Gauge Mild Steel



Cat No.	Dimensions				Weight
	A	B	C	D	
MV-1	1	3-1/2	1-11/16	6-1/8	16 lbs.
MV-1½	1-1/2	5	2-1/8	7	23 lbs.

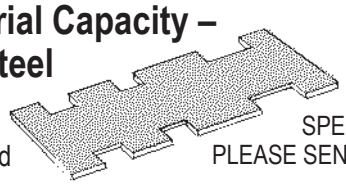
Units for 60°, 45°, 30°, and other sizes are available.
Ask for Quotation.

Medium Duty Edge Notching Units



Maximum Material Capacity – 10 Gauge Mild Steel

When Ordering – specify material thickness to be notched



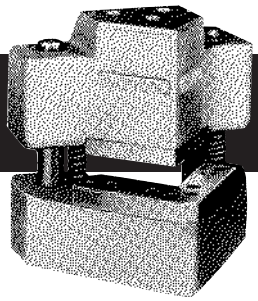
SPECIAL UNITS AVAILABLE
PLEASE SEND SKETCH FOR QUOTATION

Catalog Number	Depth A	Width B	C	D	Catalog Number	Depth A	Width B	C	D	Catalog Number	Depth A	Width B	C	D
MEN-2Dx1W	2	1	4	8¼	MEN-2Dx5W	2	5	8	8¼	MEN-2Dx9W	2	9	12	8¼
MEN-3Dx1W	3	1	4	9¼	MEN-3Dx5W	3	5	8	9¼	MEN-3Dx9W	3	9	12	9¼
MEN-2Dx2W	2	2	5	8¼	MEN-2Dx6W	2	6	9	8¼	MEN-2Dx10W	2	10	13	8¼
MEN-3Dx2W	3	2	5	9¼	MEN-3Dx6W	3	6	9	9¼	MEN-3Dx10W	3	10	13	9¼
MEN-2Dx3W	2	3	6	8¼	MEN-2Dx7W	2	7	10	8¼	MEN-2Dx11W	2	11	14	8¼
MEN-3Dx3W	3	3	6	9¼	MEN-3Dx7W	3	7	10	9¼	MEN-3Dx11W	3	11	14	9¼
MEN-2Dx4W	2	4	7	8¼	MEN-2Dx8W	2	8	11	8¼	MEN-2Dx12W	2	12	15	8¼
MEN-3Dx4W	3	4	7	9¼	MEN-3Dx8W	3	8	11	9¼	MEN-3Dx12W	3	12	15	9¼

FOR INTERMEDIATE SIZES — Specify A & B Dimensions

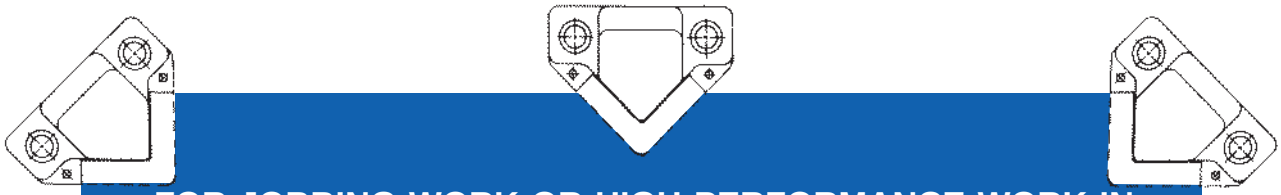
Vee & Edge Notching Units must be returned to factory for punch and die replacement.

Series 200 Post Design Corner Notching Units



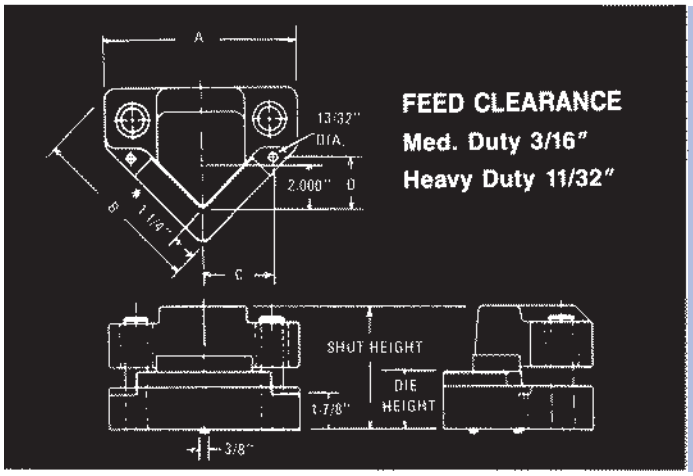
Perform left hand and right hand 90° corner notches or vee notch – with one tool…

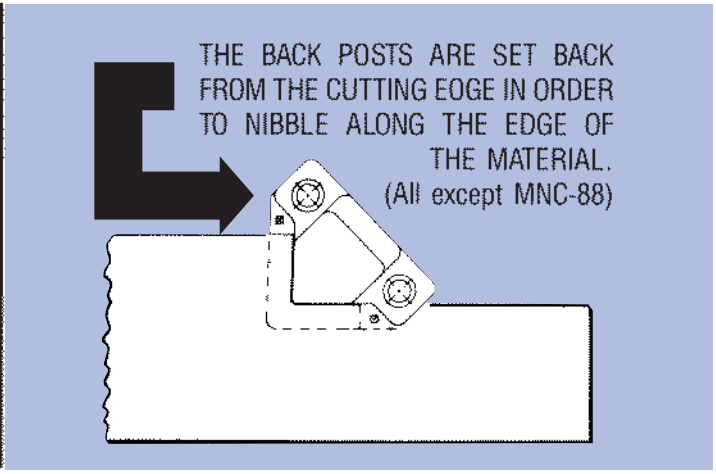
in flat stock or angle iron up to 8" × 8" in 1/8" mild steel and up to 5" × 5" in 1/4" mild steel



FOR JOBBING WORK OR HIGH PERFORMANCE WORK IN PUNCH PRESS, PRESS BREAK, ARBOR PRESS OR USE WITH AIR CYLINDER.

UNITS ARE MANUFACTURED WITH A SLUG EJECTION CHUTE. TO PREVENT "JAM-UP" THE SLUGS SHOULD OCCASIONALLY BE REMOVED.



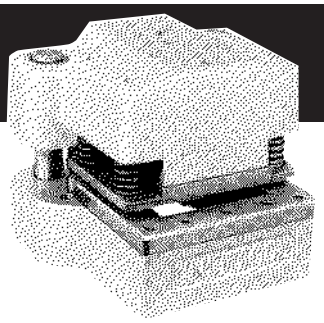


* 2" Dim. for Model MNC-88

MEDIUM DUTY	Catalog Number	Maximum Notch Size	Maximum Depth of Vee	A	B	C	D	Weight	Open Height
5-1/2" Shut Height 2-19/32" Die Height Max. Mat'l. Thickness 1/8" Mild Steel	MNC-33	3 x 3	2-1/8	8-3/4	8	3-1/4	2-1/4	35	5-13/16
	MNC-55	5 x 5	3-17/32	12-7/8	10-1/2	4-3/4	3-3/4	56	5-13/16
	MNC-66	6 x 6	4-1/4	13-1/2	11	5-1/2	4-1/2	76	5-13/16
	MNC-88	8 x 8	5-3/4	20	15	7	5	95	5-13/16
HEAVY DUTY	**Catalog Number**	**Maximum Notch Size**	**Maximum Depth of Vee**	**A**	**B**	**C**	**D**	**Weight**	**Open Height**
8-3/8" Shut Height 3-1/2" Die Height Max. Mat'l. Thickness	HNC-33	3 x 3	2-1/8	8-3/4	8	3-1/4	2-1/4	59	8-27/32
	HNC-55	5 x 5	3-17/32	12-7/8	10-1/2	4-3/4	3-3/4	96	8-27/32
	*HNC-66	6 x 6	4-1/4	13-1/2	11	5-1/2	4-1/2	120	8-27/32
1/4" Mild Steel *except HNC-66 is rated for 1/8" Mild Stl.	MODEL MNC-88 CAN BE MODIFIED TO OPERATE AT 8-3/8" Shut Height & 3-1/2" Die Height - Max. Mat'l. Capacity - 1/8" Mild Steel PRICE ON APPLICATION								

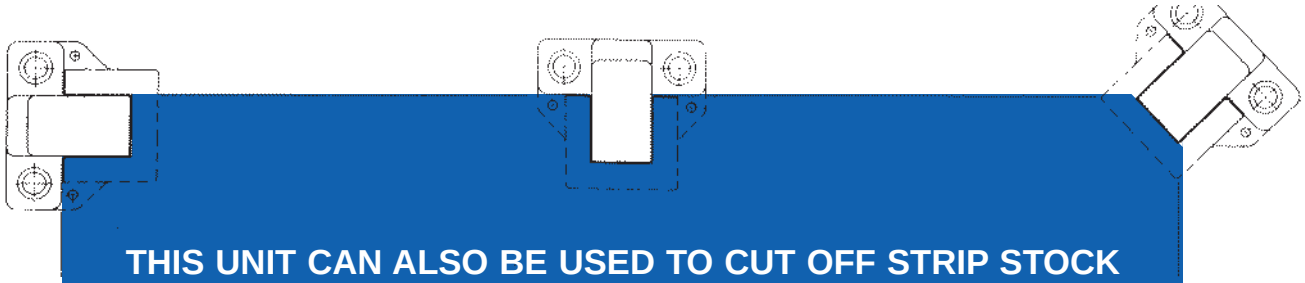
All series 200 Post Design Units must be returned to factory for punch and die replacement.

Series 200 Post Design Edge Notching Units



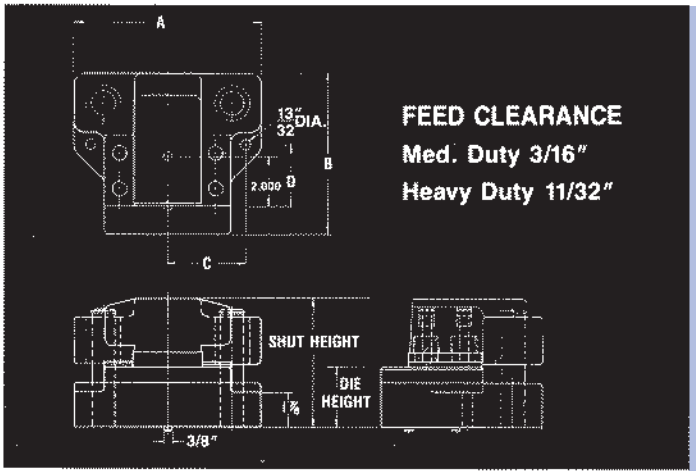
also used for corner notching, coping and strip stock cut-off.

STRIPPER PADS ARE FURNISHED ON THIS MODEL TO WIPE THE MATERIAL OFF THE PUNCH BLADES WHEN EDGE NOTCHING.



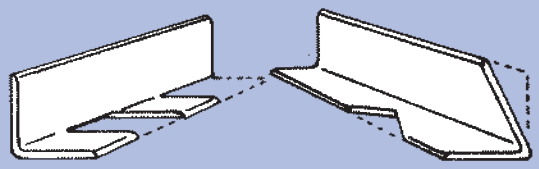
THIS UNIT CAN ALSO BE USED TO CUT OFF STRIP STOCK UP TO THE WIDTH OF NOTCHING BLADE.

DIE HEIGHT AND SHUT HEIGHT ARE DESIGNED TO OPERATE IN SAME SET UP WITH "C" FRAME PUNCHING UNITS.



FEED CLEARANCE
Med. Duty 3/16"
Heavy Duty 11/32"

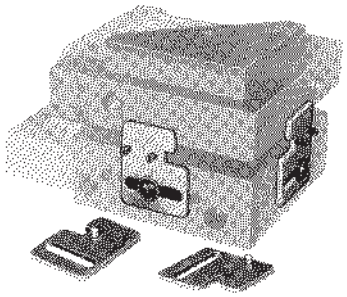
- EXPOSED PUNCH BLADE PERMITS EDGE NOTCHING AND COPING OF ANGLES AND OTHER FORMED PARTS.



MEDIUM DUTY	Catalog Number	Maximum Notch Size	A	B	C	D	Weight	Open Height
5-1/2" Shut Height 2-19/32" Die Height Die 1/8" Max. Mat'l. Thickness	MNE-33	3 x 3	8	7-1/4	3-1/4	2-5/8	45	5-13/16
HEAVY DUTY	**Catalog Number**	**Maximum Notch Size**	**A**	**B**	**C**	**D**	**Weight**	**Open Height**
8-3/8" Shut Height 3-1/2" Die Height For 1/4" Max. Mat'l. Thickness	HNE-33 HNE-44 HNE-55	3 x 3 4 x 4 5 x 5	8 12-3/8 10-1/4	7-1/4 8-5/8 10-1/4	3-1/4 4-1/2 4-1/2	2-5/8 3 4-5/8	70 110 155	8-27/32 8-27/32 8-27/32

All series 200 Post Design Units must be returned to factory for punch and die replacement.

ADJUSTABLE NOTCHING GAUGES
for Vee Notching & Corner Notching Units



Adjustable Side Gauge
for Series 100 – 5 × 5 & 3 × 3 Units

Cat No.
AG-100-1

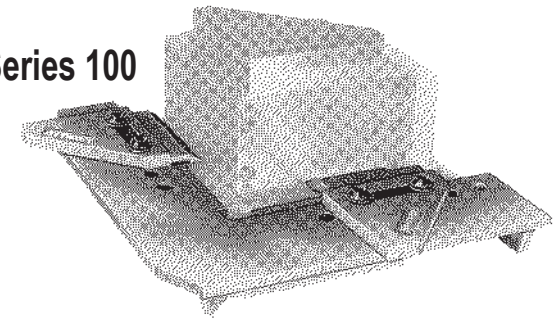
Adjustable 1-Piece Gauge with Built-In Scale 1/64" INCREMENTS

for Series 100 – 5 × 5 & 3 × 3 Units
for Series 200 – 6 × 6, 5 × 5 & 3 × 3 Units

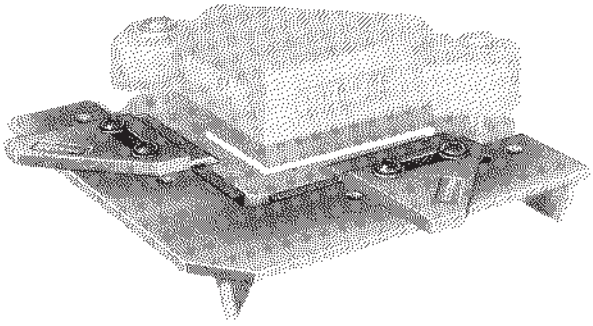
(SPECIAL ADJUSTABLE GAUGE TABLE
FOR MNC-88 AVAILABLE UPON REQUEST)

Cat No.
AG-100-3

Series 100



Series 200

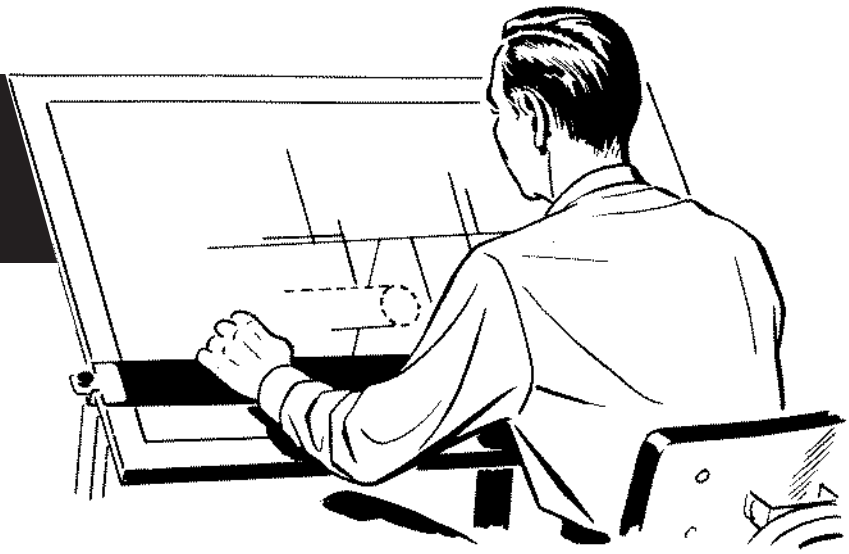


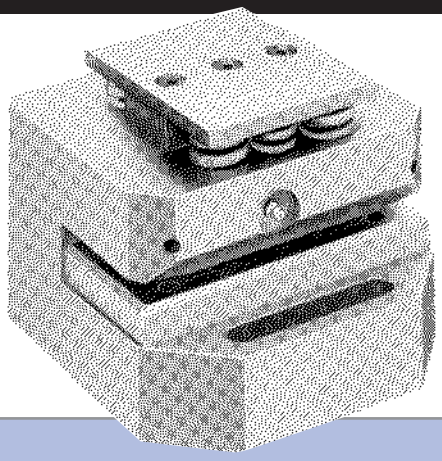
Gauge Plates for Gauge Tables

Cat No.
GP-100-RH GP-100-LH

MOUNTING HOLES ARE NOT PROVIDED IN SERIES 200 UNITS. THEREFORE THE GAUGE SHOULD BE MOUNTED AT THE FACTORY TO INSURE ACCURACY.

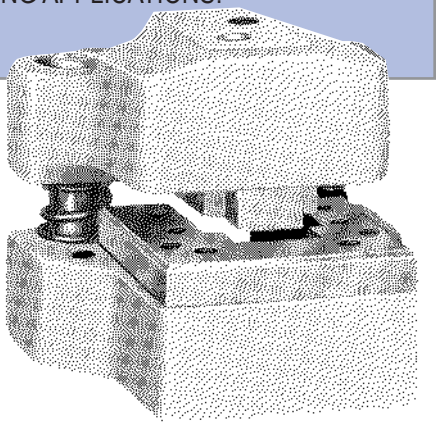
CUSTOM DESIGN

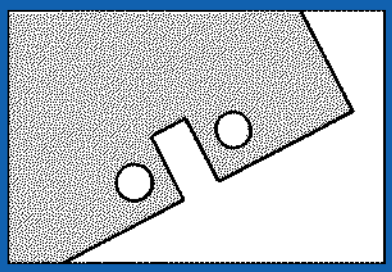
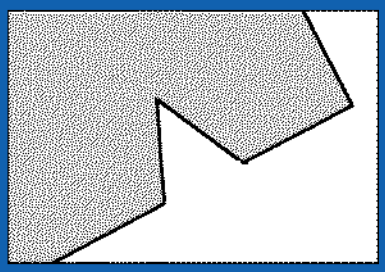
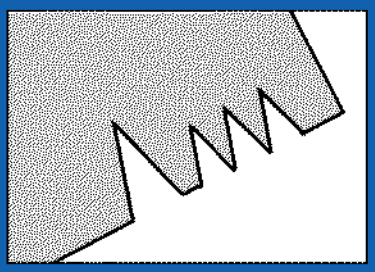
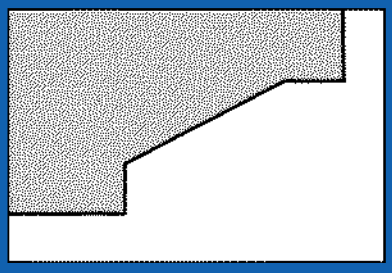
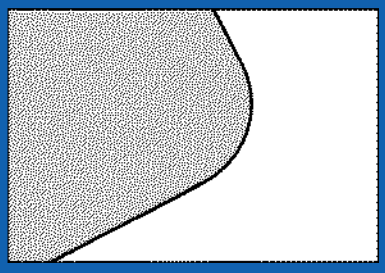
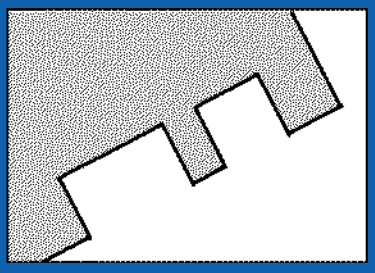




SPECIAL NOTCHING UNITS CAN BE PROVIDED FOR COMBINATION NOTCH AND PIERCE OPERATIONS AS WELL AS SPECIAL EDGE OR CORNER NOTCHING APPLICATIONS.

PRICE ON APPLICATION.
PLEASE SEND SKETCH FOR QUOTATION.



VARIOUS MOUNTING ARRANGEMENTS

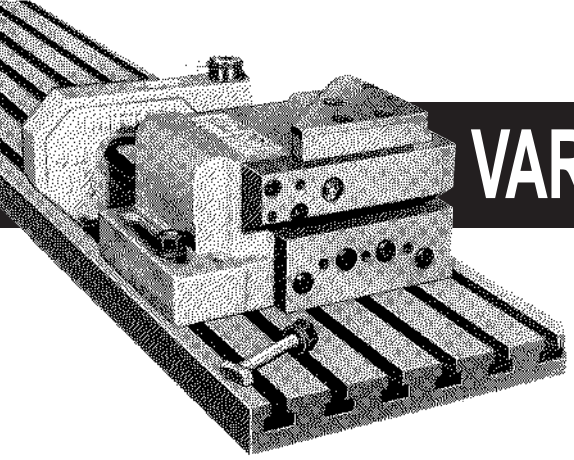
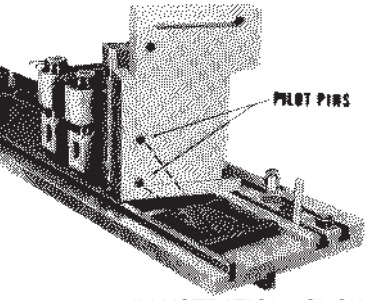
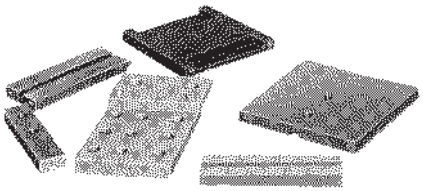


ILLUSTRATION SHOWS SERIES 100 NOTCHING UNIT ON TEE SLOTTED PLATE – (REMOVE PILOT PINS FROM BOTTOM OF NOTCHING UNIT WHEN MOUNTING ON TEE SLOTTED PLATES).





(See Accessory Catalog for Tee Slotted Plates, Bed Rails and Spacers)

ILLUSTRATION SHOWS SERIES 100 NOTCHING UNIT BEING SET UP ON BR-800 BED RAIL WITH USE OF BED RAIL SPACER.

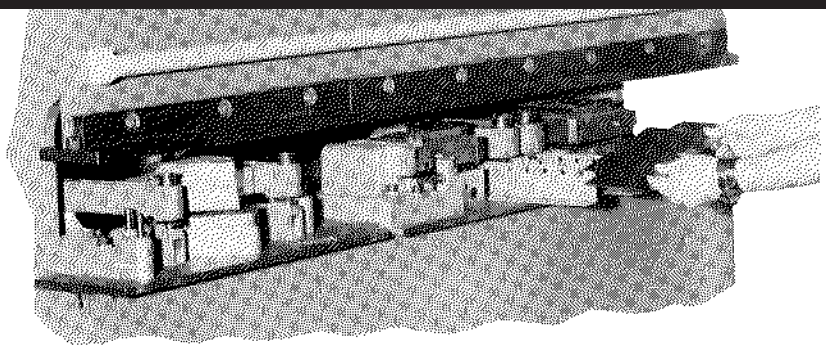


ILLUSTRATION TO SHOW TEMPLATE OR BASE PLATE SETUP WITH MEDIUM DUTY PUNCHING AND NOTCHING UNITS.

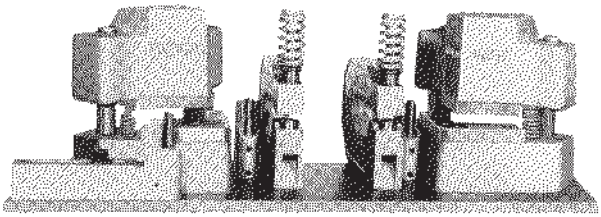


ILLUSTRATION SHOWS SERIES 200 NOTCHING UNITS AND HEAVY DUTY PUNCHING UNITS SET UP ON BASE PLATE OR TEMPLATE.

TONNAGE CHART

APPROXIMATE PRESSURES REQUIRED FOR NOTCHING MILD STEEL

METAL THICKNESS	Gauge	20	18	16	14	12	11	10	3/16"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
	Decimal	.036	.048	.060	.075	.105	.120	.135	.187	.250	.375	.500	.625	.750	1.000
TONS REQUIRED TO NOTCH 1" LENGTH		.90	1.20	1.50	1.87	2.63	3.00	3.38	4.68	6.25	9.38	12.5	15.75	18.75	25.00

FORMULA FOR NOTCHING MILD STEEL BASED ON 25 TONS PER SQUARE INCH
TOTAL SHEAR LENGTH X MATERIAL THICKNESS X 25 = TONNAGE

THE MULTIPLES SHOWN OPPOSITE MAY BE USED TO CONVERT THE ABOVE CHART AND FORMULA TO FIND TONNAGE REQUIRED TO NOTCH OTHER MATERIAL.

FOR EXAMPLE: –
IT REQUIRES 1.5 TONS TO NOTCH 1" OF 16-GAUGE MILD STEEL – STAINLESS STEEL (18-8), WOULD REQUIRE 1.5 X 1.4 (MULTIPLIER) OR 2.1 TONS.

MULTIPLIER CHART

MATERIAL DESCRIPTION	TONS PER SQ. IN.	YIELD OR SHEAR STRENGTH PSI	MULTIPLIER
Aluminium - Soft Sheet	7 1/2	15,000 P.S.I.	.30
Aluminium - Half Hard	9 1/2	19,000 P.S.I.	.38
Aluminium - Hard	12	25,000 P.S.I.	.50
Brass - Soft Sheet	15	30,000 P.S.I.	.60
Brass - Half Hard	17 1/2	35,000 P.S.I.	.70
Copper - Rolled	14	28,000 P.S.I.	.57
Steel - Mild	25	50,000 P.S.I.	1.00
Steel - ASTM-A36	30	60,000 P.S.I.	1.20
Steel - 50 Carbon	35	70,000 P.S.I.	1.40
Steel - Cold Drawn	30	60,000 P.S.I.	1.20
Steel - Stainless (18-8)	35	70,000 P.S.I.	1.40

FRACTION AND DECIMAL EQUIVALENTS

1/64	.015625	33/64	.515625
1/32	.03125	17/32	.53125
3/64	.046875	35/64	.546875
1/16	.0625	9/16	.5625
5/64	.078125	37/64	.578125
3/32	.09375	19/32	.59375
7/64	.109375	39/64	.609375
1 - 8	.125	**5 - 8**	.625
9/64	.140625	41/64	.640625
5/32	.15625	21/32	.65625
11/64	.171875	43/64	.671875
3/16	.1875	11/16	.6875
13/64	.203125	45/64	.703125
7/32	.21875	23/32	.71875
15/64	.234375	47/64	.734375
1 - 4	.25	**3 - 4**	.75
17/64	.265625	49/64	.765625
9/32	.28125	25/32	.78125
19/64	.296875	51/64	.796875
5/16	.3125	13/16	.8125
21/64	.328125	53/64	.828125
11/32	.34375	27/32	.84375
23/64	.359375	55/64	.859375
3 - 8	.375	**7 - 8**	.875
25/64	.390625	57/64	.890625
13/32	.40625	29/32	.90625
27/64	.421875	59/64	.921875
7/16	.4375	15/16	.9375
29/64	.453125	61/64	.953125
15/32	.46875	31/32	.96875
31/64	.484375	63/64	.984375
1 - 2	.5	**1**	1.

USEFUL INFORMATION

To find the circumference of a circle multiply diameter by 3.1416.

To find diameter of a circle multiply circumference by .31831.

To find area of a circle multiply square of diameter by .7854.

Area of rectangle = length multiplied by breadth. Doubling the diameter of a circle increases its area four times.

To find area of a triangle multiply base by ½ perpendicular height.

Area of ellipse = product of both diameters x .7854.

Area of parallelogram = base x altitude.

To find side of an inscribed square multiply diameter by 0.7071 or multiply circumference by 0.2251 or divide circumference by 4.4428.

United States Standard Gauge

(Revised)

Manufacturers' Standard Gage for Sheet Steel

Based on 0.0014945 in. per oz. per sq. ft.; 0.023912 in. per lb. per sq. ft. (reciprocal of 41.820 lb. per sq. ft. per in. thick); 3.443329 in. per lb. per sq. in

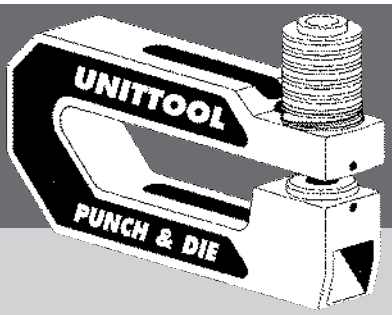
Standard Gage No.	Thickness Inches Decimal Equivalent	Ounces per Sq. Ft.	Pounds per Square Inch	Pounds per Square Foot
3	0.2391	160	0.069444	10.0000
4	.2242	150	.065104	9.3750
5	.2092	140	.060764	8.7500
6	.1943	130	.056424	8.1250
7	.1793	120	.052083	7.5000
8	.1644	110	.047743	6.8750
9	.1495	100	.043403	6.2500
10	.1345	90	.039062	5.6250
11	.1196	80	.034722	5.0000
12	.1046	70	.030382	4.3750
13	.0897	60	.026042	3.7500
14	.0747	50	.021701	3.1250
15	.0673	45	.019531	2.8125
16	.0598	40	.017361	2.5000
17	.0538	36	.015625	2.2500
18	.0478	32	.013889	2.0000
19	.0418	28	.012153	1.7500
20	.0359	24	.010417	1.5000
21	.0329	22	.0095486	1.3750
22	.0299	20	.0086806	1.2500
23	.0269	18	.0078125	1.1250
24	.0239	16	.0069444	1.0000
25	.0209	14	.0060764	0.87500
26	.0179	12	.0052083	.75000
27	.0164	11	.0047743	.68750
28	.0149	10	.0043403	.62500
29	.0135	9	.0039062	.56250
30	.0120	8	.0034722	.50000
31	.0105	7	.0030382	.43750
32	.0097	6.5	.0028212	.40625
33	.0090	6	.0026042	.37500
34	.0082	5.5	.0023872	.34375
35	.0075	5	.0021701	.31250
36	.0067	4.5	.0019531	.28125
37	.0064	4.25	.0018446	.26562
38	.0060	4	.0017361	.25000

Decimal Equivalents of Number Size Drills

No.	Size of Drill in Inches	No.	Size of Drill in Inches	No.	Size of Drill in Inches
1	0.2280	21	0.1590	41	0.0960
2	0.2210	22	0.1570	42	0.0935
3	0.2130	23	0.1540	43	0.0890
4	0.2090	24	0.1520	44	0.0860
5	0.2055	25	0.1495	45	0.0820
6	0.2040	26	0.1470	46	0.0810
7	0.2010	27	0.1440	47	0.0785
8	0.1990	28	0.1405	48	0.0760
9	0.1960	29	0.1360	49	0.0730
10	0.1935	30	0.1285	50	0.0700
11	0.1910	31	0.1200	51	0.0670
12	0.1890	32	0.1160	52	0.0635
13	0.1850	33	0.1130	53	0.0595
14	0.1820	34	0.1110	54	0.0550
15	0.1800	35	0.1100	55	0.0520
16	0.1770	36	0.1065	56	0.0465
17	0.1730	37	0.1040	57	0.0430
18	0.1695	38	0.1015	58	0.0420
19	0.1660	39	0.0995	59	0.0410
20	0.1610	40	0.0980	60	0.0400

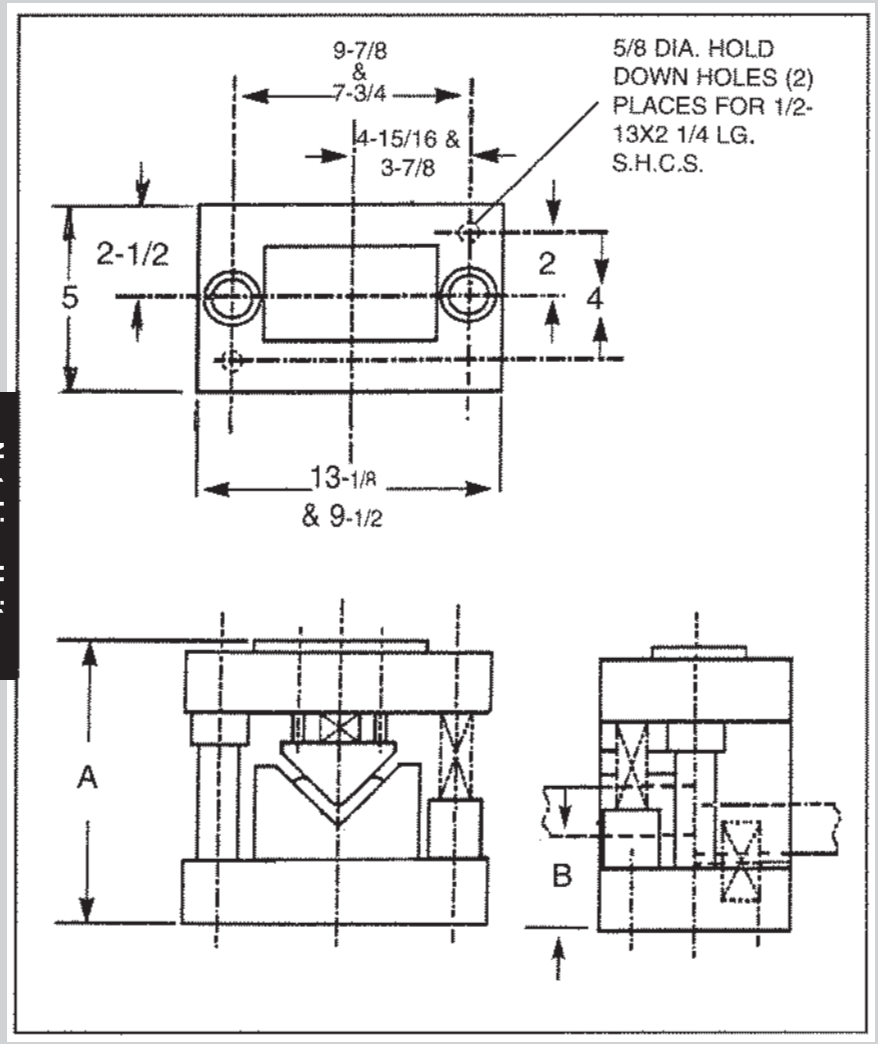
Decimal Equivalents of Letter Size Drills

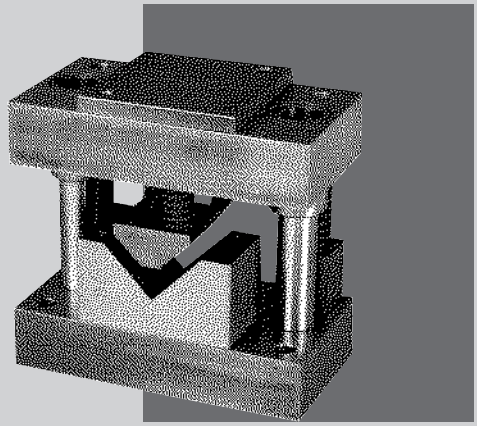
Letter	Size of Drill in Inches	Letter	Size of Drill in Inches	Letter	Size of Drill in Inches
S	0.348	L	0.290	E	0.250
R	0.339	K	0.281	D	0.246
Q	0.332	J	0.277	C	0.242
P	0.323	I	0.272	B	0.238
O	0.316	H	0.266	A	0.236
N	0.302	G	0.261	. . .	. . . . .
M	0.295	F	0.257	. . .	. . . . .

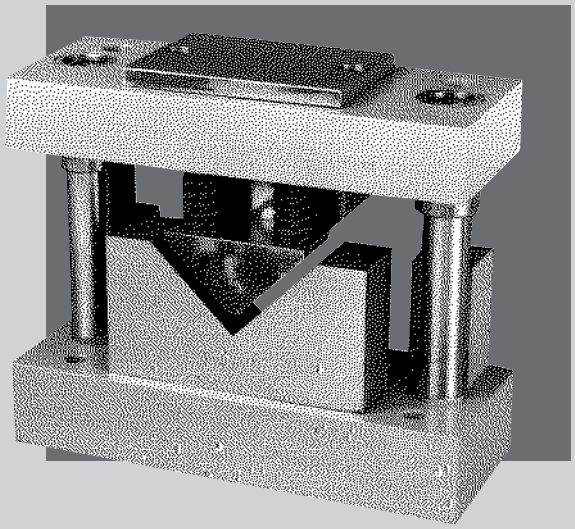


HAC HEAVY DUTY ANGLE CUTOFF UNIT

Unittool's heavy duty angle cutoff units are self-contained (2 post) die set designed. These units incorporate pressure pads in the front and rear. There are (2) mounting holes for securing this unit to a mounting plate or press bed. This unit can be mounted in a press or press brake as a stand alone cut to length tool for angle cut-off applications on structural angle iron up to 3 x 3-1/4 maximum thickness.







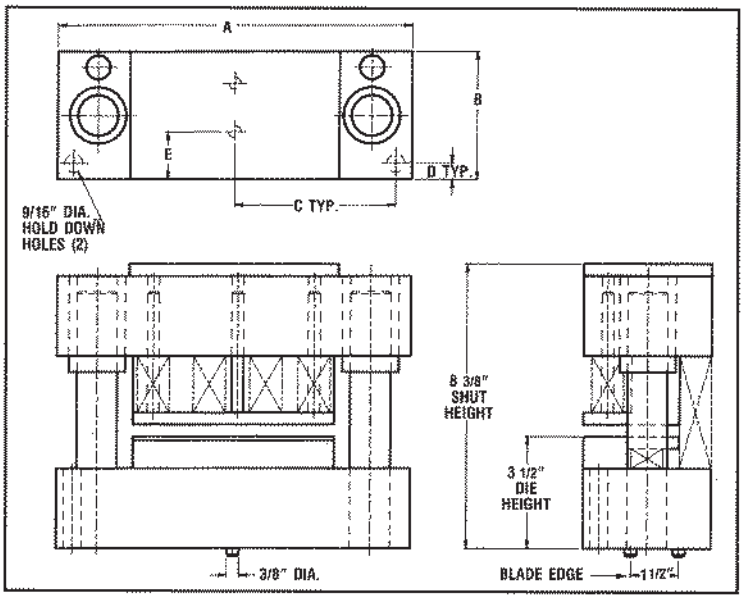
Medium Duty 2 x 2

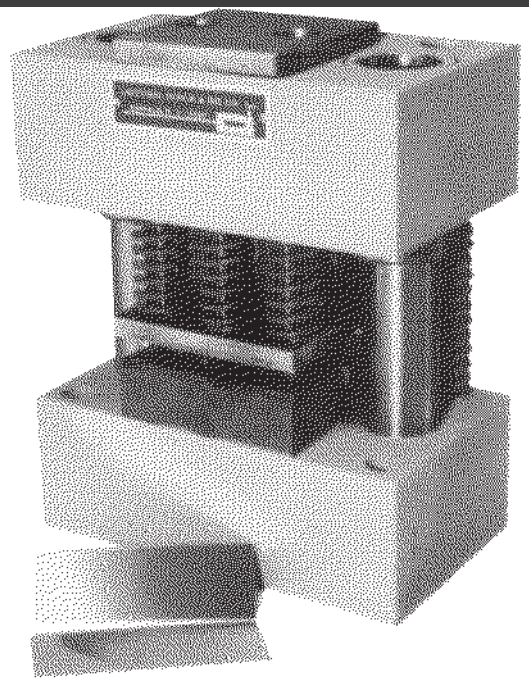
PART NUMBER	A SHUT HEIGHT	B DIE HEIGHT	OPEN HEIGHT	MAX. MATL THICKNESS
HAC22	8.375	3.062	9.125	.250
HAC33	11.125	4.125	11.875	.250

HEAVY-DUTY SHEARING DIES

BULLETIN SD-01
EFFECTIVE Feb. 15, 2001

"H" Series Cut-Off Shearing Dies are available in widths from 2" through 18" in 2 inch increments





- Maximum Material Capacity – 1/4" Mild Steel
- Minimum Material Thickness – 22 gauge (.0299)*
- Feed Clearance – 3/8"

CATALOG NUMBER	SHEAR BLADE LENGTH	A	B	C	D	E	WEIGHT	OPEN HEIGHT
HSD-2	2"	7	4	3	1/2	2	50	8 3/4
HSD-4	4"	9	4	4	1/2	2	65	8 3/4
HSD-6	6"	11	4	5	1/2	2	80	8 3/4
HSD-8	8"	13	4	6	1/2	2	90	8 3/4
HSD-10	10"	15	4	7	1/2	2	100	8 3/4
HSD-12	12"	17	4	8	1/2	2	115	8 3/4
HSD-14	14"	19	5	9	1/2	2 1/2	160	8 3/4
HSD-16	16"	21	5	10	1/2	2 1/2	185	8 3/4
HSD-18	18"	23	5	11	1/2	2 1/2	210	8 3/4

These units are designed to work in conjunction with Unittool "H" series hole punching & notching units for flat stock cut-off or part-trimming up to 1/4" mild steel. Typical press set-ups may include 'C' Frame hole piercing units, corner or edge notch units followed by a shearing die to accomplish a multiple part fabrication in one unit.

* UNIT CAN BE SUPPLIED FOR SHEARING THIN MATERIAL. CONSULT FACTORY FOR DETAILS.
UNIT MUST BE RETURNED FOR REPLACEMENT OF BLADES.

RETURNED MERCHANDISE	TERMS – NET 30 Days, F.O.B., our plant, Buffalo, NY. Prices subject to change without notice. Merchandise may not be returned for credit without written authorization. Authorized returned merchandise must be shipped prepaid. Standard parts, round punches and dies are subject to a handling and restocking charge. Shaped punches and dies, in most cases, are not acceptable. Custom-made equipment is not returnable.

UNITTOOL PUNCH & DIE CO. INC.
FACTORY ADDRESS | 20 NORRIS STREET, BUFFALO, NY 14207 • MAIL ADDRESS | P.O. BOX 863, BUFFALO, NY 14240
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BULLETIN SD-01

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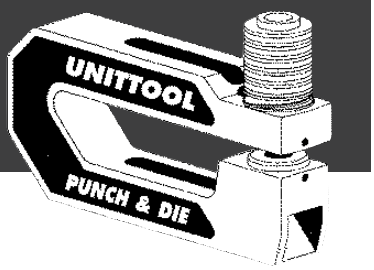
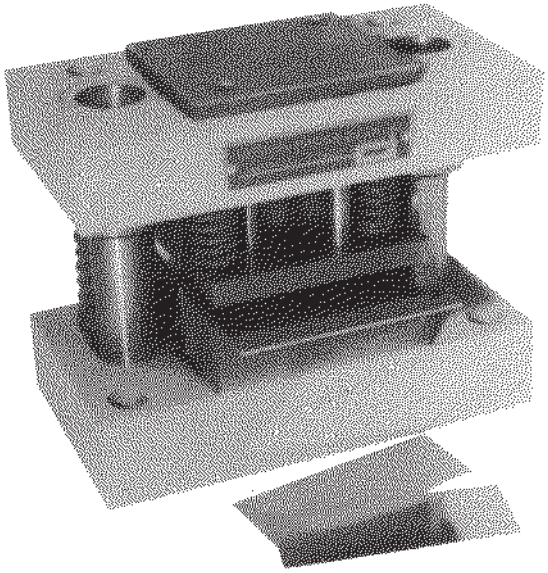
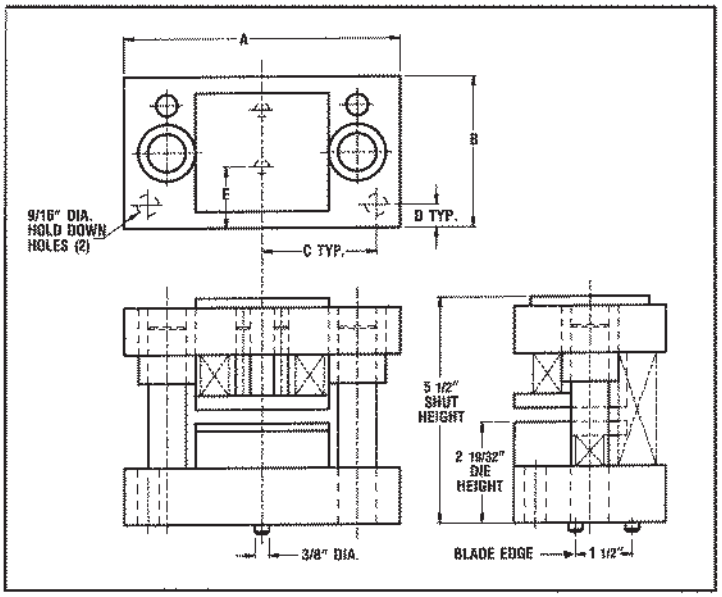
MEDIUM-DUTY SHEARING DIES





"M" Series Cut-Off Shearing Dies are available in widths from 2" through 18" in 2 inch increments



- Maximum Material Capacity – 10 gauge Mild Steel
- Minimum Material Thickness – 22 gauge (.0299)*
- Feed Clearance – $^{5}/_{16}$"

Notching Units

CATALOG NUMBER	SHEAR BLADE LENGTH	A	B	C	D	E	WEIGHT	OPEN HEIGHT
MSD-2	2"	7	4	3	$^{1}/_{2}$	2	30	6
MSD-4	4"	9	4	4	$^{1}/_{2}$	2	40	6
MSD-6	6"	11	4	5	$^{1}/_{2}$	2	50	6
MSD-8	8"	13	4	6	$^{1}/_{2}$	2	60	6
MSD-10	10"	15	4	7	$^{1}/_{2}$	2	70	6
MSD-12	12"	17	4	8	$^{1}/_{2}$	2	80	6
MSD-14	14"	19	5	9	$^{1}/_{2}$	$2^{1}/_{2}$	120	6
MSD-16	16"	21	5	10	$^{1}/_{2}$	$2^{1}/_{2}$	145	6
MSD-18	18"	23	5	11	$^{1}/_{2}$	$2^{1}/_{2}$	170	6

These units are designed to work in conjunction with Unittool "M" series hole punching & notching units for flat stock cut-off or part sizing up to 10 gauge mild steel. Incorporating a self-contained shearing unit with a hole punching & notching set-up can eliminate one or more part-sizing steps that yield a cost effective method.

* UNIT CAN BE SUPPLIED FOR SHEARING THIN MATERIAL. CONSULT FACTORY FOR DETAILS.
UNIT MUST BE RETURNED FOR REPLACEMENT OF BLADES.

WARNING:	Operating set up should be guarded to comply with applicable standards for operator safety.

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