

C.E. TOOLING

Section

10



Brake Press Tools



BRAKE PRESS TOOLING

*E some *A

With tools CET produces at its USA-factory or sourced through relationships with leading manufactures, CET can offer the best tool to meet your needs.

Precision Planed Dies from CET & Qualified U.S. Mfg.

Precision Ground Dies from European & Asian Mfg.

Description	Page	Description	Page
American Planed 90° Regular & Gooseneck			
American Planed 30° + FLATTENING DIES		Perfect Bends Patented Forming Technology	
American Precision Ground +/- .0008 Hardened 50-56		RIB FORMING	
American Multi-V Dies		ROCKER CHANNEL DIES	
EUROPEAN Precision Ground +/- .0004		STANDING SEAM, HEMMING DIES	
OFF-SET / JOGGLE DIES		Urethane Sheet—Film—Inserts	
LOUVER TOOLS		Urethane Dies Tru-Form®	
HOLDERS & RISERS		WIPING DIES	

BRAKE TOOLS: CET provides tools designed and produced to the highest quality

Steels are selected based on proven high strength, toughness, and deep harden ability.

Precision-Planed: SAE 4140 (42CrMo4) 26-30Rc Further Option Induction/Flame Hardened to 45-49.

Precision-Ground: Induction hardened **CK50 50-56Hrc & DIN 17200, ISO 683 53-60Hrc**

Precision-planed of $\pm .002"$ / 0.05mm on all critical surfaces.

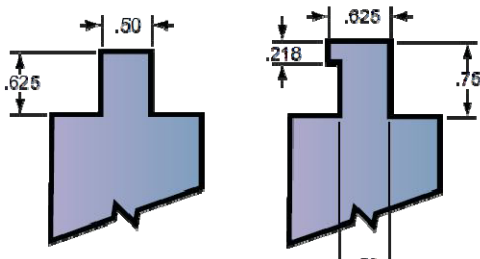
Available lengths 1', 2', 3', 4', then +2' increments to 24'

Precision-ground to tolerance of $\pm .00039$ / .01mm on all critical surfaces.

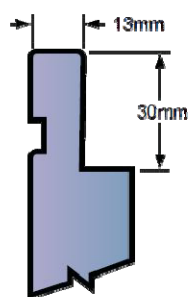
Available lengths: 835mm & 415 (32 7/8" & 16 5/16) or sectionalized. Upper unit in 9 matched pieces

American

1/2" Tang Top & Bottom

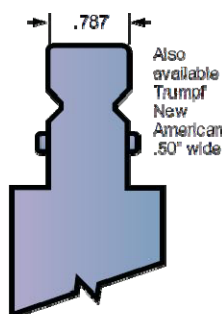


European Style Tang



Wila / Trumpf

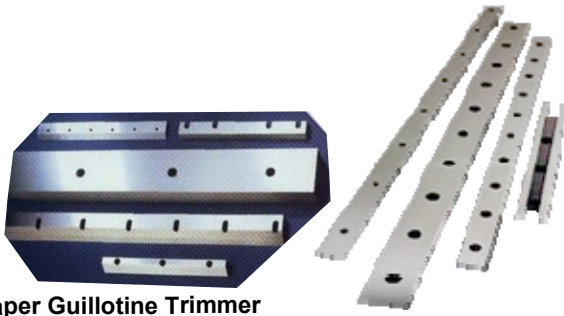
Original 20mm Tang & Newest Amer - 12.7mm



Amada One Touch



NEW & SHARPENING OF BLADES + NEW EQUIPMENT



Paper Guillotine Trimmer

SHARPENING SERVICE of up to 16' long

Recommended regrind tolerances are as follows: WIDTH - Parallel to within .005" from end to end THICKNESS - Parallel to within .003" from end to end No variation greater than .001" within any 12" length

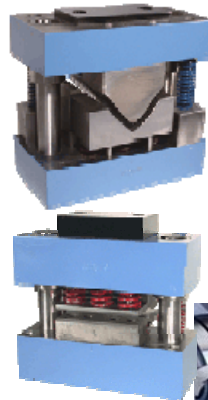
BLADE STEEL OPTIONS:

D2 Tool Steel (18% chrome) excellent wear resistance on lighter gauge shearing. Good for up to up to 1/4" 6mm MS for mechanical press, up to 3/8" 10mm MS for hydraulic presses. For shearing stainless steel, reduce machine stated capacities by 50%

S7 "Shock Proof" Tool Steel provides the highest degree of toughness, recommended for shearing of mild steel up to 1" thicker. For shearing stainless steel, reduce machine stated capacities by 50%

M2 High Speed Steel provided for unique situations such as hot work type applications where elevated temperatures would have an adverse effect on other alloy steels.

ANGLE CUT OFF UNITS



Send your
Cut Off units to
CET for sharpen or
install of new
Blades

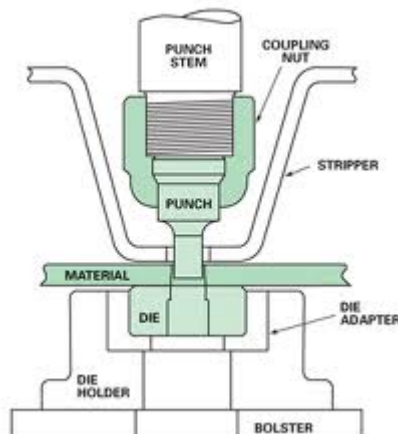
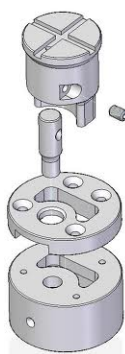


Flat bar, Angle Shear,
Plate Notchers, Square/
Round Bar Knives,
Guillotine/Trimmer



Ironworker Punches & Dies

Allow us to quote your tool needs. Tools are produced in CE Tooling's own factory or supplied from relationships with leading tool and original equipment manufactures.



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COREGATED BRAKE STORAGE

Can be used on your tables, on your racks...or on any flat surface.

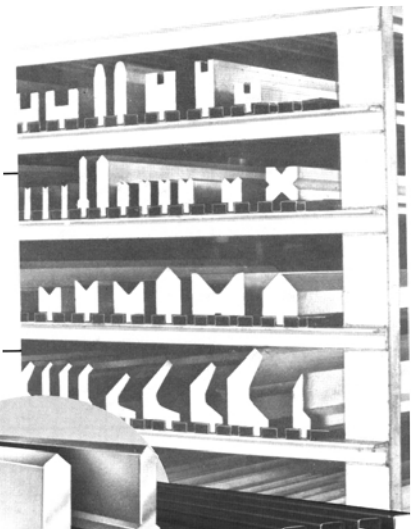
- Keep tools organized and easily accessible.
- Each sheet has 17 slots 9/16 wide on 1-1/2 centers.
- Sheet measures 29 1/2" X 96 65lbs

Part# ACDABS \$225.25 Ships from CA Est.Freight on 1pc \$100 2pc \$135

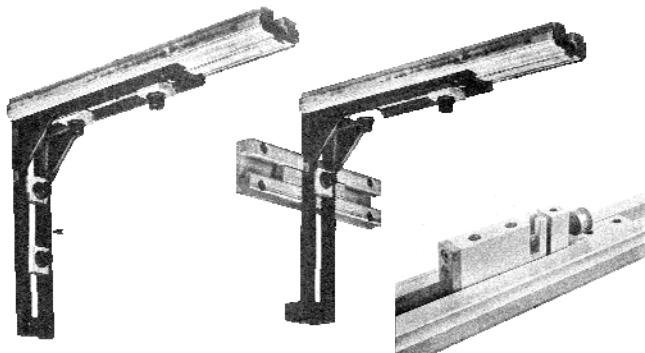
BRAKE TOOL STORAGE



Save time, locate tools quickly.
Improve inventory control....Protect
Tools from Damage



GAGE ARMS & TABLES



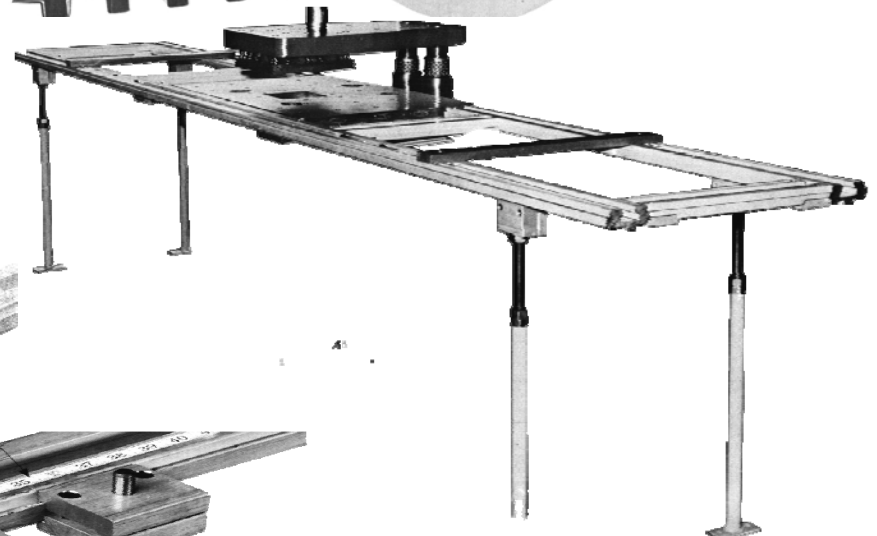
SPS-R-401
SIDE DISAPPEARING
FINGER STOP—RIGHT

SMT-1100
STEEL MEASURING TAPE

SPS-L-600
SIDE PIN STOP—LEFT

SPS-L-400
SIDE DISAPPEARING
FINGER STOP—LEFT

SPS-C-300
DISAPPEARING FINGER
STOP—CENTER



.pdf booklet
available
cetooling.com



SQUARING ARM Left & Right Drastically Reduce Set up Times

- Attaches magnetically for instant setup
- Allows small parts to be formed safely - hands free
- Equipped with angle attachment for tapered flanges
- Attaches to die face with no intrusion into the forming area
- Available in both left and right hand models
- Both sides of the squaring arm can be used simultaneously

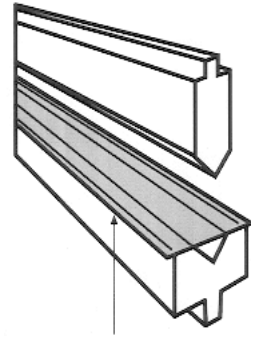


Left Hand Model

Right Hand Model

Urethane Film that prevents die marks on materials like stainless, aluminum, and other polished stocks.

Simply cut sheet to required length, lay it on top of the bottom die (optionally secure one side with double faced clamping tape) and you're set.

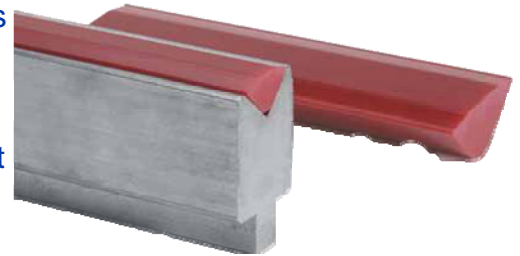


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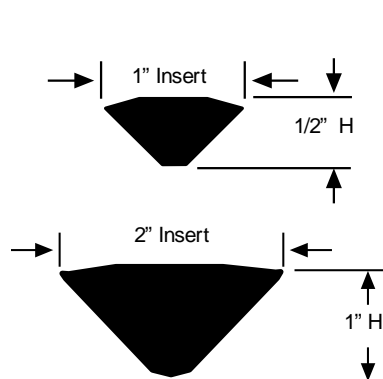


Description	Part No.
.015 X 2" Wide X 100 ft. Long	*ATP-02015
.015 X 4" Wide X 100 ft. Long	*ACH-04015
.015 X 6" Wide X 100 ft. Long	*ACH-06015
.030 X 6" Wide X 100 ft. Long	*ACH-06030
.015 X 36" Wide X 20 ft. minimum	*ACH-36015
Double Faced Clamping Tape 1" X 36 Yards	*A-KPT-136

Inserts • These triangular shaped insert converts steel "V" dies into non-marring, versatile bottom dies. Under pressure from a punch, the urethane takes the shape of a variety of punch tips and in the process produces a variety of scratch free, accurate bends. Stocked in K-950A (other durometers available) in 1 foot increments to 4 foot maximum lengths. Simply position the correct sized urethane insert in 1" or 2" steel "V die, using lengths that allow 2" to extend beyond the end of the part to be formed. For maximum life, do not penetrate any further than is needed to produce the desired bend. Penetrating to a depth of more than 30% of the height of the Insert can significantly reduce its effective life.



Note: Spring back problems are reduced and it allows you to form different material thickness without having to change dies.



Length

Part No.

12"
24
36
48

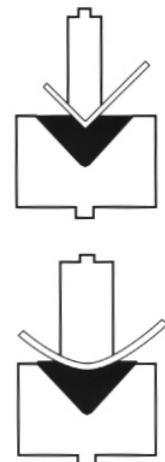
KAF-161000-12
KAF-161000-24
KAF-161000-36
KAF-161000-48

12
24
36
48

KAF-162000-12
KAF-162000-24
KAF-162000-36
KAF-162000-48

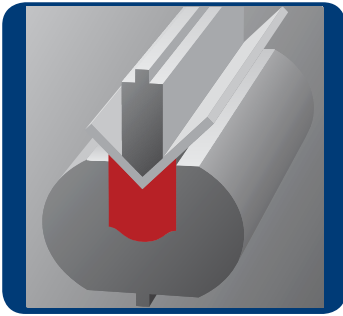
*Double-faced Clamping Tape 1" x 36 yards

KPT-136



URETHANE TRU-FORM

*A



Solid K•Prene® Die Pad

Deflects to form metal under continuous high blank-holding pressure before forming action literally wraps blank around punch. The three standard widths (A x B), are available in 4 ft. lengths. They can be butted together as needed. Pads can be saw-cut to fit any punch or retainer length.



K•Prene® Die Block Pad

This system functions like a solid pad but uses 2' long blocks. The blocks allow more economical replacements if a short section is damaged. Furnished in 1 ft. long increments only (six 2" blocks per ft).

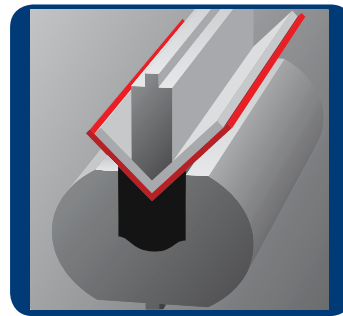


Cored K•Prene® Die Pads

This system offers a 1" cored hole in our standard 2" and 3" wide pad. The relieved pad concentrates forming pressure on the outside edges allowing deeper penetration in the center. This is another option for U-forming when press tonnage may be limited.



When forming heavier metals or difficult shapes (like flat bottom U-forming), higher blank-holding pressure can be easily generated by inserting a K•Prene® rod in the air channel under die pad. The rod acts like a "spring" to concentrate additional pressures upward. Rods are furnished in 1/4", 1/2", and 5/8" diameters, in lengths up to 4 ft.



K•Prene® Wear Pads

These 1/8" thick strips protect the forming pad from punch cuts. Available in lengths up to 4 ft. and in widths equal to our standard die pad systems. Wear pads should be as wide as die pad, or 1" wider when forming heavy metals, to protect both the parts and the retainer walls.

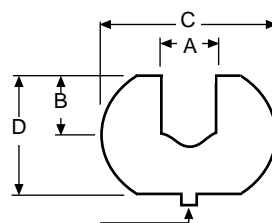
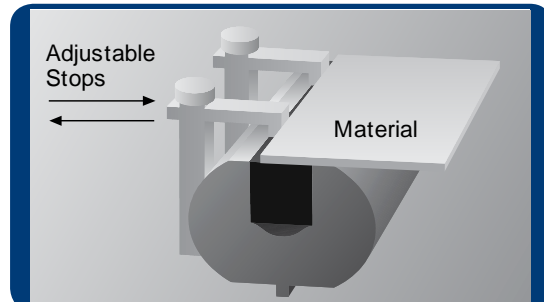


K•Prene® Wafer Pad

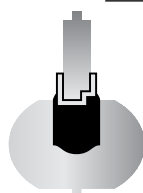
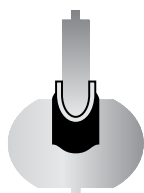
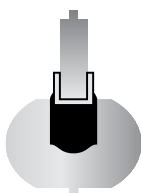
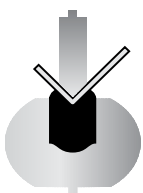
This system involves the use of four thin (1/4" or 1/2") K•Prene® strips, or wafers, which are stacked in the retainer. It allows the increased punch penetration needed for severe bends, like U-forming. It is most efficient when forming blanks lighter than 16 ga. M.S.

Flexible Stock Packages

Spring steel deflects up when urethane bulges.



Dimensions		
A x B	C	D
1" x 1"	3-1/2"	2-3/16"
2 x 2	5-1/2"	3-7/8"
3 x 2	6-1/2"	4-1/4"
Tang 1/2" x 11/16"		



URETHANE PRESS BRAKE DIES

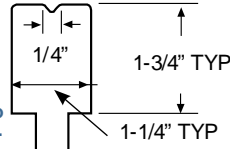
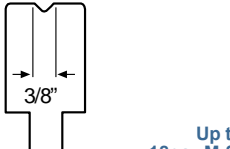
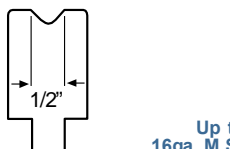
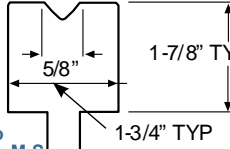
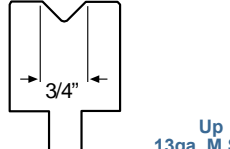
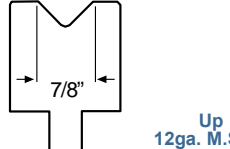
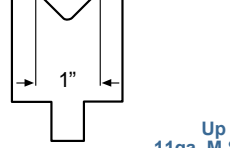
*A

K•Prene® urethane female dies are designed for production and will not leave die marks! They feature tremendous load-bearing capacity and excellent resistance to abrasion. These are manufactured in 48" lengths and can be butted together as needed. They are lightweight, easy to handle, stocked for immediate delivery and may be shipped via UPS.

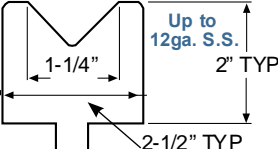
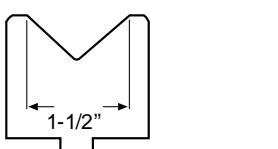
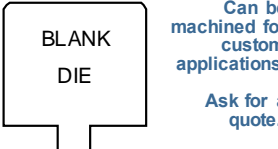
***Desired opening equals 8X the material thickness.
Recommended for air bending, NOT coining.***



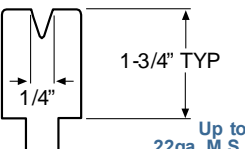
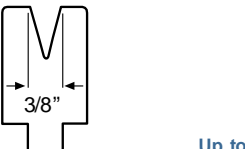
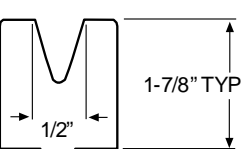
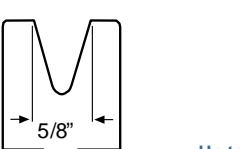
90 Degree Dies

Dimensions	Lgth.	Part No.
	12" 24 36 48	KBDV-0104-12 KBDV-0104-24 KBDV-0104-36 KBDV-0104-48
	12" 24 36 48	KBDV-0308-12 KBDV-0308-24 KBDV-0308-36 KBDV-0308-48
	12" 24 36 48	KBDV-0102-12 KBDV-0102-24 KBDV-0102-36 KBDV-0102-48
	12" 24 36 48	KBDV-0508-12 KBDV-0508-24 KBDV-0508-36 KBDV-0508-48
	12" 24 36 48	KBDV-0304-12 KBDV-0304-24 KBDV-0304-36 KBDV-0304-48
	12" 24 36 48	KBDV-0708-12 KBDV-0708-24 KBDV-0708-36 KBDV-0708-48
	12" 24 36 48	KBDV-1000-12 KBDV-1000-24 KBDV-1000-36 KBDV-1000-48

Note: All dies have standard 1/2" x 5/8" tang.

Dimensions	Lgth.	Part No.
	12" 24 36 48	KBDV-1104-12 KBDV-1104-24 KBDV-1104-36 KBDV-1104-48
	12" 24 36 48	KBDV-1102-12 KBDV-1102-24 KBDV-1102-36 KBDV-1102-48
	12" 24 36 48	Can be machined for custom applications. Ask for a quote. KBDB-0000-12 KBDB-0000-24 KBDB-0000-36 KBDB-0000-48

30 Degree Dies

Dimensions	Lgth.	Part No.
	12" 24 36 48	KBDA-0104-12 KBDA-0104-24 KBDA-0104-36 KBDA-0104-48
	12" 24 36 48	KBDA-0308-12 KBDA-0308-24 KBDA-0308-36 KBDA-0308-48
	12" 24 36 48	KBDA-0102-12 KBDA-0102-24 KBDA-0102-36 KBDA-0102-48
	12" 24 36 48	KBDA-0508-12 KBDA-0508-24 KBDA-0508-36 KBDA-0508-48



LOUVERS for PRESS BRAKES

Single, Double, Triple... CE TOOLING, INC

STANDARD STOCK SIZES • FORM DOWN American, European & Trumpf/Willa Style Tongue • -10ga SST

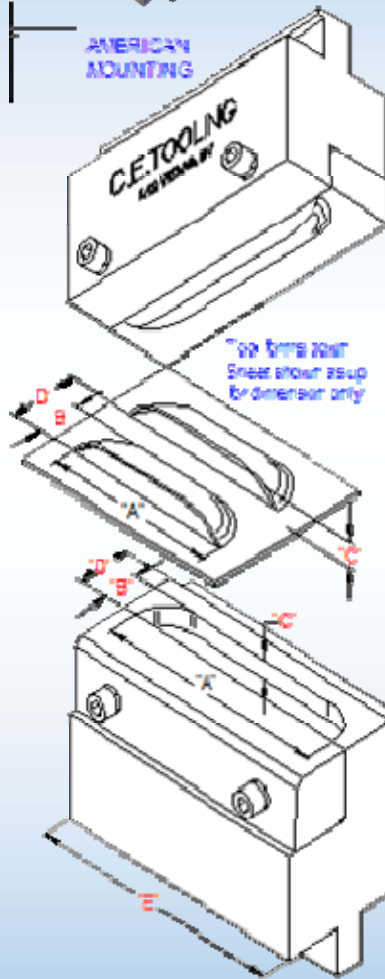
A=Length	2"	3"	3 1/2"	4"	5"	6"	8"	10"
B=Width	1/2"	5/8"			3/4"			1"
C=Height	3/16	1/4"			5/16			1/2"
D=Spacing Cut to Cut	3/4"	7/8			1-1/8			1-3/8"
E=Base	2 1/2	3 1/2	4"	4 1/2	5 1/2	6 1/2	8 3/4	10 3/4
American								
European								
Willa/Trumpf								

Non Standard, Closest match to above + \$250 5-12 work days

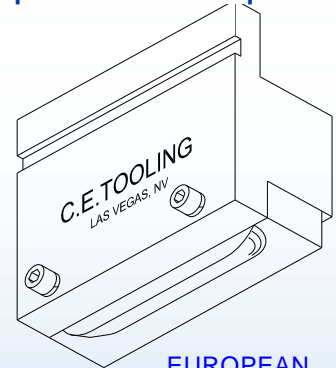
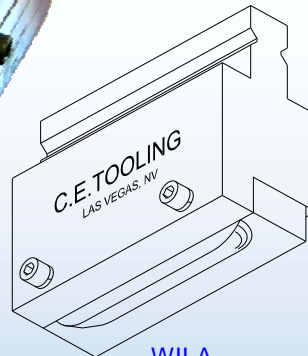
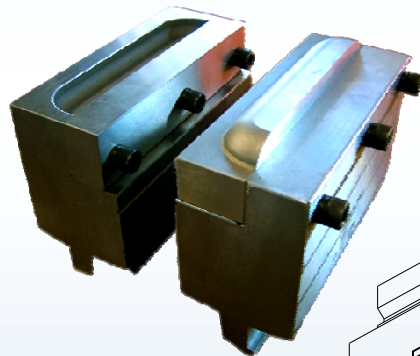
Sets for Mounting in Die Set for Stamping Press +

Upgrade to semi-high speed steel to extended life in stainless material +

Multiple Louvers in a Single Hit. Side by side or Up & Down +



MOUNTING STYLES American, European & Willa/Trumpf



WILLA MOUNTING

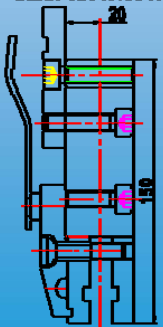
EUROPEAN MOUNTING



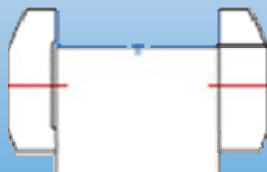
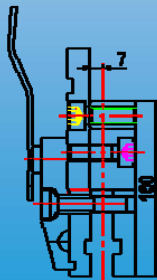
RISER Part# BED-RISER55-835 EUROPEAN DIE BASE RISER Width 60, Height 55 Length 835mm

UNIVERSAL EUROPEAN HOLDERS Holds European or American Tools

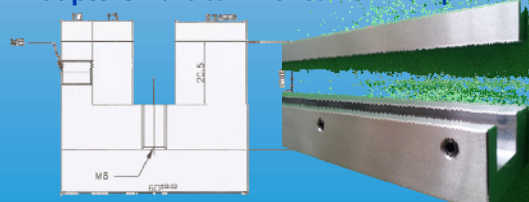
BEAH-C20-H150-150-01



BEAH-C7-H100-150-01



Adapters Euro to American or Trumpf



Willa/Trumpf Upper Tang:

Our Default is Willa Original style having 20mm wide tang. We can also offer the Willa .50" American tang at same price.

CE TOOLING sales@cetooling.com

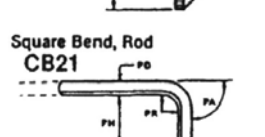
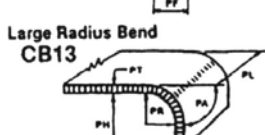
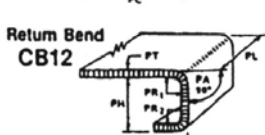
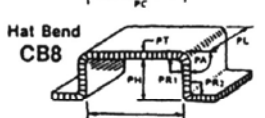
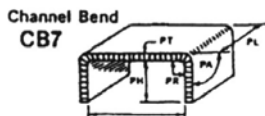
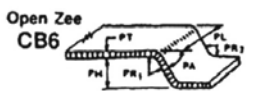
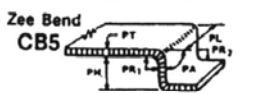
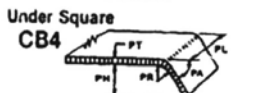
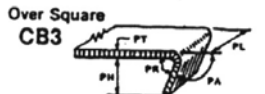
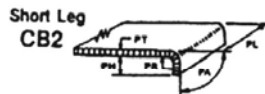
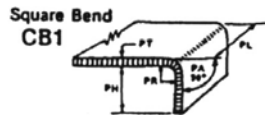
Forming Technology Rotary Bending



Request CET Source Catalog Rolla-V Rotary Bending -fs.pdf

BEND TYPES

Specifiable by
CB# and Part Dims.



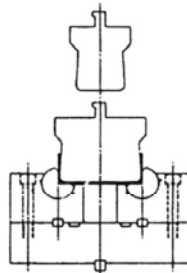
Proven COST EFFECTIVE on these Applications:

1 MAR-FREE BENDING

Most dies can be equipped with Delrin® rotors to bend pre-finished and stainless steels without tool marks.

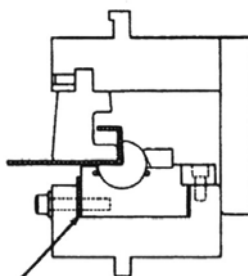
2 BEND SHORT FLANGES on the ends of large sheets with no part whip-up. Operators run more parts safely with less scrap...even on heavy gauge material.

3 ONE-HIT CHANNEL DIES
Adjustable channel die shown.



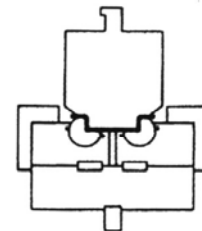
4 QUICK CHANGE DIES

Anvil sections easily changed in the press for special applications.



NOTE: Run different part thicknesses by shimming here.

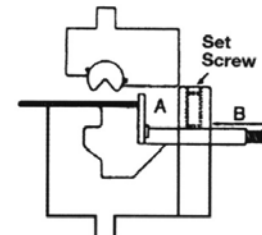
5 HAT BENDS OR OFFSETS



6 BUILT-IN GAGES or specify clearances for automatic gages.

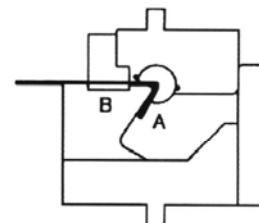
PELICO GAGE SHOWN

A) Gage rotates as die closes, spring returns gage each time
B) Gage is adjustable.



7 COMPLETE HEMMING DIES

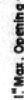
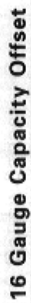
A) Bend part to 120°
B) Flatten to 180°



Let us quote your application

Families of parts are often satisfied with one die designed for your needs.

TONNAGE CHART



In forming a box, where 4 sides are bent up, the punch must be high enough so that when making the last two bends, the preformed sides do not strike the ram.

The special gooseneck punches shown above may be used to form boxes and channels with long return legs.

Tonnage Chart

Approximate Tons Per Lineal Foot Of Forming Based On Air Bending 90 Degree Bend In Mild Steel

Material Thickness		Width Of Female Vee Die Opening																											
Gage	Dec.	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4	5	6	7	8	10	12	14	15	20	24	30
20	.0360	2.5	2	1.6	1.1	1.2																							
18	.0478		3.5	2.8	2.1	1.7	1.3																						
16	.0598			5.3	5.3	3.7	2.8	2.2	1.7																				
14	.0747					5.5	4.6	3.5	3.0	2.5	2.1																		
13	.0897						6.4	5.5	4.3	3.6	3.2	2.8																	
12	.1046						9.2	6.9	6.0	5.0	4.3	3.9	3.1																
11	.1196							10.1	8.0	7.0	6.1	5.3	4.3	2.9															
10	.1345								10.3	8.7	7.8	6.9	5.7	3.9															
9	.1495									11.9	9.8	8.8	7.0	5.0	3.7														
3/16	.1870									21.5	16.9	13.9	11.2	8.3	6.7	4.9													
1/4	.2500											27.5	22.1	15.0	11.6	9.6	7.9	6.7											
5/16	.3120												39.2	26.5	19.3	15.0	12.5	10.4	7.7										
3/8	.3750													42.7	31.2	23.8	19.5	16.3	12.4	9.6									
7/16	.4380														45.5	35.2	28.5	24.4	17.4	15.0	11.5								
1/2	.5000															48.5	39.5	33.2	24.6	19.5	16.1	13.4							
5/8	.6250																	65.5	57.9	42.8	33.1	27.3	23.3	17.0					
3/4	.7500																		138	110	93	68.7	53.5	43.6	36.5	27.1	21.0		
7/8	.8750																			165	137	103.5	81	64	53	39.5	31.4		
1	1.000																				197	143	112.5	91	76	56	44		
1-1/4	1.250																												
1-1/2	1.500																												
1-3/4	1.750																												
2	2.000																												
2-1/2	2.500																												
3	3.000																												

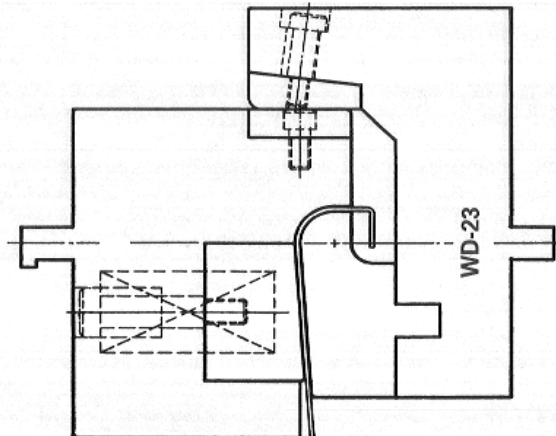
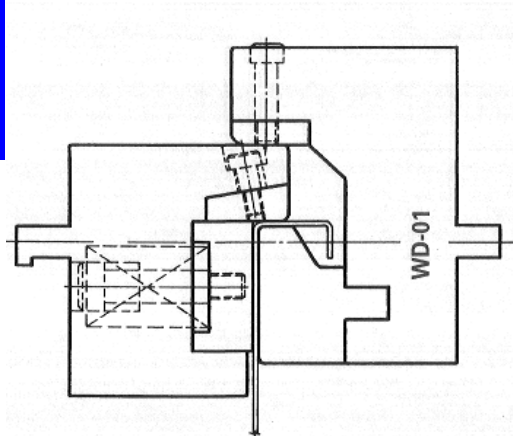
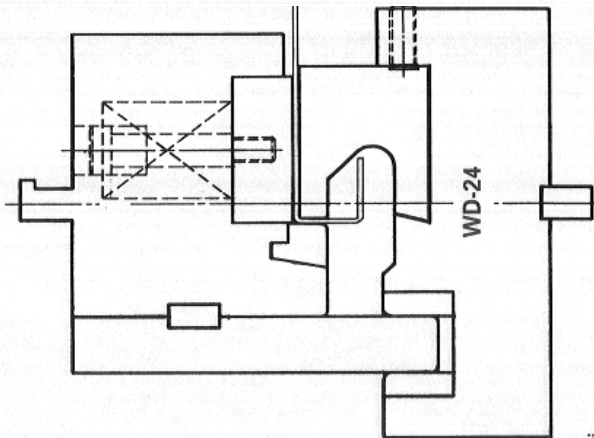
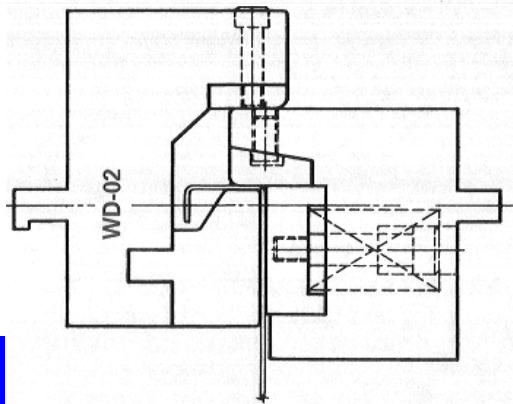
When using material 5/8" and thicker, it is usual practice to have die opening 10 times the metal thickness.

Black shaded figures represent ideal conditions for right angle bending: punch with radius equal to metal thickness and die opening, approximately eight times the metal thickness. Resulting bend has inside radius approximately equal to metal thickness. Bending pressure required for other metals as compared to 60,000 P.S.I. tensile mild steel on chart.

Soft Brass50% of pressure listed
Soft Aluminum50% of pressure listed
Aluminum Alloy (heat treated) .Same as steel
Stainless Steel50% more than steel
Chrome Molybdenum .100% more than steel

Wiping Dies

*E

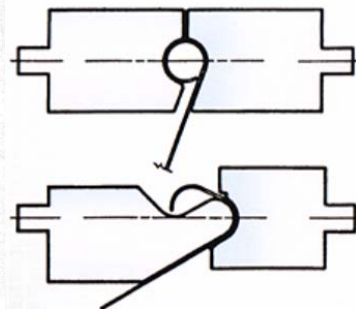
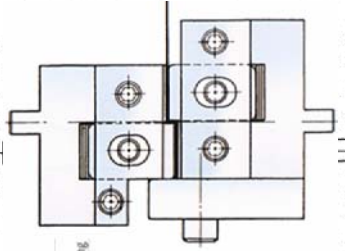
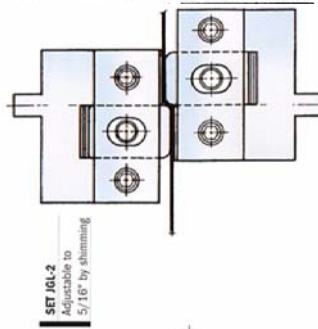
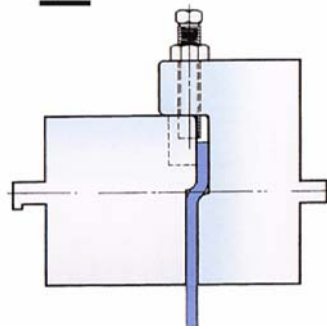


All of these die sets are used in high production flanging operations. Material whip up on the operator is non-existent. Capacity for illustrated sets - 16 Gauge.

Anvil and pad are angled to compensate for material spring back.

Offset/Joggle Dies

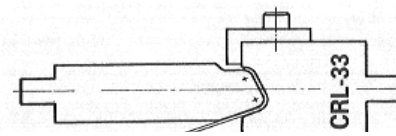
*E



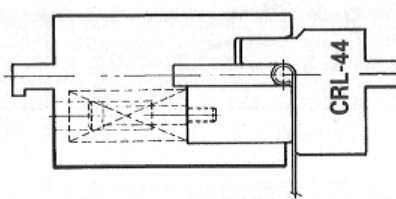
CRL-22

SET CRL-11&22	Curls of 3/8" dia. and larger are for regular edge beading
SET CRL-33&44	Produce the tightest and roundest curl that can be formed in two strokes
SET CRL-55	Used in place of CRL-44 with on center curl in three strokes

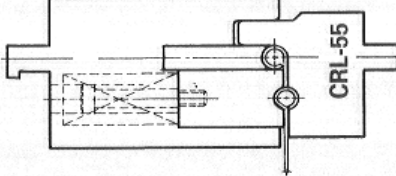
First Operation



Second Operation



Third Operation

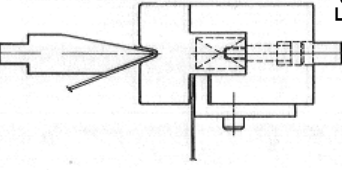


3XMat. = Min. PinØ After this, a special nested/gauging die is required which secure part .

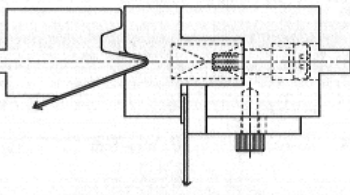
Standing Seam, Hemming Dies

*E

SS-9
Flattening die required to close hem in second operation.



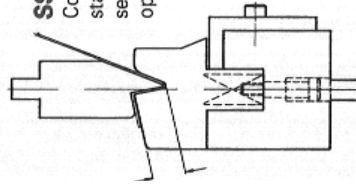
HM-01
Very popular - produces complete hem in two strokes up to 16 Gauge.



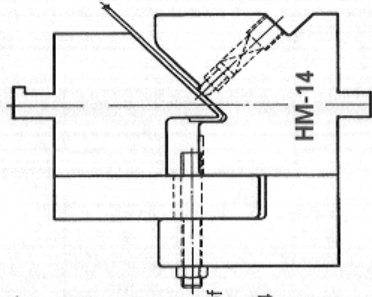
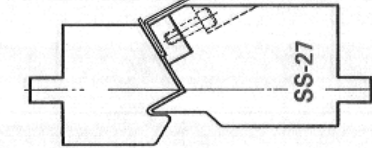
HM-02
Stabilizing heal on punch necessary when forming heavier material (Length of heal will be limited)

Est. 2'=\$1,750

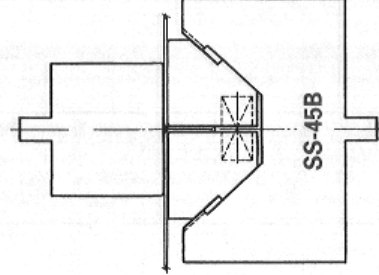
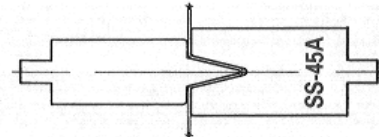
SS-18
Common standing seam in two operations.



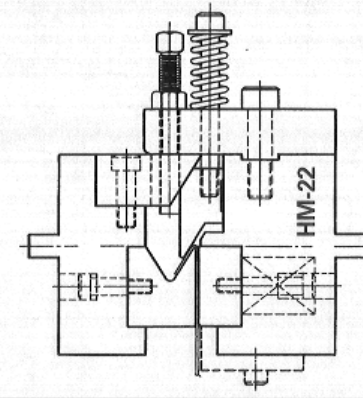
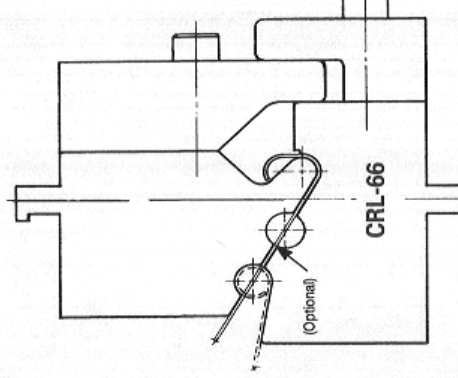
Sets: **SS-27** and **HM-14** form an open hem in one handling (2 strokes).



These types of die sets are suitable for 14 Gauge mild steel or less.



Double Flange Standing Seam Die sets forms in two operations.

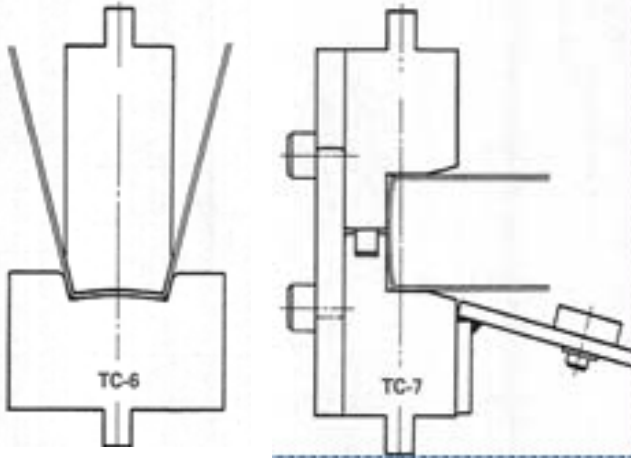


Set HM-22 is for high production in hemming wide sheets with no whip up. Recommended for 20 Gauge or lighter.

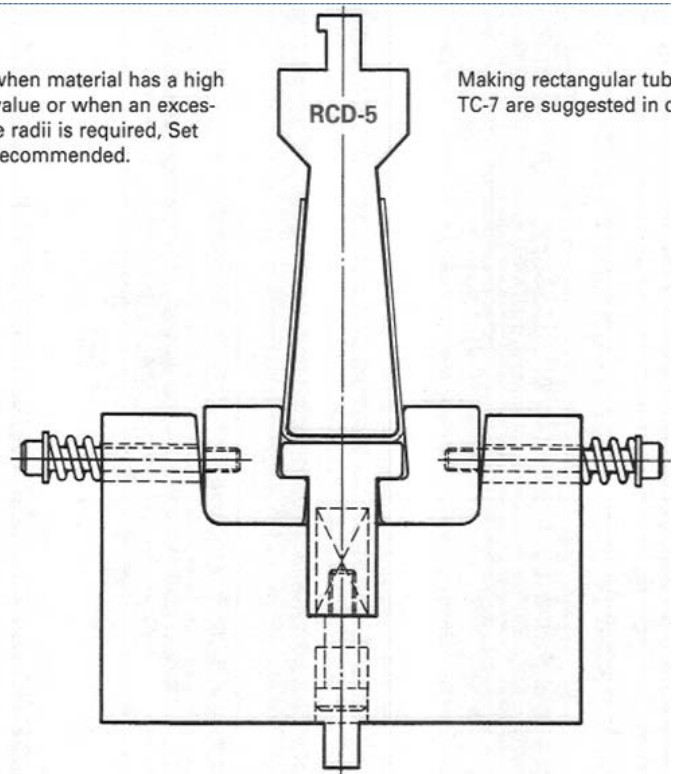


Rocker Channel

Making rectangular tubes, sets TC-6 and TC-7 are suggested in combination



At times when material has a high memory value or when an excessive inside radii is required, Set RCD-5 is recommended.

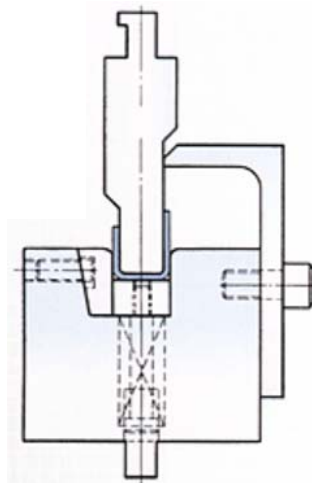


Making rectangular tubes TC-7 are suggested in combination

Channel Dies

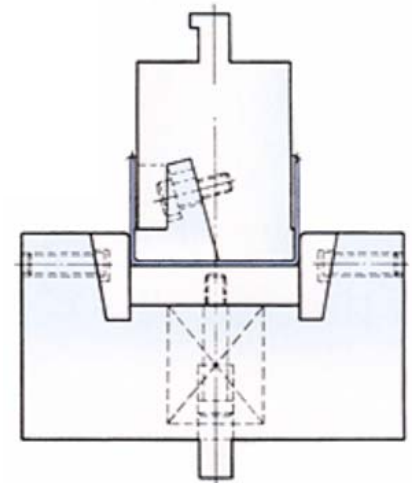
SET CHN-1

Used to form flat bottomed channels in one stroke. Release wedge on die, and hook stripper on punch, makes part removable.



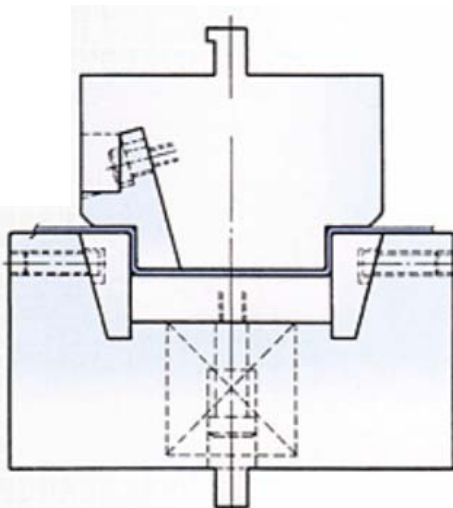
SET CHN-2

Recommended for channels with a web over 3/4" wide. Release wedges on both punch and die insure instant removal of part.



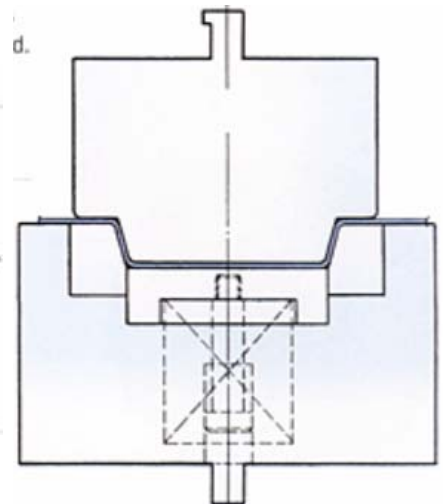
SET HCD-3

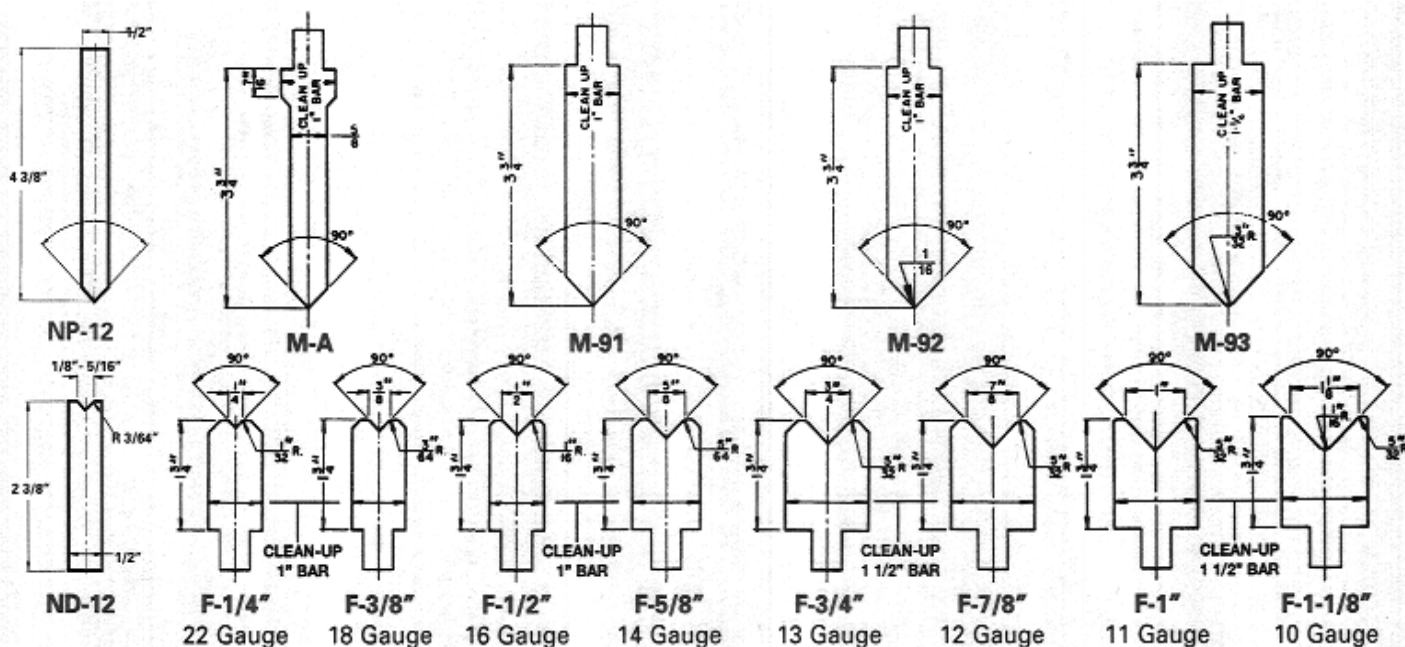
Forms four right angle bends in one stroke. Pressure pad in die keeps web flat and wedge permits easy part removal.



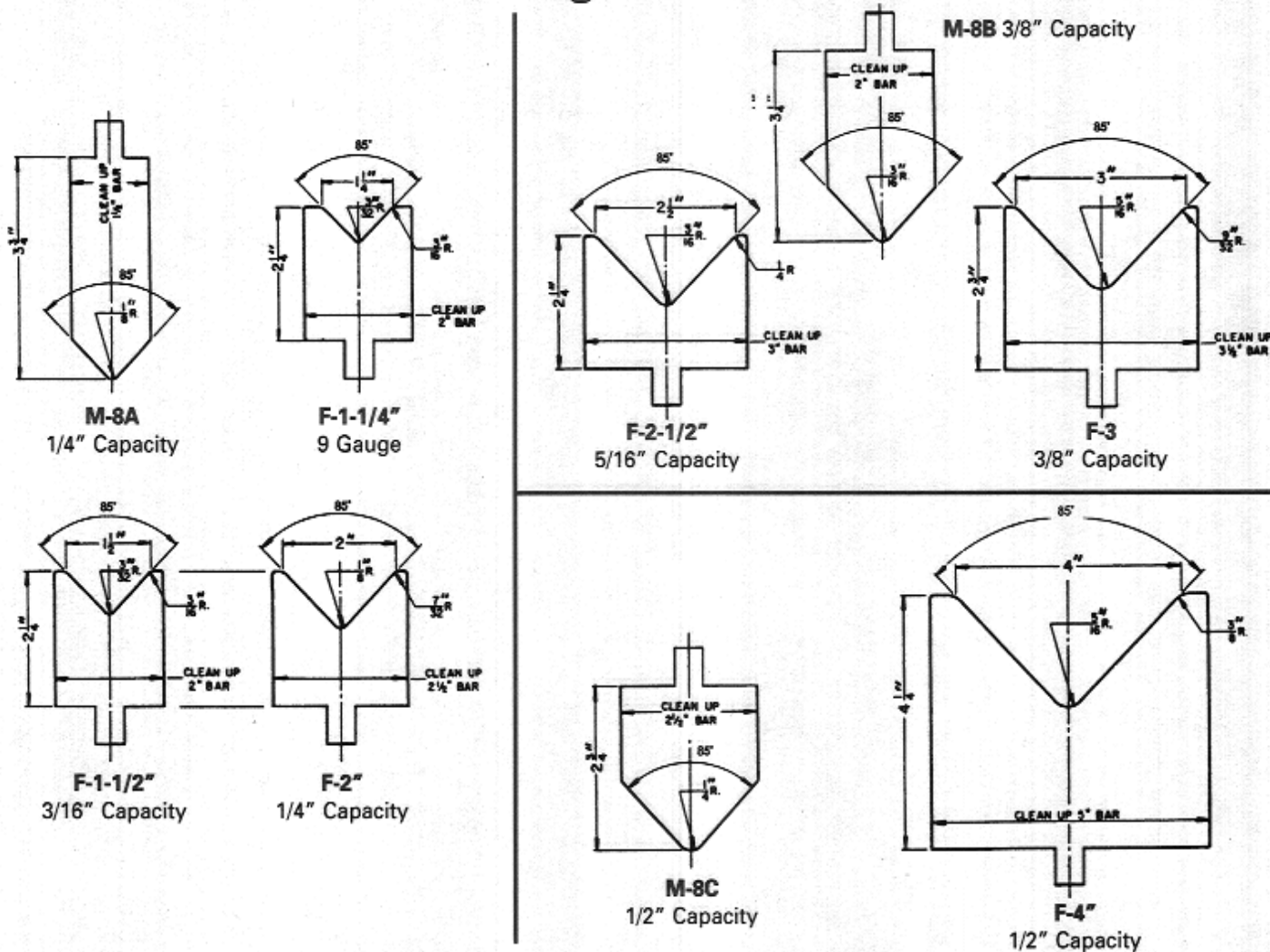
SET HCD-4

By tapering sides of a hat channel, press tonnage is greatly decreased. Pressure pad assures flatness of web and ejection of part.

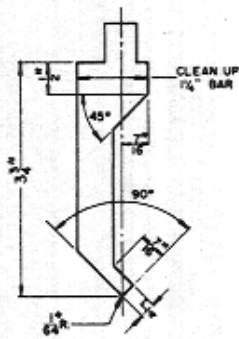




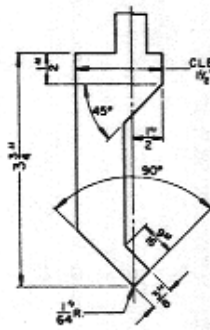
90° Air Forming Punches And Dies



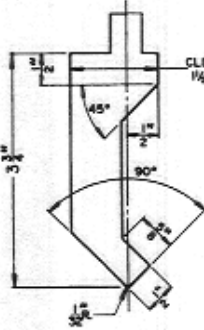
Gooseneck Punches



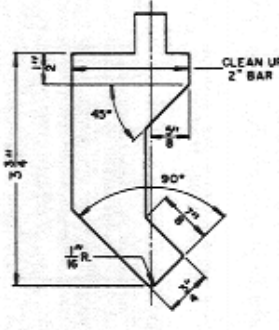
GS-1/4"
22 Gauge



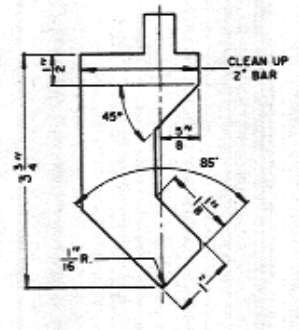
GS-3/8"
18 Gauge



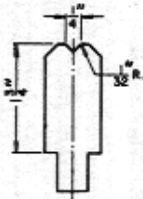
GS-1/2"
14 Gauge



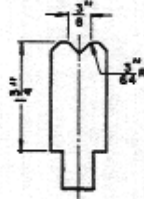
GS-3/4"
10 Gauge



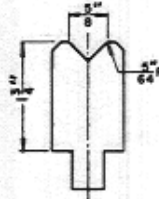
GS-1"
9 Gauge



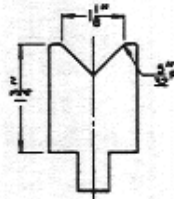
F-1/4"



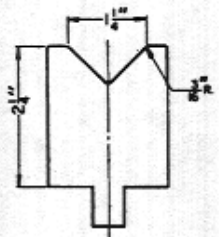
F-3/8"



F-5/8"

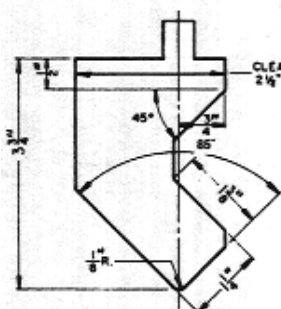


F-1 1/8"

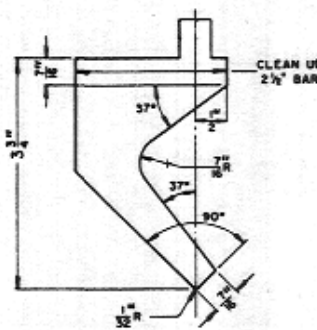


F-1 1/4"

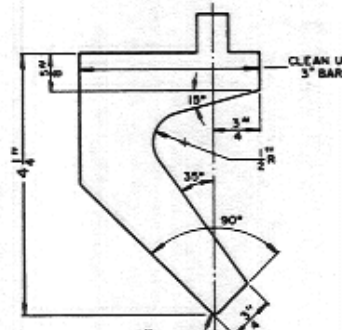
Gooseneck punches offer the benefit of clearance for a return flange as in a two stroke channel forming operation.



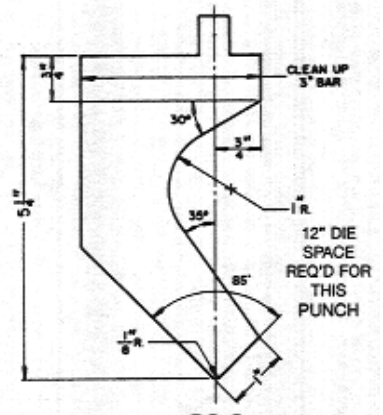
GS-1 1/4"
7 Gauge



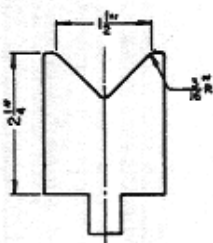
GS-A
16 Gauge



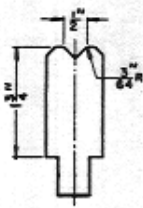
GS-B
12 Gauge



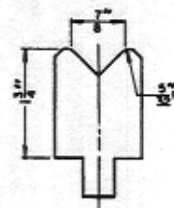
GS-C
7 Gauge



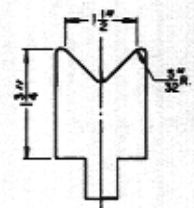
F-1 1/2"



F-1/2"

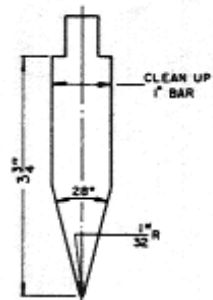


F-7/8"

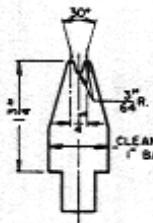


F-1 1/2"

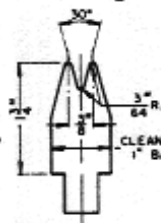
American Planed $\pm .002"$ / .05mm 30° Forming ^{★E}



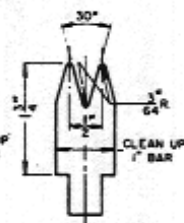
AM-1
16 Gauge



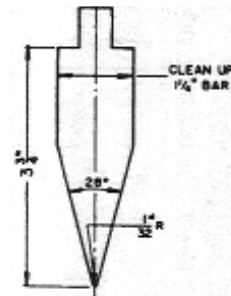
AF-1/4"
22 Gauge



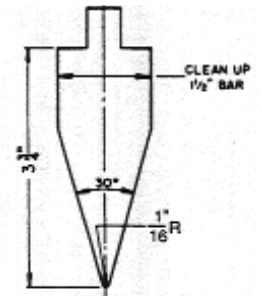
AF-3/8"
18 Gauge



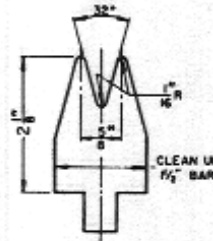
AF-1/2"
16 Gauge



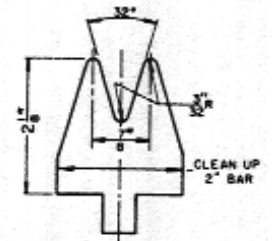
AM-2
14 Gauge



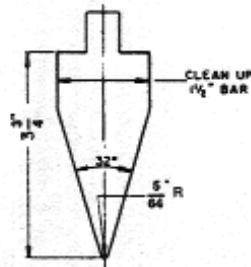
AM-3
12 Gauge



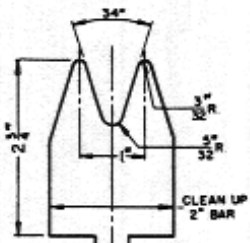
AF-5/8"
14 Gauge



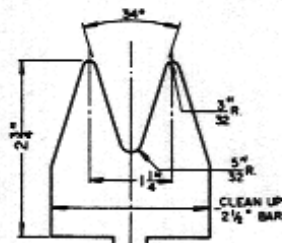
AF-7/8"
12 Gauge



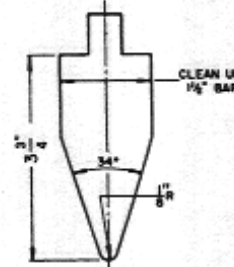
AM-4
9 Gauge



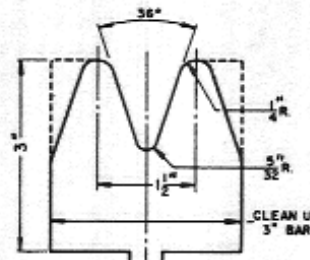
AF-1"
11 Gauge



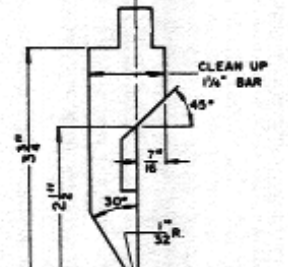
AF-1 1/4"
9 Gauge



AM-5
3/16" Capacity

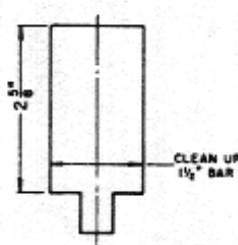


AF-1 1/2"
3/16" Capacity

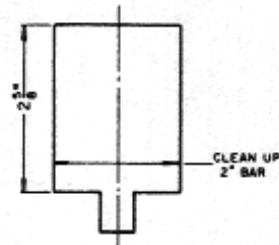


AM-F
20 Gauge

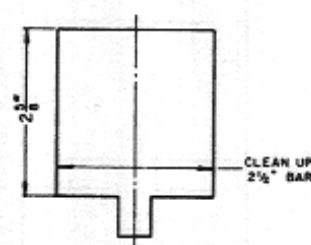
Flattening Dies



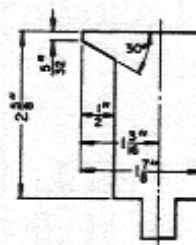
180-A



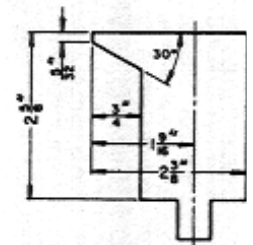
180-B



180-C



180-Y



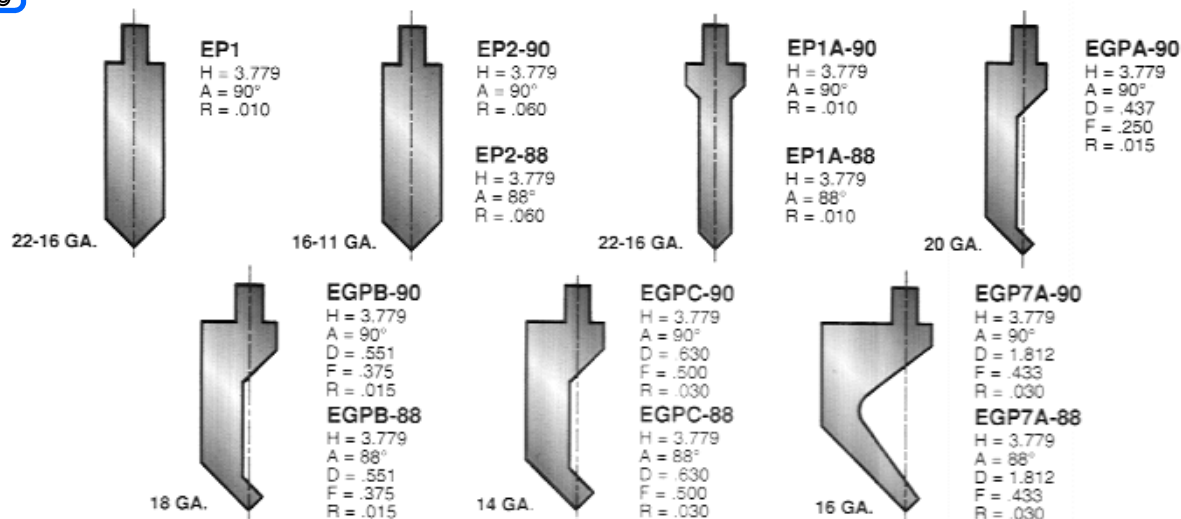
180-Z



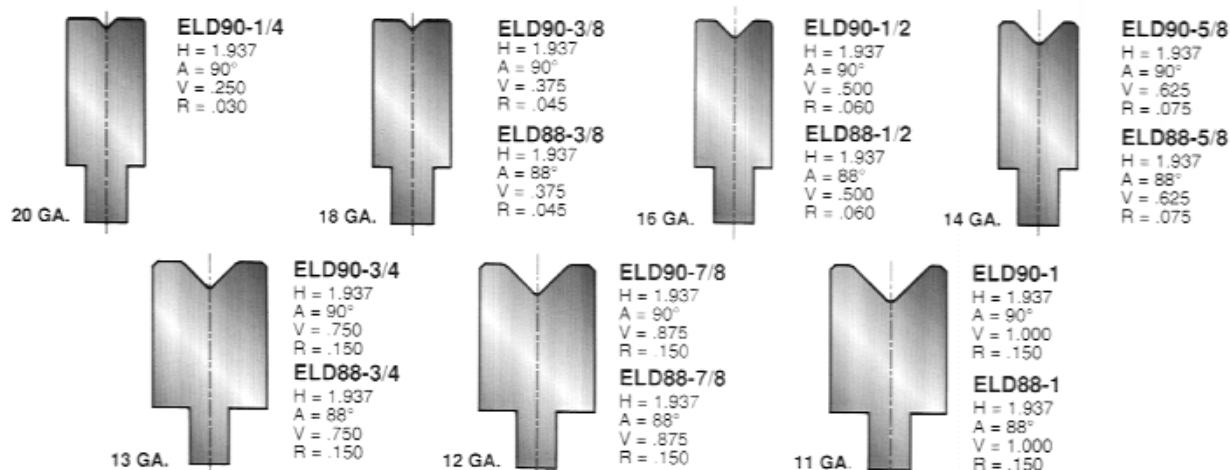
American -Ground $\pm .0008"$ / .02mm

*A

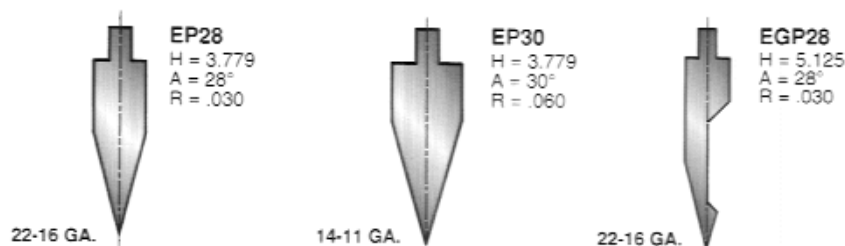
88° AND 90° PUNCHES



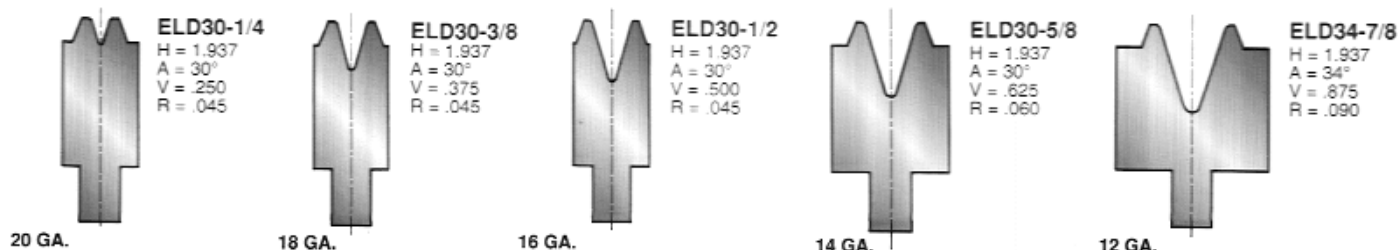
88° AND 90° LOWER DIES



ACUTE PUNCHES



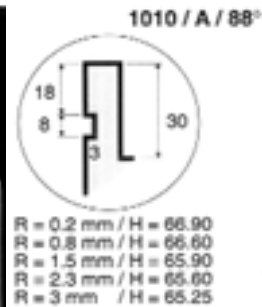
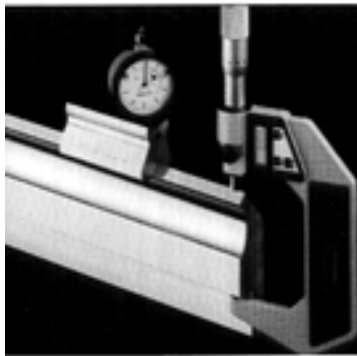
ACUTE LOWER DIES



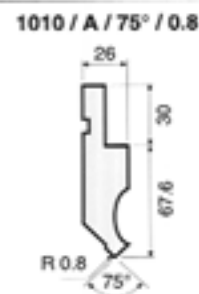
European "Ground"

$\pm .0004" / .01\text{mm}$

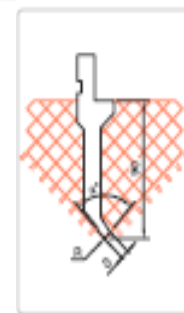
*A



SOLID 100 T / m



SOLID 100 T / m

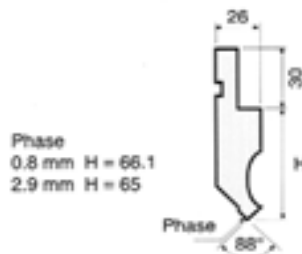


GP110(H=90)

max Load : 300kN/m
(Hardness : HRC57±2)

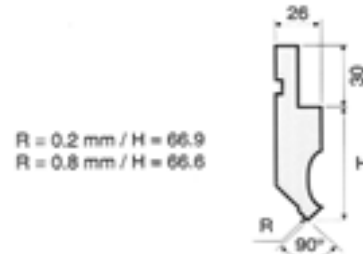
Length	Code No.	R	α°	S
835	GP1101	R0.2	84°	4
415	GP1102	R0.8	88°	8
Section	GP1103	R0.8	88°	8

1010 / 88°



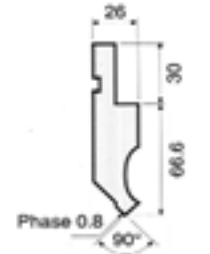
SOLID 100 T / m

1010 / A / 90°

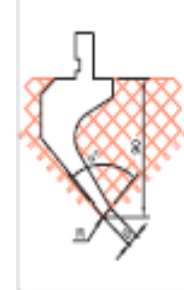


SOLID 100 T / m

1010 / 90° / 0.8



SOLID 100 T / m

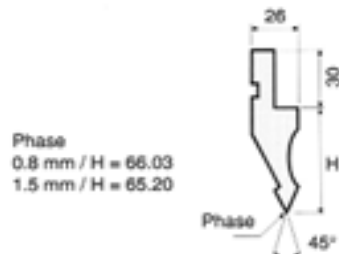


GP120(H=90)

max Load : 500kN/m
(Hardness : HRC57±2)

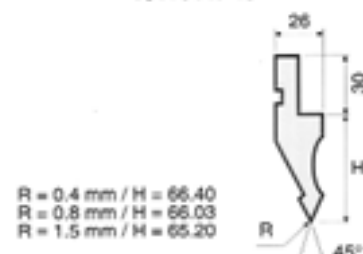
Length	Code No.	R	α°	S
835	GP1201	R0.2	84°	8
415	GP1202	R0.8	88°	8
Section	GP1203	R0.8	88°	8

1011 / 45°



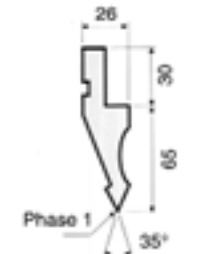
SOLID 70 T / m

1011 / A / 45°

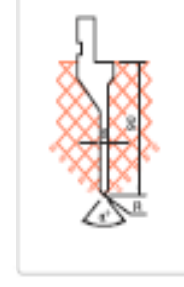


SOLID 70 T / m

3864 / 35° / 1



SOLID 50 T / m

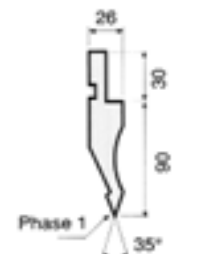


GP130(H=90)

max Load : 500kN/m
(Hardness : HRC57±2)

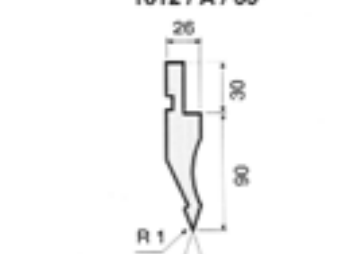
Length	Code No.	R	α°	S
835	GP1301	R0.2	84°	-
415	GP1302	R0.8	88°	-
Section	GP1303	R0.8	88°	-

1012 / 35° / 1



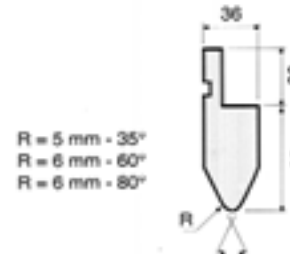
SOLID 50 T / m

1012 / A / 35°

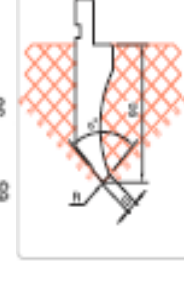


SOLID 50 T / m

1013



SOLID 100 T / m



GP140(H=90)

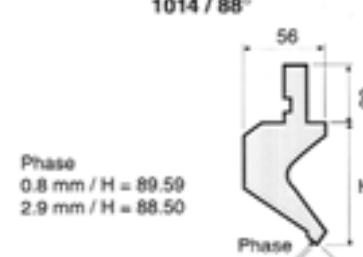
max Load : 1000kN/m
(Hardness : HRC57±2)

Length	Code No.	R	α°	S
835	GP1401	R0.2	84°	7
415	GP1402	R0.8	88°	9
Section	GP1403	R0.8	88°	9

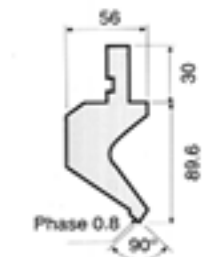
1014 / A / 75° / 0.8



1014 / 88°



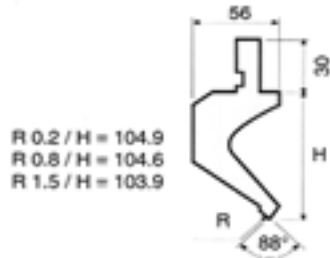
1014 / 90° / 0.8



European "Ground" .0004" / .01mm

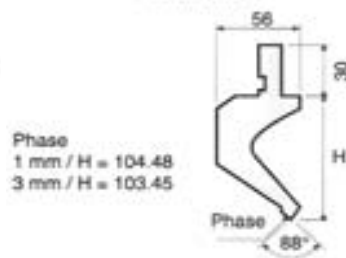
*A

1015 / A / 88°



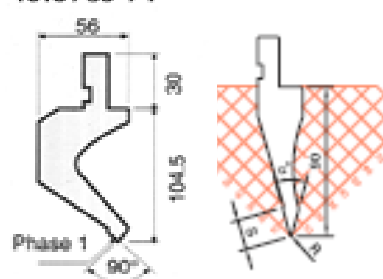
SOLID 50 T / m

1015 / 88°



SOLID 50 T / m

1015 / 90° / 1



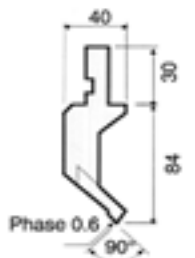
SOLID 50 T / m

GP150(H=90)

max Load : 200kN/m
(Hardness : HRC57 ±2)

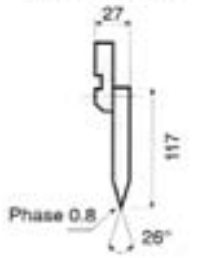
Length	Code No.	R	α°	S
835	GP1501	R0.5	30°	18
415	GP1502			
Section	GP1503	R1		

1016 / 90° / 0.6



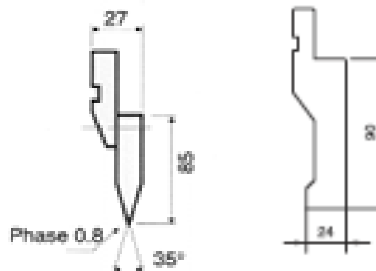
SOLID 15 T / m

1017 / 26° / 0.8



SOLID 50 T / m

1017 / 35° / 0.8



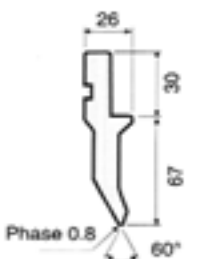
SOLID 50 T / m

GP160(H=90)

max Load : 1000kN/m
(Hardness : HRC57 ±2)

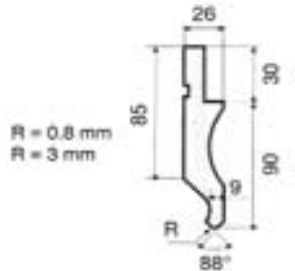
Length	Code No.	R	α°	S
835	GP1601		-	-
415	GP1602			
Section	GP1603			

1018 / 60° / 0.8



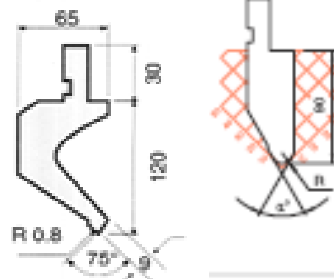
SOLID 50 T / m

1019 / A / 88°



SOLID 50 T / m

1020 / A / 75° / 0.8



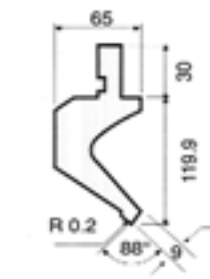
SOLID 50 T / m

GP170(H=90)

max Load : 1000kN/m
(Hardness : HRC57 ±2)

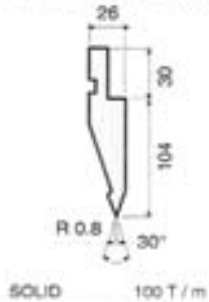
Length	Code No.	R	α°	S
835	GP1701		60°	-
415	GP1702			
Section	GP1703			

1020 / A / 88° / 0.2



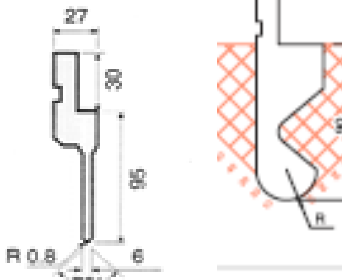
SOLID 50 T / m

1021 / A / 30° / 0.8



SOLID 100 T / m

1022 / A / 75° / 0.8



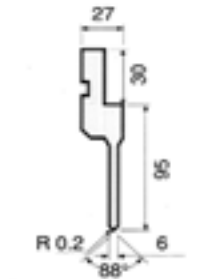
SOLID 50 T / m

GP180(H=90)

max Load : 1000kN/m
(Hardness : HRC57 ±2)

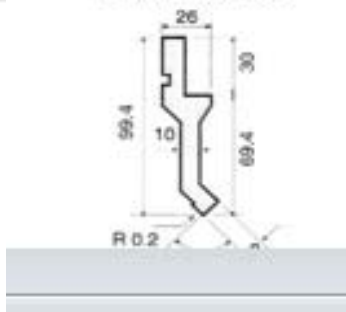
Length	Code No.	R	α°	S
835	GP1801		-	-
415	GP1802	R17.5		
Section	GP1803			

1022 / A / 88° / 0.2

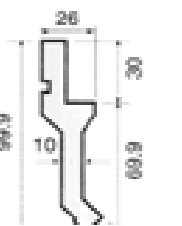


SOLID 50 T / m

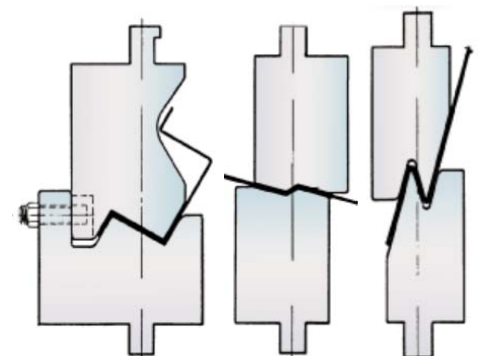
1023 / A / 88° / 0.2



1023 / A / 90° / 0.2



SOLID 50 T / m

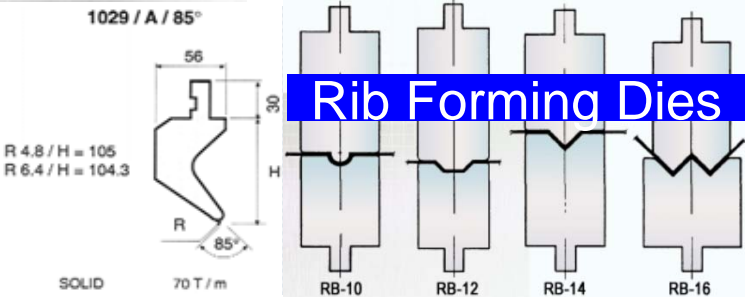
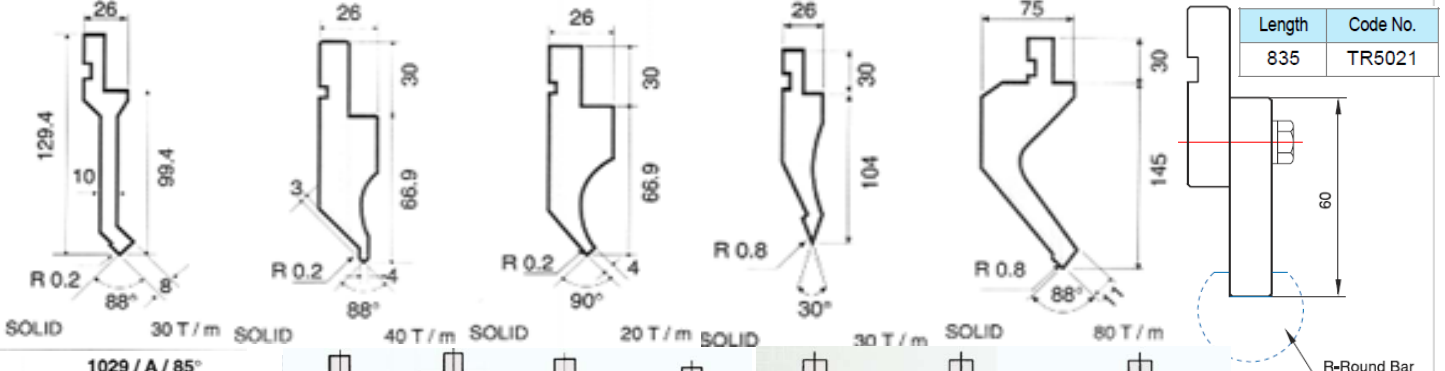


SO-26

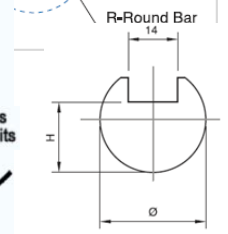
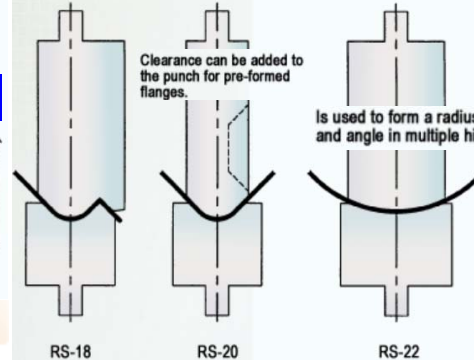
SO-28

SO-30

1024 / A / 88° / 0.2 1025 / A / 88° / 0.2 1026 / A / 90° / 0.2 1027 / A / 30° / 0.8 1028 / A / 88° / 0.8



Rib Forming Dies



TP150(H=220)
max Load : 600kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	S
500	TP1501	R0.5	28°	-
Section	TP1502	R1		

TP110(H=120)
max Load : 800kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	S
500	TP1101	R0.5	88°	10
Section	TP1102	R1		

AP150
max Load : 1000kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	h
835	AP1501	R0.8	30°	70
415	AP1502	R1		100
Section	AP1503			

AP110
max Load : 300kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	h
835	AP1101	R0.2	88°	70
415	AP1102	R0.6	88°	100
Section	AP1103			

TP151(H=240)
max Load : 400kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	S
500	TP1511	R0.5	28°	-
Section	TP1512	R1		

TP120(H=120)
max Load : 800kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	S
500	TP1201	R0.5	88°	8
Section	TP1202	R1		

AP160
max Load : 1000kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	h
835	AP1601	R0.8	30°	70
415	AP1602	R17.5		100
Section	AP1603			

AP120
max Load : 500kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	h
835	AP1201	R0.2	88°	70
415	AP1202	R0.6	88°	100
Section	AP1203			

TP121(H=140)
max Load : 400kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	S
500	TP1211	R0.5	88°	5
Section	TP1212	R1		

AP170
max Load : 400kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	h
835	AP1701	R0.2	88°	70
415	AP1702	R0.6	88°	100
Section	AP1703			

AP130
max Load : 500kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	h
835	AP1301	R0.2	88°	70
415	AP1302	R0.6	90°	100
Section	AP1303			

SO-32
TA-22
TA-24

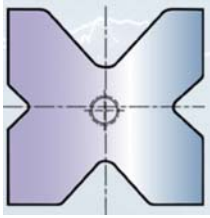
TP122(H=220)
max Load : 800kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	S
300	TP1221	R0.5	88°	10
200	TP1222	R1		
Section	TP1223			

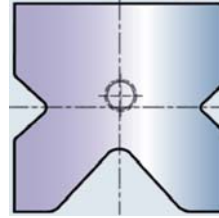
AP140
max Load : 500kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	R	α°	h
835	AP1401	R0.2	88°	70
415	AP1402	R0.6	88°	100
Section	AP1403			

European "Ground" $\pm 0.004"/.01\text{mm}$ Mat. CK 50 50-53Rc



Die No.	Block Size	4 Die Openings			
2-2MV4	2.250	0.500	0.750	1.000	1.250
2-7MV4	2.750	0.625	0.875	1.125	1.500
3-2MV4	3.250	0.750	1.000	1.500	2.000
3-7MV4	3.750	0.875	1.125	2.000	2.500
4-2MV4	4.250	1.000	1.500	2.000	3.000
4-7MV4	4.750	1.000	1.250	2.500	3.000
5-2MV4	5.250	1.000	2.000	3.000	4.000
5-7MV4	5.750	1.250	2.000	3.000	4.000
6-7MV4	6.750	1.500	2.500	3.500	5.000
7-7MV4	7.750	2.000	3.000	3.500	6.000
10MV4	10.00	2.500	3.500	4.000	8.000
12MV4	12.00	3.000	4.000	5.000	10.00



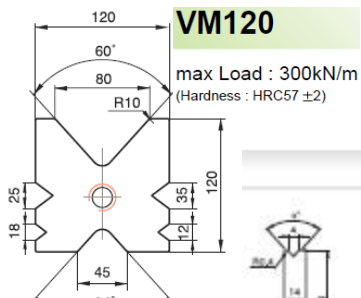
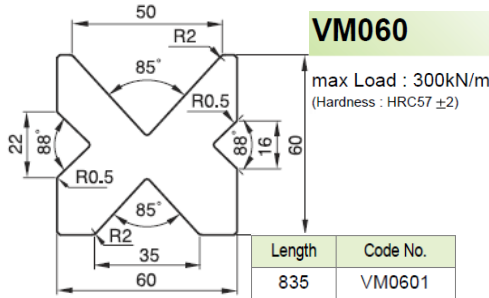
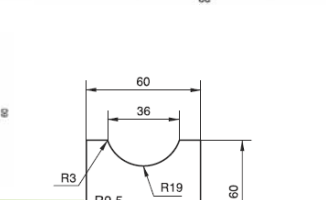
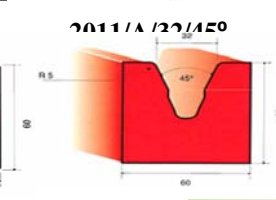
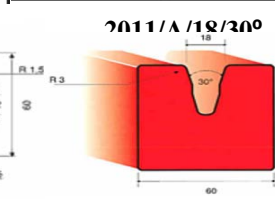
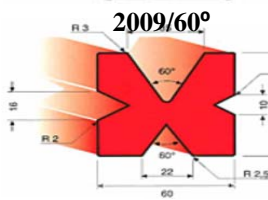
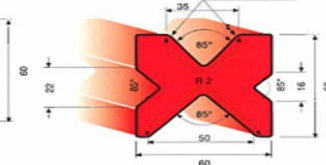
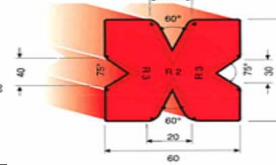
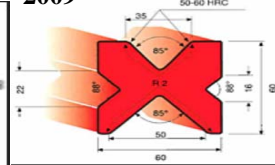
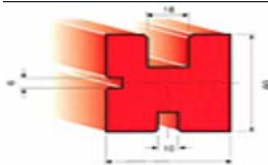
Die No.	Block Size	3 Die Openings			
2-2MV3	2.250	0.500	0.750	1.000	
2-7MV3	2.750	0.750	1.125	1.500	
3-2MV3	3.250	1.000	1.500	2.000	
3-7MV3	3.750	1.125	2.000	2.500	
4-2MV3	4.250	1.000	2.000	3.000	
4-7MV3	4.750	1.250	2.000	3.000	
5-2MV3	5.250	2.000	3.000	4.000	
5-7MV3	5.750	1.500	2.500	4.000	
6-7MV3	6.750	1.500	3.000	5.000	
7-7MV3	7.750	2.000	3.500	6.000	
10MV3	10.00	2.500	4.000	8.000	
12MV3	12.00	3.000	6.000	10.00	

2008 Often used for hem-

2009

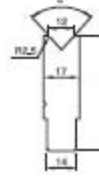
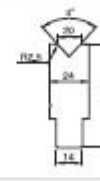
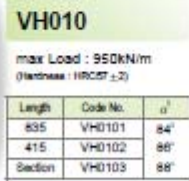
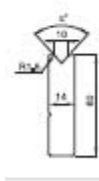
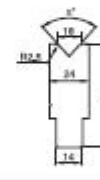
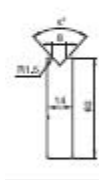
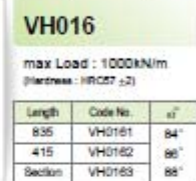
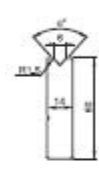
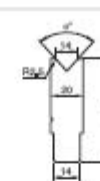
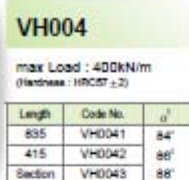
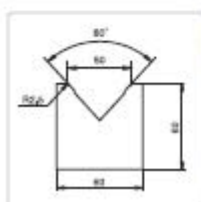
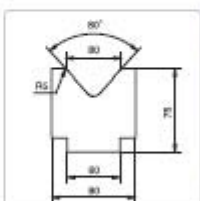
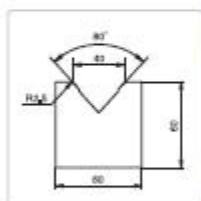
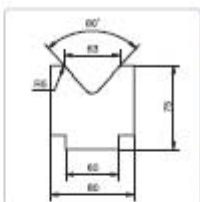
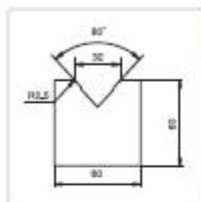
2009/SPEC

2009/020

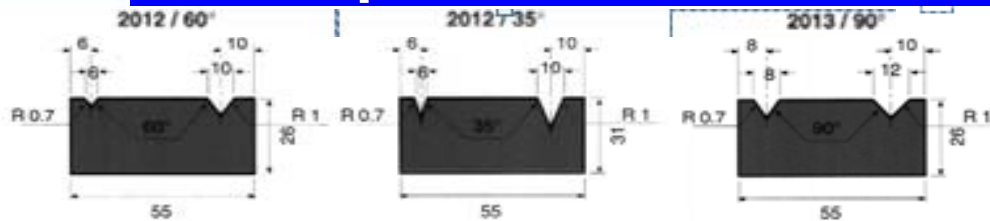


1V Die (H=60) Standard

1V Die 80° Standard



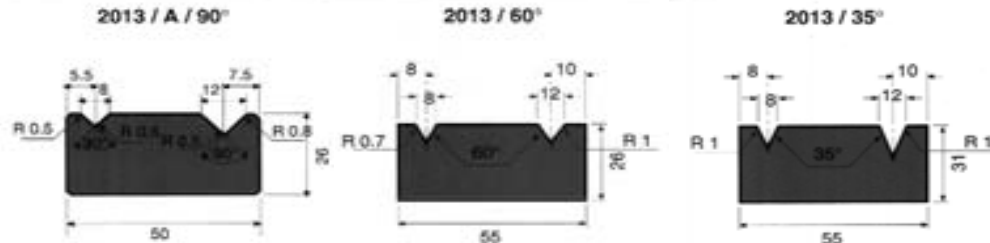
European Die 2 & 1 V Ground 0004"/.01mm Mat. c



SOLID 80 T/m

SOLID 30 T/m

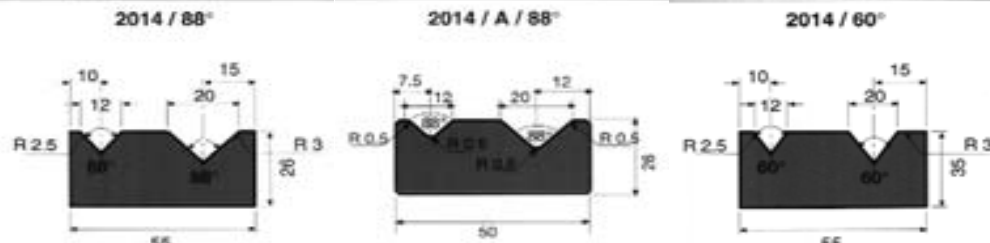
SOLID 80 T/m



SOLID 80 T/m

SOLID 80 T/m

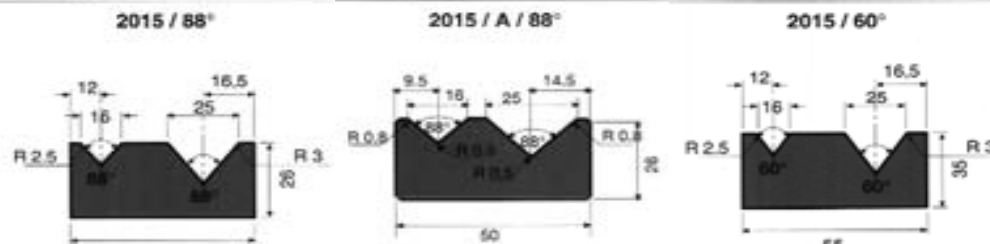
SOLID 30 T/m



SOLID 100 T/m

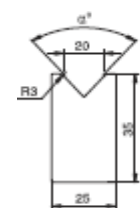
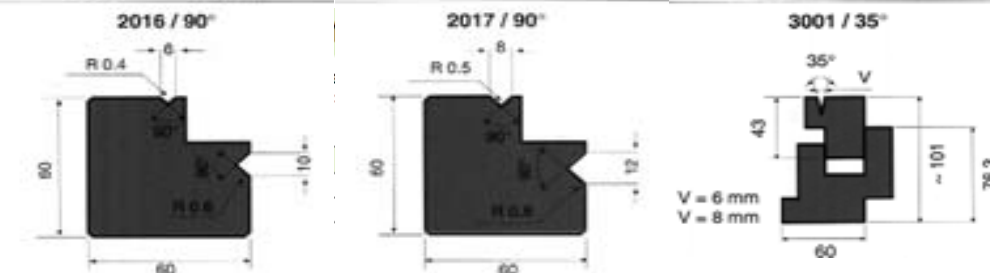
SOLID 100 T/m

SOLID 80 T/m



SOLID 100 T/m

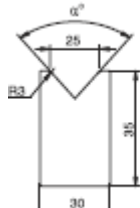
SOLID 80 T/m



GV020

max Load : 1000kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	α°
835	GV0201	84°
415	GV0202	86°

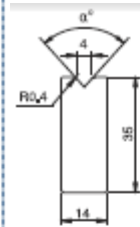


GV025

max Load : 1000kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	α°
835	GV0251	84°
415	GV0252	86°

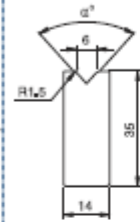
IV Die (H=35) 84°, 86°



GV004

max Load : 400kN/m
(Hardness : HRC57 \pm 2)

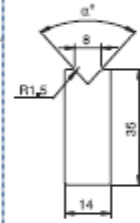
Length	Code No.	α°
835	GV0041	84°
415	GV0042	86°



GV006

max Load : 950kN/m
(Hardness : HRC57 \pm 2)

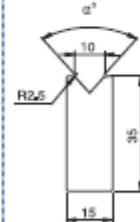
Length	Code No.	α°
835	GV0061	84°
415	GV0062	86°



GV008

max Load : 950kN/m
(Hardness : HRC57 \pm 2)

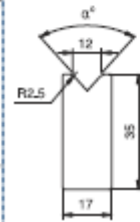
Length	Code No.	α°
835	GV0081	84°
415	GV0082	86°



GV010

max Load : 950kN/m
(Hardness : HRC57 \pm 2)

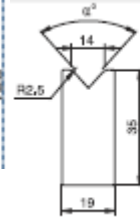
Length	Code No.	α°
835	GV0101	84°
415	GV0102	86°



GV012

max Load : 950kN/m
(Hardness : HRC57 \pm 2)

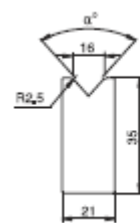
Length	Code No.	α°
835	GV0121	84°
415	GV0122	86°



GV014

max Load : 1000kN/m
(Hardness : HRC57 \pm 2)

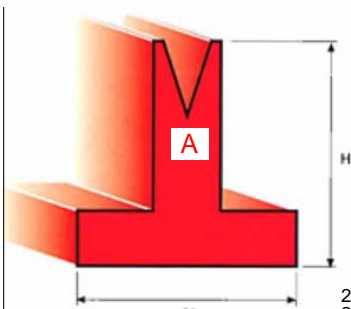
Length	Code No.	α°
835	GV0141	84°
415	GV0142	86°



GV016

max Load : 1000kN/m
(Hardness : HRC57 \pm 2)

Length	Code No.	α°
835	GV0161	84°
415	GV0162	86°



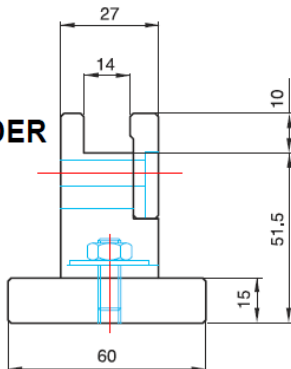
2011/A/18/30°
2011/A/32/45°
2011/A/40/45°
2030/30°/6
2030/30°/8
2030/30°/10
2030/30°/12
2030/30°/16
2030/30°/20
2030/30°/25
2030/A/30°/6
2030/A/30°/8
2030/A/30°/12

2035/35°/12
2045/45°/10
2045/45°/12
2045/45°/16
2045/45°/20
2045/45°/25
2060/60°/6
2060/60°/8
2060/60°/10

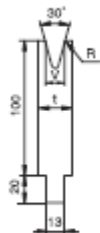
2030/A/30°/16
2030/A/30°/20
2030/A/30°/24
2035/35°/8
2088/88°/12
2088/88°/16
2088/88°/20
2088/88°/25
2090/90°/6
2090/90°/8

VH DIE HOLDER DH712

Length	Code No.
840	DH7121
420	DH7122



1V Die 30°



TV210(H=100)

max Load : 400kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV2101	6(0.6)	20	20
		8(0.6)		
		10(0.6)		
		12(0.6)		
		16(0.6)		
Section	TV2102	20(0.6)	35	35
		24(0.6)	40	40
		30(3)	55	55

TV211(H=150)

max Load : 400kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV2111	6(0.6)	20	20
		8(0.6)		
		10(0.6)		
Section	TV2112	10(0.6)	20	20
		12(1)	20	21.5

TV212(H=100)

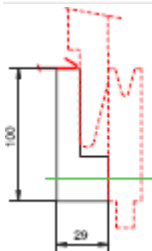
max Load : 170kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV2121	6(0.6)	20	16
		8(0.6)		
		10(0.6)		
Section	TV2122	10(0.6)	20	18
		12(1)	20	21.5

TV213(H=100)

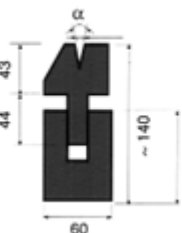
max Load : 1200kN/m
(Hardness : HRC57 ± 2)

Length	Code No.
500	TV2131
Section	TV2132



Hemming:
Mat.—14ga
Use with upper
1017/35/8
Es835-970

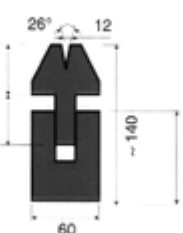
3001



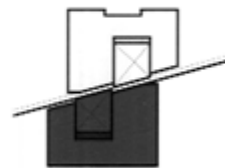
V = 10 mm / 26°
V = 10 mm / 35°
V = 12 mm / 35°

Hemming:
Mat.—12ga
Use with upper
1017/26/8
Es835-1090

3001 / 12 / 26°



3005

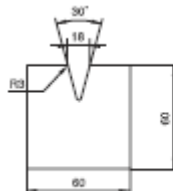


VH Acute Die 30° (H=60)

VH308

max Load : 200kN/m
(Hardness : HRC57 ± 2)

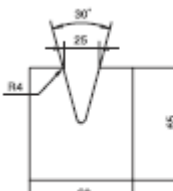
Length	Code No.
835	VH3081
415	VH3082
Section	VH3083



VH318

max Load : 800kN/m
(Hardness : HRC57 ± 2)

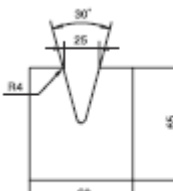
Length	Code No.
835	VH3181
415	VH3182



VH312

max Load : 200kN/m
(Hardness : HRC57 ± 2)

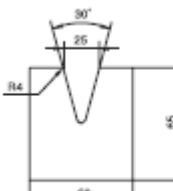
Length	Code No.
835	VH3101
415	VH3102
Section	VH3103



VH325

max Load : 600kN/m
(Hardness : HRC57 ± 2)

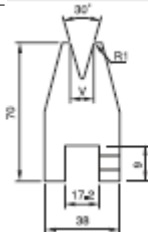
Length	Code No.
835	VH3251
415	VH3252



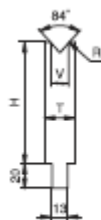
VH308

max Load : 200kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	V
835	VH3081	30°	8
415	VH3082		12
Section	VH3083		12



1V Die 84°



TV410(H=100)

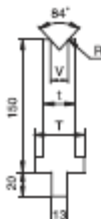
max Load : 400kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV4101	6(0.6)	20	20
		8(0.6)		
		10(0.6)		
		12(0.6)		
		16(0.6)		
Section	TV4102	20(0.6)	35	35
		24(0.6)	40	40
		30(3)	55	55

TV411(H=100)

max Load : 400kN/m
(Hardness : HRC57 ± 2)

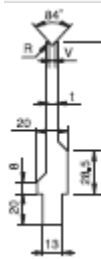
Length	Code No.	V (°)	T	t
500	TV4111	6(0.6)	30	20
		8(0.6)		
		10(0.6)		
		16(0.6)		
Section	TV4112	20(0.6)	30	-
		24(0.6)	30	-



TV412(H=100)

max Load : 250kN/m
(Hardness : HRC57 ± 2)

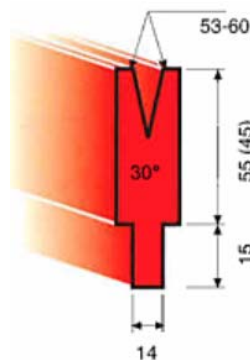
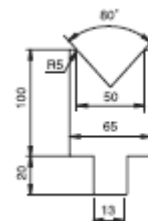
Length	Code No.	V (°)	T	t
500	TV4121	4(0.6)	20	8
Section	TV4122	5(0.6)		



1V Die 80° TV310(H=100)

max Load : 1500kN/m
(Hardness : HRC57 ± 2)

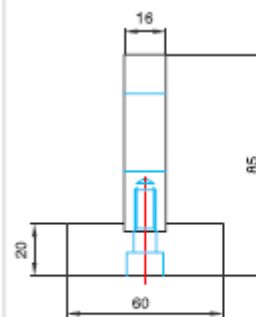
Length	Code No.	V (°)
500	TV3101	50(5)
Section	TV3102	



2130/A/30°/6
2130/A/30°/8
2130/A/30°/10
2130/A/30°/12
2130/A/30°/16
2130/A/30°/24
2188/A/88°/6
2188/A/88°/8
2188/A/88°/10
2188/A/88°/12

2190/A/90°/6
2190/A/90°/8
2190/A/90°/10
2190/A/90°/12
2190/A/90°/6

DH710



Length	Code No.
830	DH7101
412	DH7102

V DIE HOLDER(L833)

1V Die 86°

TV510(H=100)

max Load : 400kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV5101	6(0.6)	-	20
		8(0.6)		
		10(0.6)		
		12(0.6)		25
Section	TV5102	16(0.6)	-	30
		20(0.6)		35
		24(0.6)		40
		30(3)		55

TV511(H=150)

max Load : 400kN/m
(Hardness : HRC57 ± 2)

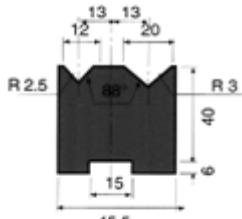
Length	Code No.	V (°)	T	t
500	TV5111	6(0.6)	30	20
		8(0.6)		
		10(0.6)		
Section	TV5112	10(0.6)	-	75
		12(0.6)		
		14(0.6)		

TV512(H=150)

max Load : 1500kN/m
(Hardness : HRC57 ± 2)

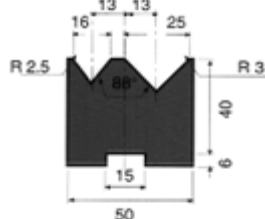
Length	Code No.	V (°)	T	t
500	TV5121	50(3)	-	75
Section	TV5122	50(3)	-	75

2022 / A / 88°



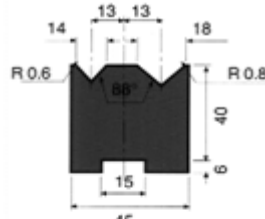
SOLID 100 T / m

2023 / A / 88°



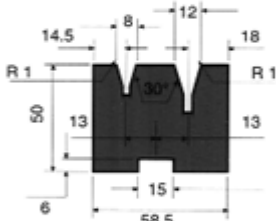
SOLID 100 T / m

2024 / A / 88°



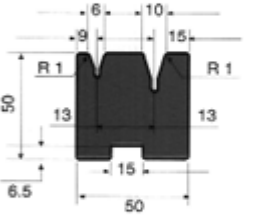
SOLID 100 T / m

2025 / A / 30°



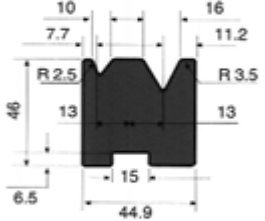
SOLID 30 T / m

2026 / A / 30°



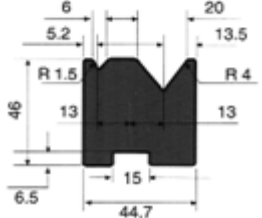
SOLID 30 T / m

2027 / A / 75°



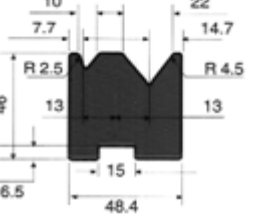
SOLID 30 T / m

2028 / A / 75°



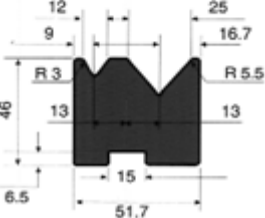
SOLID 30 T / m

2029 / A / 75°



SOLID 30 T / m

2030 / A / 75°



SOLID 30 T / m

1V Die 90°

TV610(H=100)

max Load : 250kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV6101	16(1.5)	-	20
Section	TV6102	16(1.5)	-	20

TV611(H=100)

max Load : 1100kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV6111	6(0.6)	30	20
		8(0.6)		
		10(0.6)		
		12(1)		
Section	TV6112	10(0.6)	-	75
		12(0.6)		
		14(0.6)		
		16(0.6)		

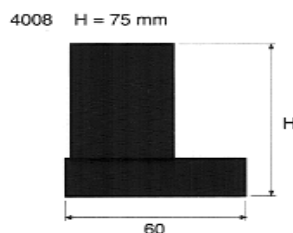
TV612(H=100)

max Load : 250kN/m
(Hardness : HRC57 ± 2)

Length	Code No.	V (°)	T	t
500	TV6121	4(0.6)	20	8
Section	TV6122	5(0.6)	20	10

EUROPEAN Lower Bed Options for tool holding & Risers.

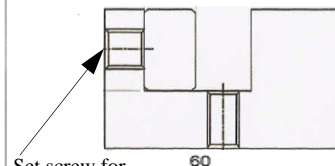
4008



Riser, often allows bolt on of #410 Quick-Change.

4015

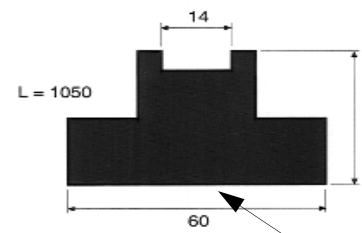
Part# BE-LAEA



Set screw for clamping

Adapter to use American or Trumpf/ Willa Style tool in European machine. Sits on machine bed or riser like #4018 Length 417mm or 835mm

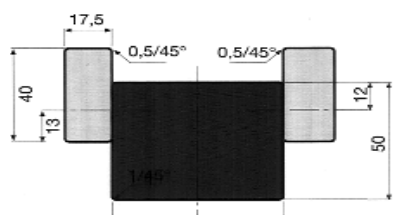
4017



Threads on bottom for bolting from machine T

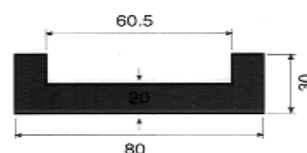
RISER 4018=50 DB80#55mm #1=417, #2=835

Threads on bottom for bolting from machine T



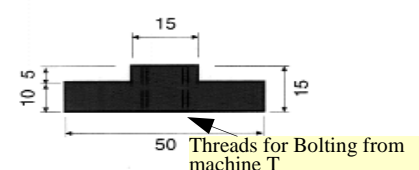
4016 / 1050 mm

60.5 Slot Base, bolts to machine bed

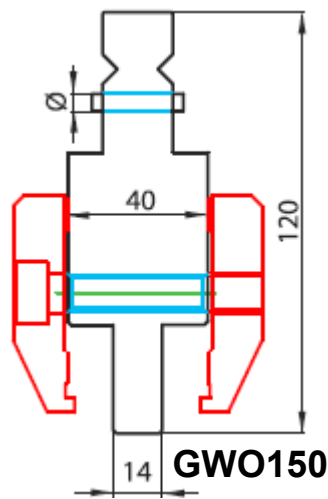


4010

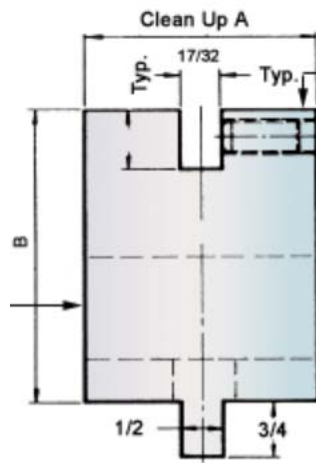
QUICK-CHANGE 15mm Slot Base Bolts to machine bed, or commonly sits on 4007 or 4008 riser/support machine base.



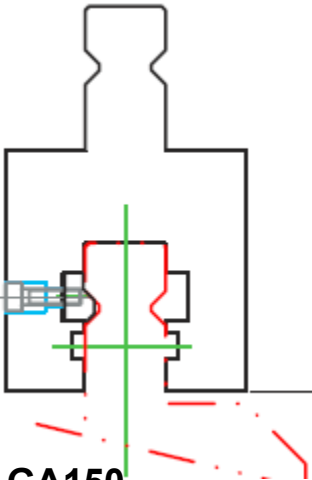
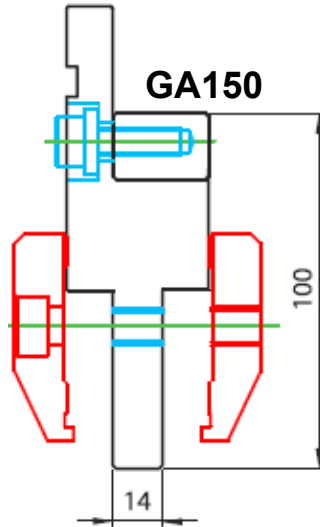
Threads for Bolting from machine T



GWO150

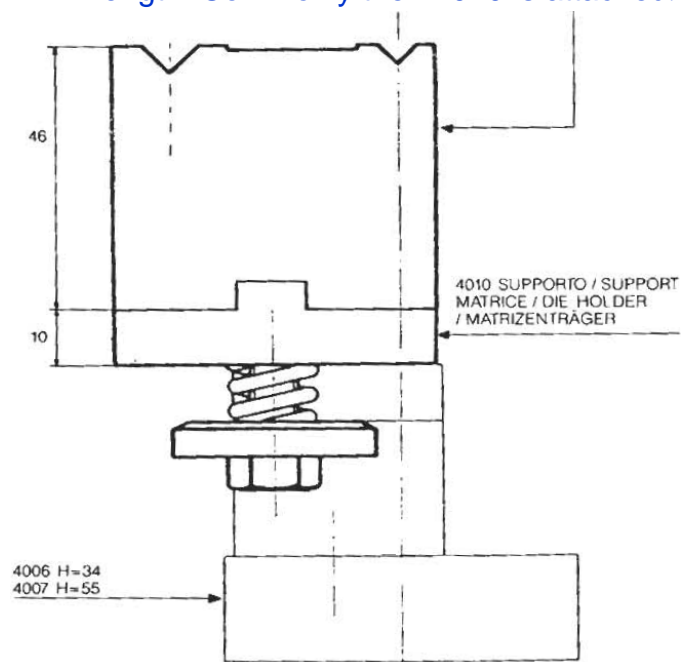


GA150



GA150

RISER, Shown Below. Sits on machine bed or on 4018 riser. Has T-bolts 4 places on 835mm length. Commonly then 4010 is attached.



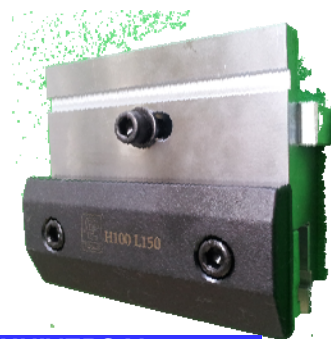
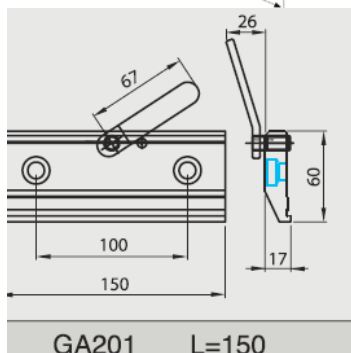
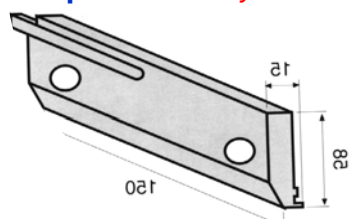
We all know and understand the problems that occur with forming on a press brake. The main concern is the compensation of deflection which jeopardizes the end result of your forming standards. Specific has developed a solution to this problem. The O-DFLX Series II compensation holder is a precision adjustment device that not only compensates for crowning at a single central point, but takes advantage of our patented dual-wedge design allowing for independent adjustment at every 8 inches to compensate for inconsistencies in the press, worn tooling, or to aid in side by side staged applications. (where applicable)



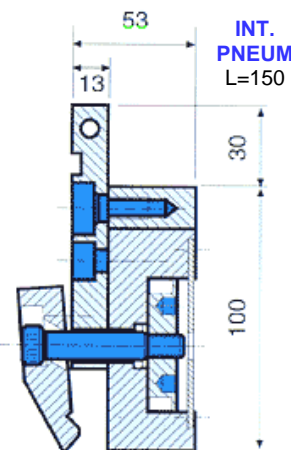
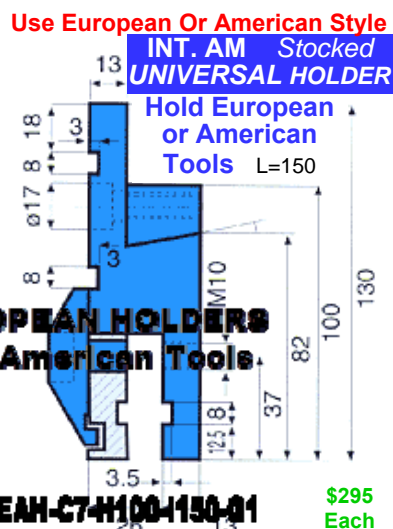
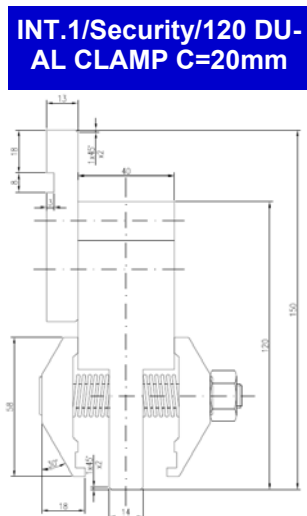
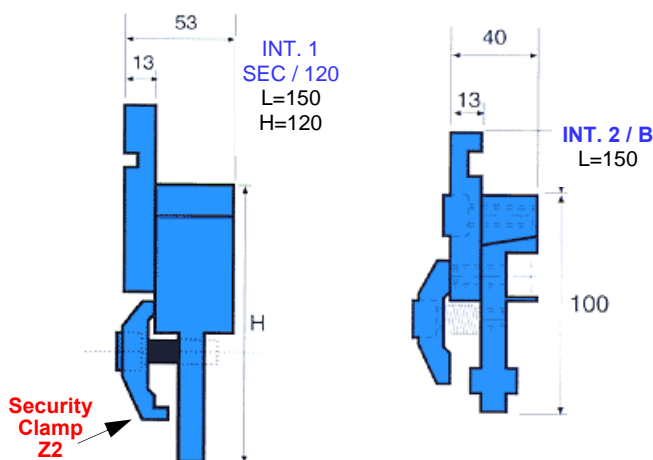
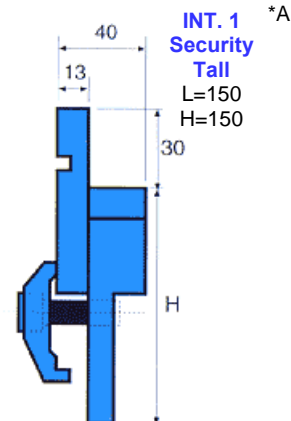
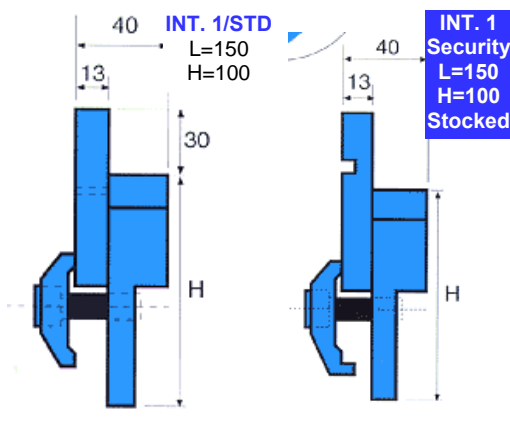
This high precision fixture features:

- Easy, Single central point adjustment
- Independent adjustment thru entire length of the die
- Eliminates shimming
- Integrated, aperture read-out gauge
- Top-cap eliminates infiltration of abrasive particles when running materials that generate slag, galvanic debris, etc.
- Requires virtually no training
- Low-profile design consumes minimal die "open space"
- Helps ensure constant, accurate angle bending for the highest quality production

Standard Clamp GA202

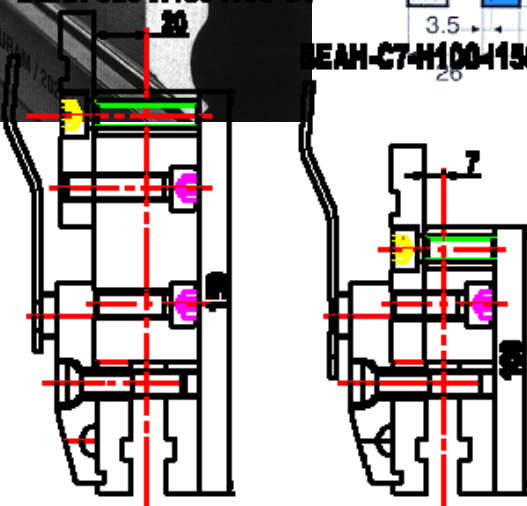


BEAH-C7-H100-L150-G2
BEAH-C7-H100-L150-G1
BEAH-C20H120-L150-G1



**\$295
Each**

2 Centerlines C7 or 20 Z1/Z2)



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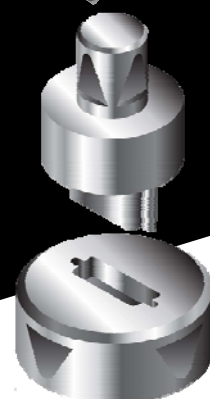
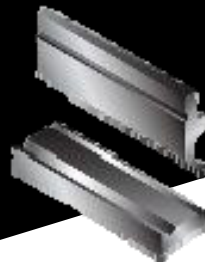
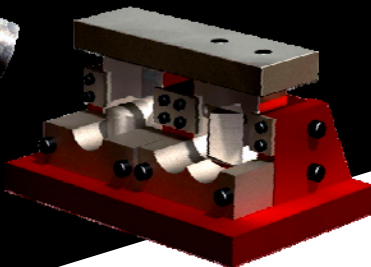
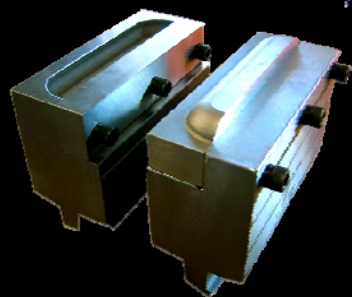
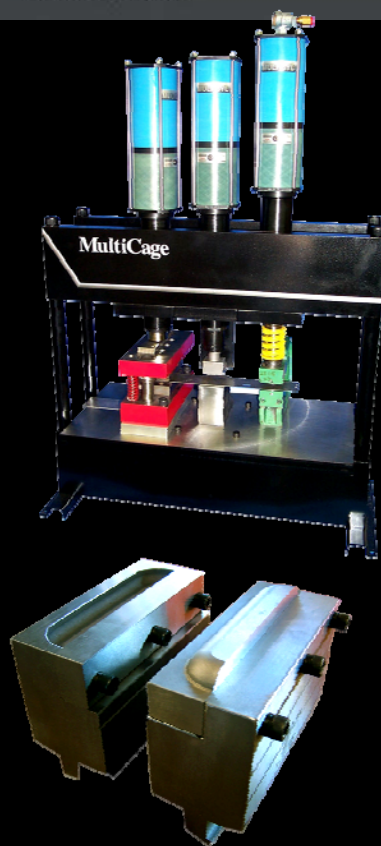
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ventas@CEtooling.com
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