



CANADA

CONVENTIONAL TOOLING



SOLUTIONS FOR PRESS BRAKE TOOLING

YEARS OF INDUSTRY EXPERIENCE. NOW AVAILABLE GLOBALLY.

Wilson Tool Canada Conventional Press Brake tooling is engineered to meet the needs of Sheet Metal Fabricators around the world. We have the ability to manufacture high quality Standard or Special Forming tools in one-piece lengths of up to 20 feet or the same tool in sections of any desirable length.

Our manufacturing processes allow us to produce Conventional Tooling, Standard and Specials at much closer tolerance than the industry standard. We also have capabilities to manufacture single-piece tooling in lengths of up to 13 feet with hardness and finishes similar to what you will find with sectionalized precision tooling.

In addition, Wilson Tool Canada Conventional style Press Brake tooling is available in a variety of styles and is available for the vast majority of Press Brakes on the market today. If we do not offer a solution that works for you in our standard tooling line, our design experts will work with you to engineer a solution to meet your needs.

Manufactured at our facility in Toronto, our Wilson Tool Canada press brake products incorporate years of industry experience and are now available through the global sales and distribution network of the world's leading independent tooling supplier – Wilson Tool.

Terms and Conditions

ORDER Minimum order is \$50.00

CREDIT REQUIREMENTS All orders are subject to approval by our Credit Department. If you are a new account, complete a current credit application form that we will provide. A credit limit will be imposed on new accounts until credit has been established.

PAYMENT TERMS Terms are net 30 days. Catalog prices are subject to change without notice.

FREIGHT Orders are shipped F.O.B. from our manufacturing facility.

ORDER CANCELLATION In the event an order is cancelled, an additional charge will be assessed to cover the cost of labor and material.

RETURNED MATERIAL A 25% handling/restocking fee will be applied to all standard products returned for credit. A return authorization form and shipping instructions must be obtained in advance before an item can be returned. No returns are accepted after 3 months.

CLAIMS All claims or product shortages must be made within 30 days of the invoice date.

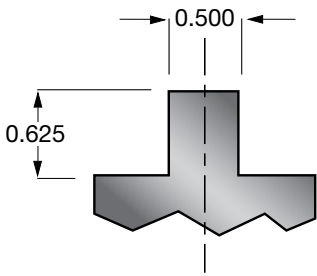
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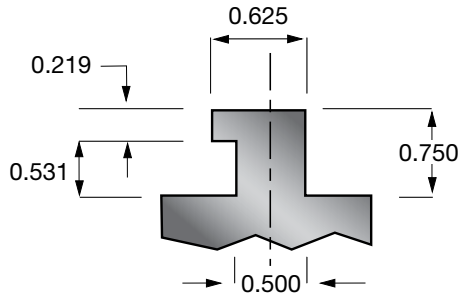
wilsontool.com is your online source for the latest news and information from Wilson Tool. Available in seven languages, wilsontool.com is a great resource for all of our customers around the globe.



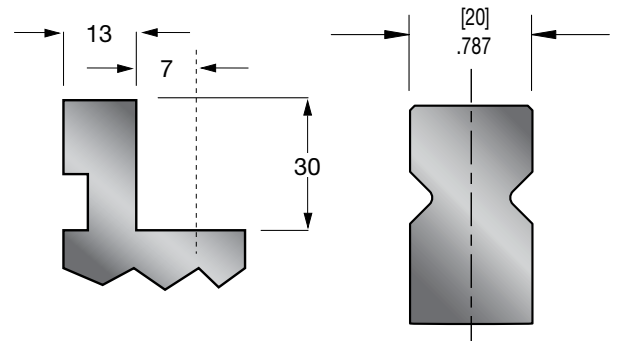
STANDARD TONGUES AVAILABLE



AMERICAN STANDARD
(NO SAFETY HOOK)



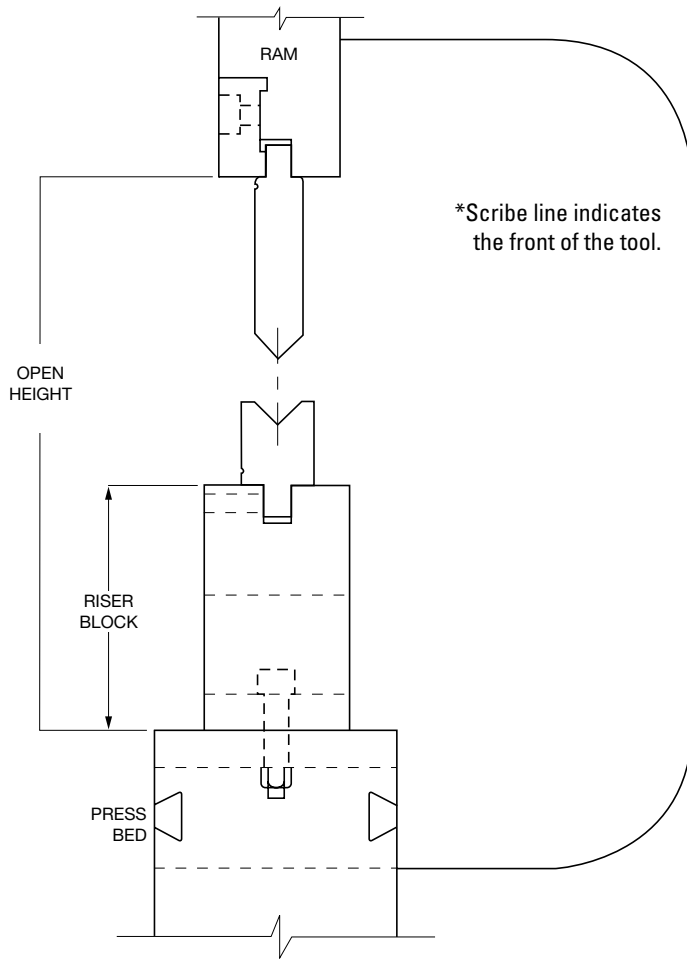
AMERICAN SAFETY



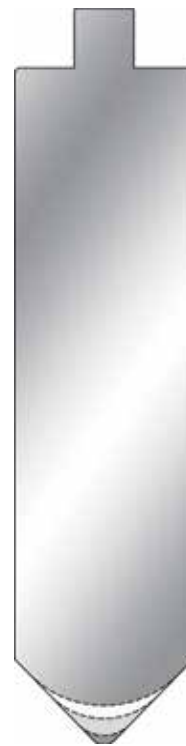
EUROPEAN

WT

TYPICAL PRESS SETUP



PUNCH MODIFICATIONS



Tip modifications are available in all styles and sizes.

No charge for Tip Radius changes up to .250' and angle changes.

DIE MODIFICATIONS

Angles can be modified to 80° at no charge.

CONVENTIONAL PRESS BRAKE DIES

Wilson Tool Canada Conventional Press Brake Dies are quality, heat treated alloy Brake Die steel that is through hardened and heat treated at approximately 285–300 Brinell (30-Rockwell "C").

Wilson Tool Canada Conventional Dies do not have to be annealed before machining or re-hardened afterward.

A hooked retainer Tongue is available on special order when multiple Die sections are required.

AIR BENDING

Air Bending dies are made at a more acute angle than the angle to be formed. The only contact is between the Dies and material occurring at the tip of the Upper Punch and the inside edges of the Lower Die. The material is formed rather than "coined" or "bottomed".

Most Wilson Tool Canada air bending Dies are made with an included angle of 85°; when forming 90° Flanges in mild steel, the material's natural springback achieves the 90° angle. To form angles greater than the Die's included angle, the Ram is adjusted for less Die penetration.



BOTTOMING / COINING

Bottoming is used when high accuracy and sharp corners are needed. This process requires three to five times the pressure used in air bending. Since more tonnage is needed, Bottoming Dies are seldom used on steel heavier than 12 gauge.

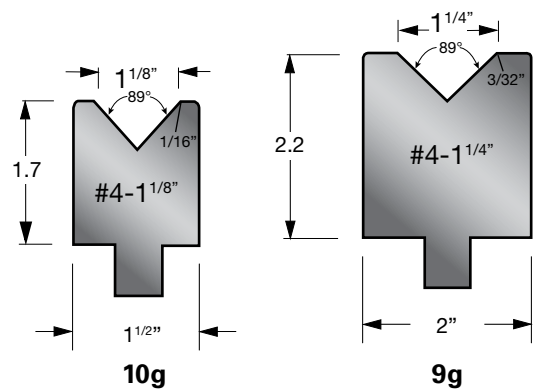
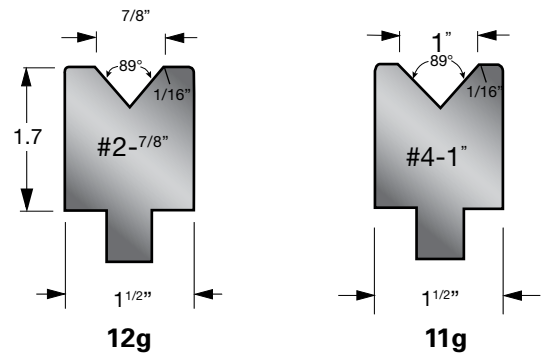
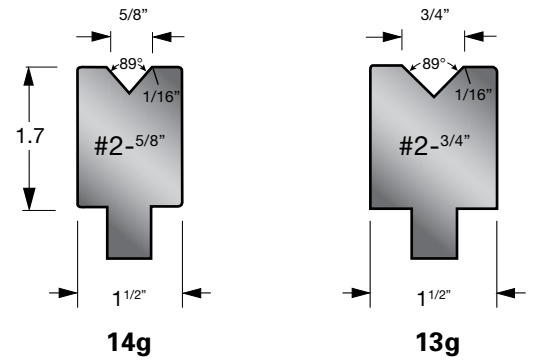
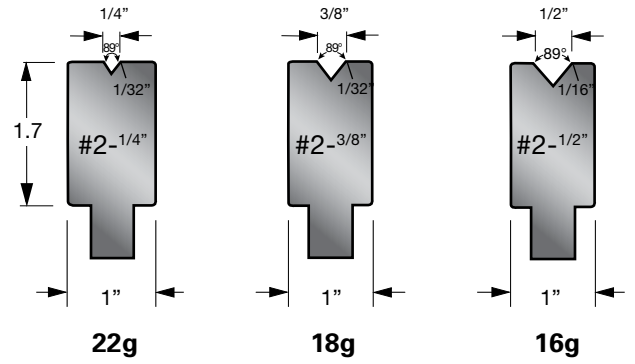
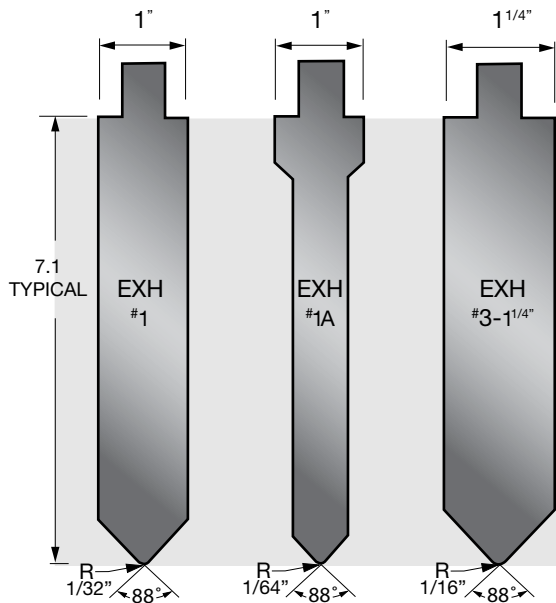
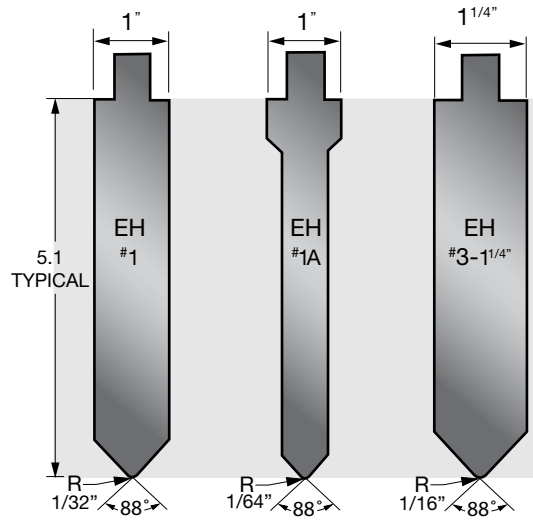
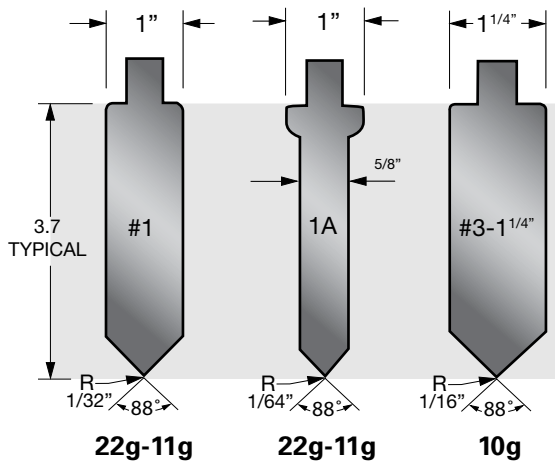
Wilson Tool Canada Bottoming Dies have an included angle of 90°, and Lower Die capacities are based on eight times the material thickness. For tighter radii and less springback, the Die opening is five times the material thickness.

UPGRADE

Upgrade your conventional tooling with the Plane Ground option to bridge the gap between conventional tooling and precision tooling. Plane Ground tooling will save you time in setups due to consistent centerlines. The improved surface finishes will reduce sheet marking.

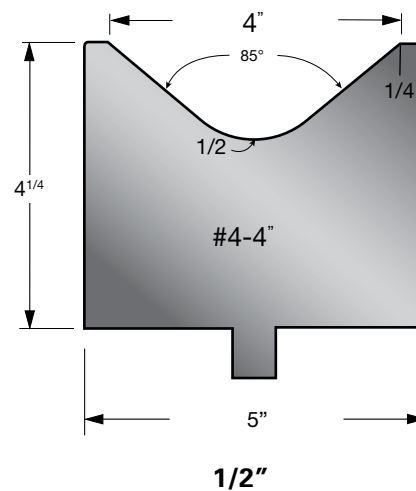
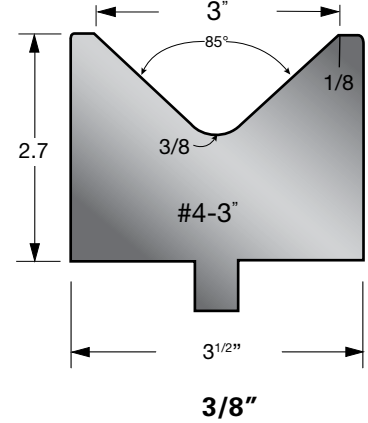
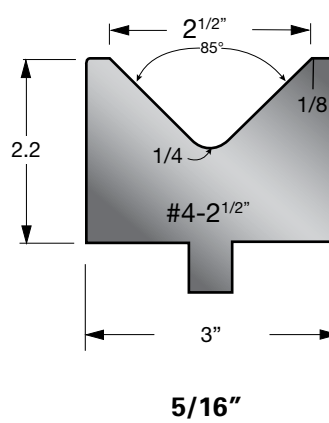
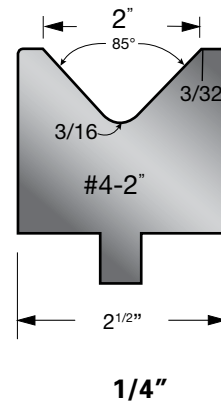
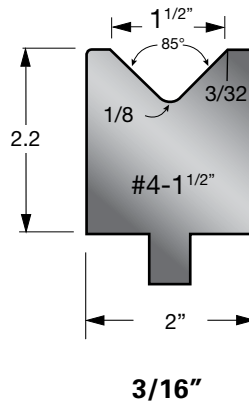
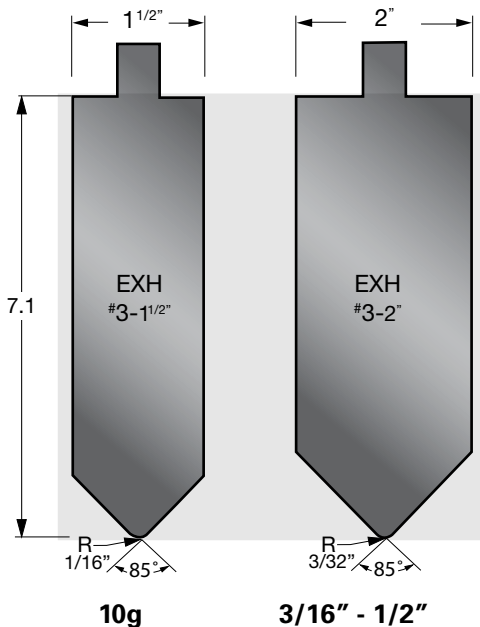
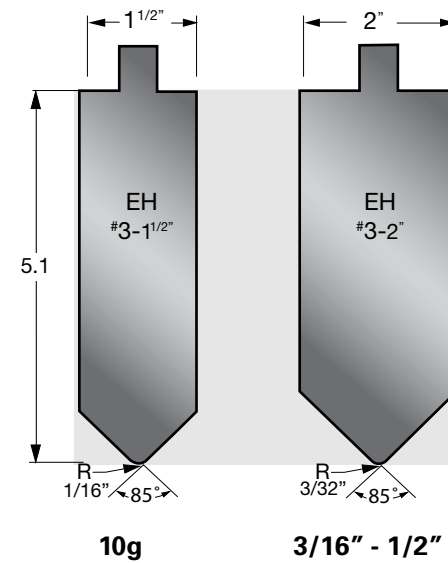
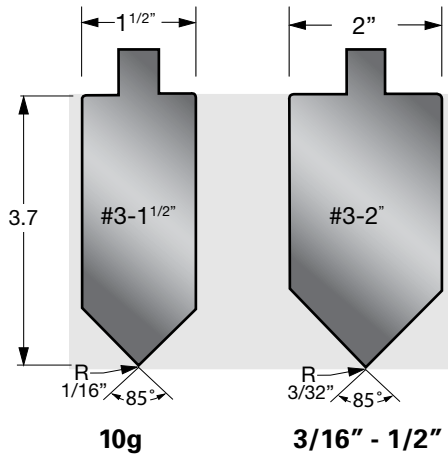
Bending thicker material? Our induction hardened option will provide longer tool life and is recommended when bending thicker materials. Call our sales desk for more details.

88° BLOCK PUNCHES AND 89° DIES



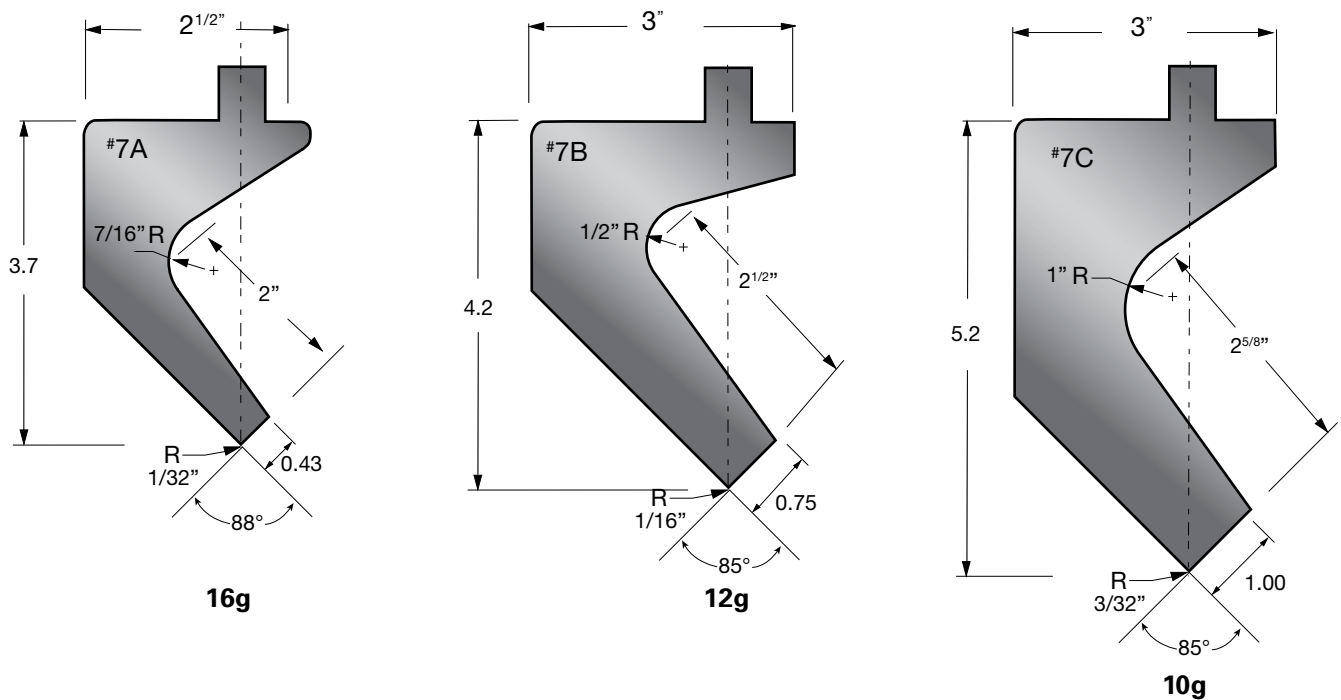
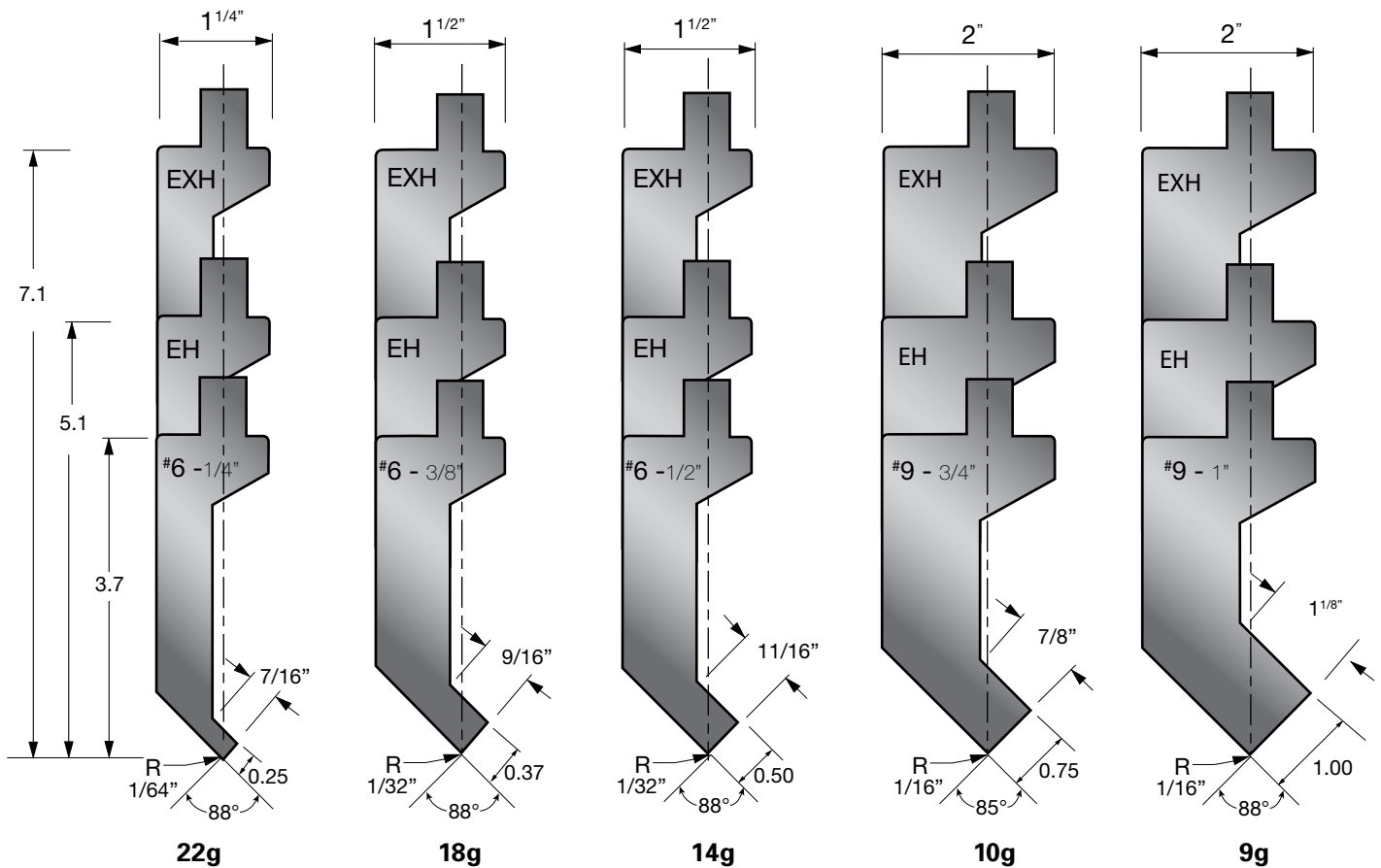
NOTE
Outside widths shown are Bar Sizes prior to cleanup.

85° BLOCK PUNCHES AND DIES



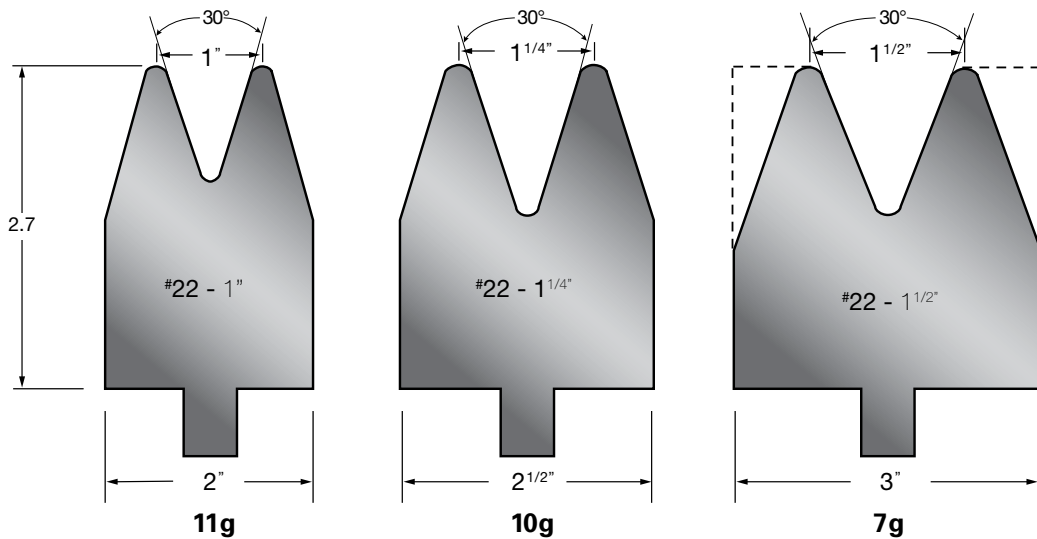
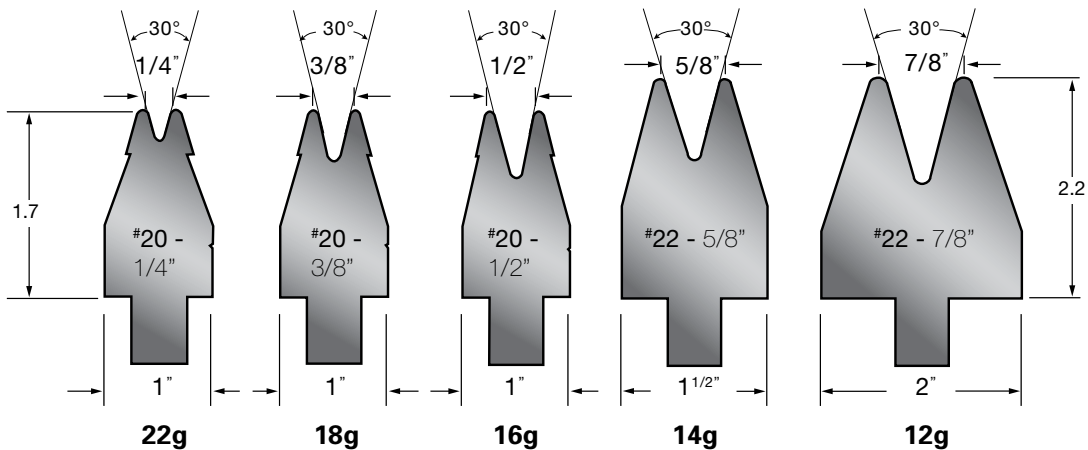
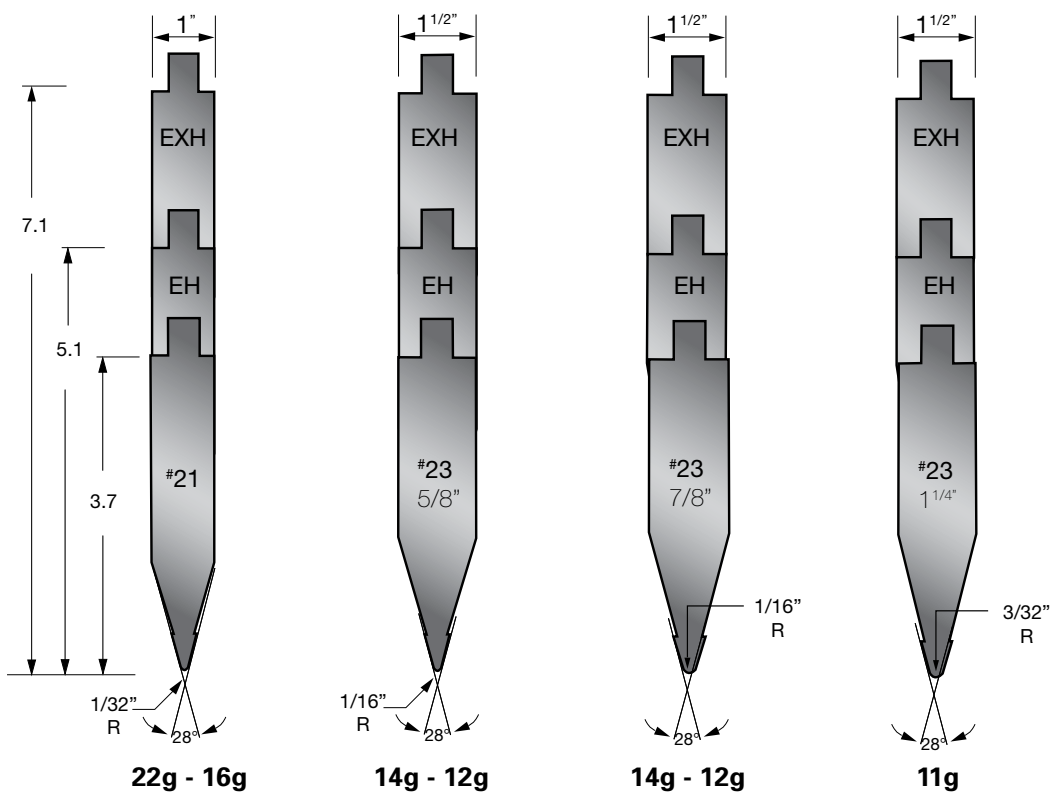
NOTE
Outside widths shown are Bar Sizes prior to cleanup.

88°/85° SASH AND GOOSENECK PUNCHES



NOTE
Outside widths shown are Bar Sizes prior to cleanup.

ACUTE PUNCHES AND DIES

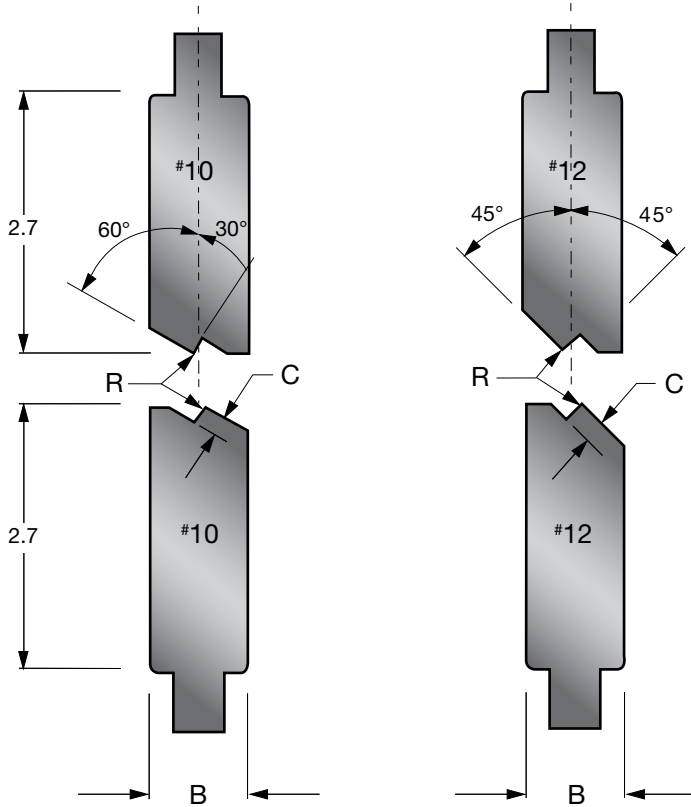


Dotted lines indicate the Heavy Duty concept - available on all Acute dies.

NOTE
Outside widths shown are Bar Sizes prior to cleanup.

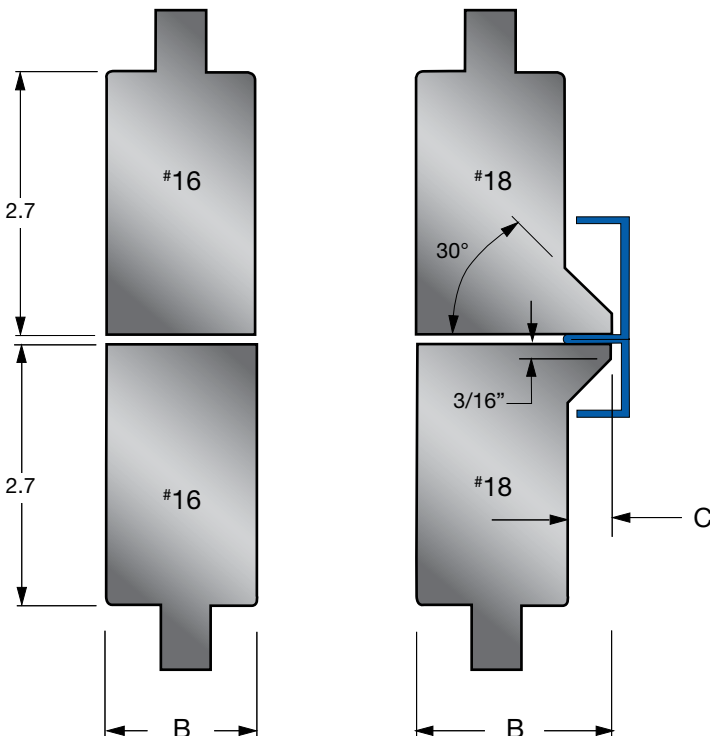
OFFSET AND FLATTENING DIES

For producing two 90° bends simultaneously.



OFFSET				
SET #	ANGLE	B	C	R
#10 - 3/16"	30° / 60°	1"	3/16"	1/64"
#12 - 1/4"	90°	1"	1/4"	1/64"
#12 - 5/16"	90°	1"	5/16"	1/64"
#12 - 3/8"	90°	1-1/4"	3/8"	1/32"
#12 - 1/2"	90°	1-1/4"	1/2"	1/32"
#12 - 5/8"	90°	1-1/2"	5/8"	1/32"
#12 - 3/4"	90°	2"	3/4"	1/32"
#12 - 7/8"	90°	2"	7/8"	1/32"
#12 - 1"	90°	2"	1"	1/32"

A set consists of Top and Bottom



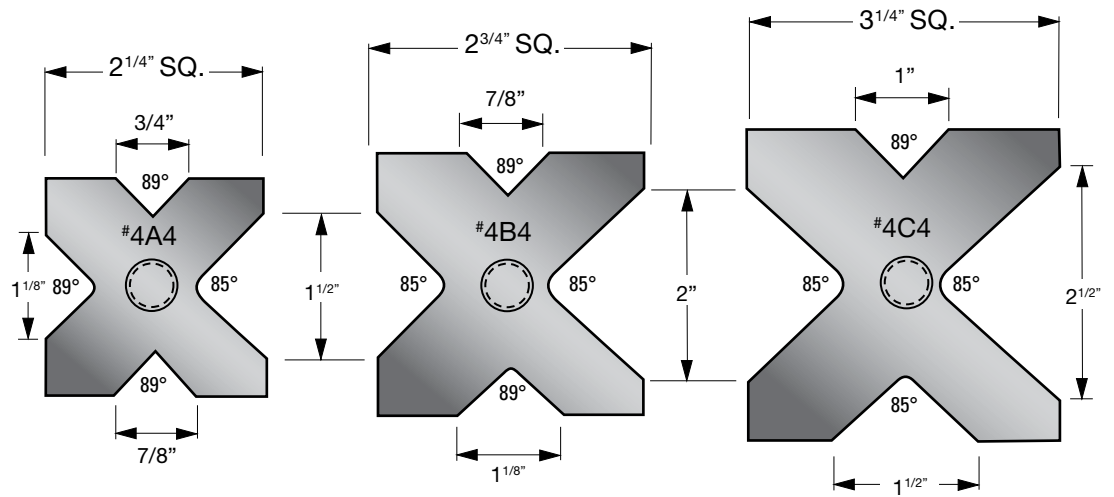
FLATTENING		
SET #	B	C
#16 - 1-1/2"	1-1/2"	NA
#16 - 2"	2"	NA
#16 - 2-1/2"	2-1/2"	NA
#18 - 2"	1-7/8"	1/2"
#18 - 2-1/2"	2-3/8"	3/4"

A set consists of Top and Bottom

NOTE

Outside widths shown are Bar Sizes prior to cleanup.

4-WAY DIES AND ADAPTERS

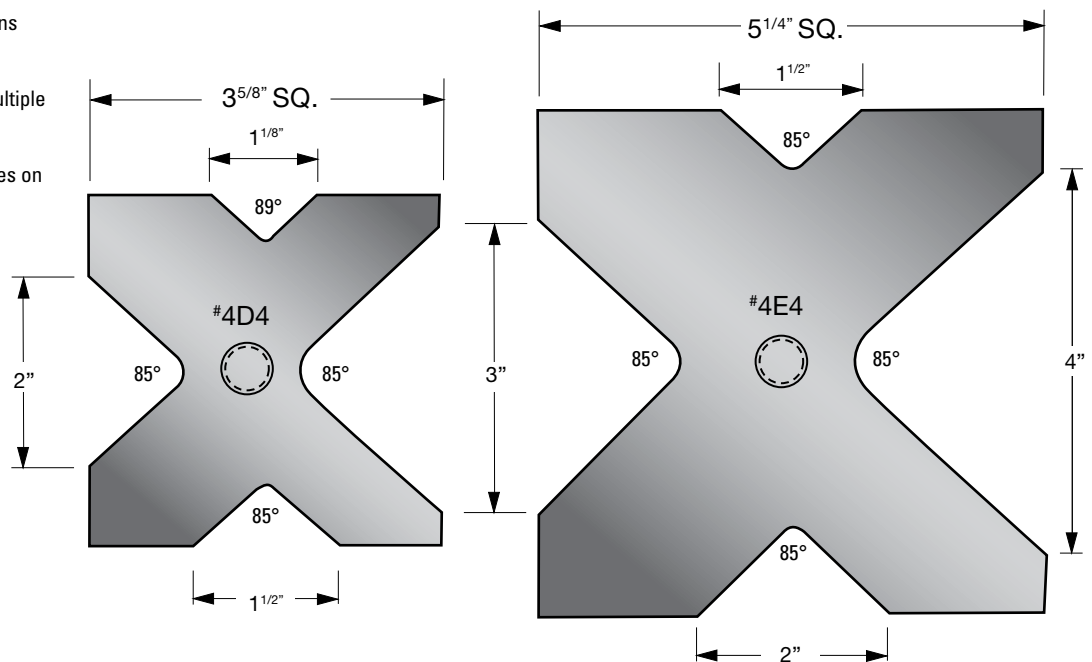


NOTE: HOLDER REQUIRED, or alternative method of securing die should be considered.

Special angles and configurations are made to order.

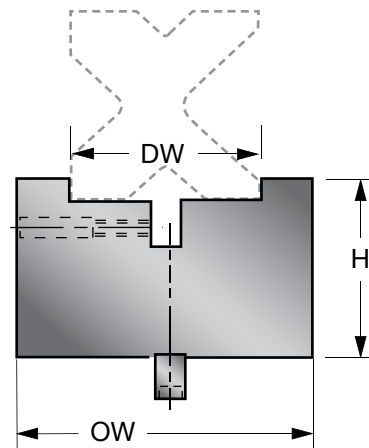
For quick die changes where multiple bends are required.

All are supplied with tapped holes on each end for lifting.

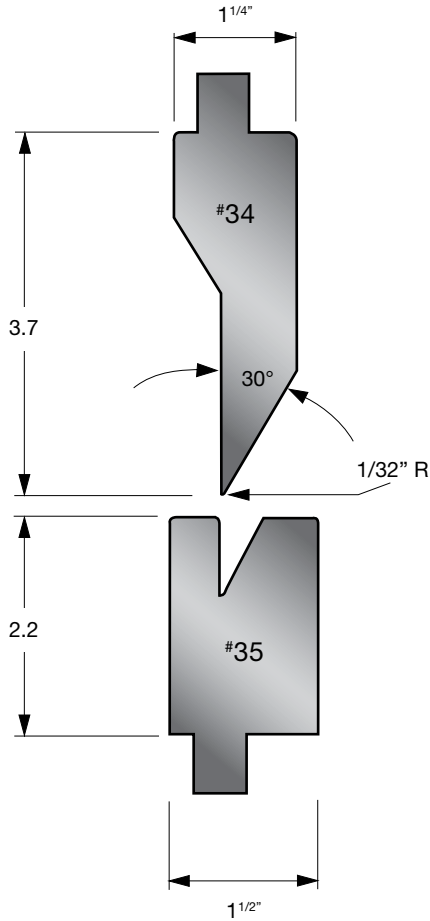


4-WAY DIE ADAPTERS			
Holder	H	OW	DW
4A	2.0	3.5	2.28
4B	2.0	4.0	2.78
4C	2.5	4.5	3.28
4D	2.5	5.0	3.65
4E	2.5	6.5	5.28

Screw holes in 4-way adapters are 3/8" 16 on 12" centres. Specify if tongue required.



HEMMING DIES / RADIUS PUNCHES

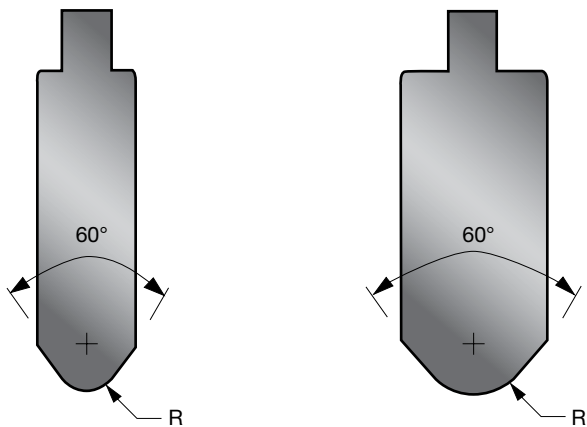
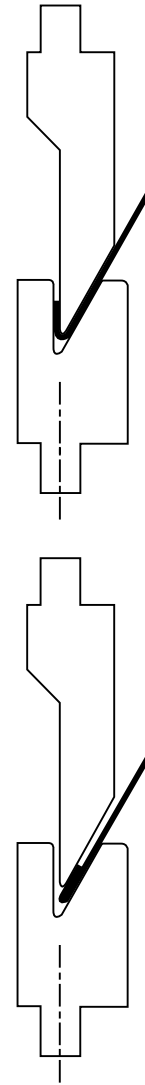


HEMMING DIES

For bending and crimping the edge of a sheet 18 gauge or lighter.

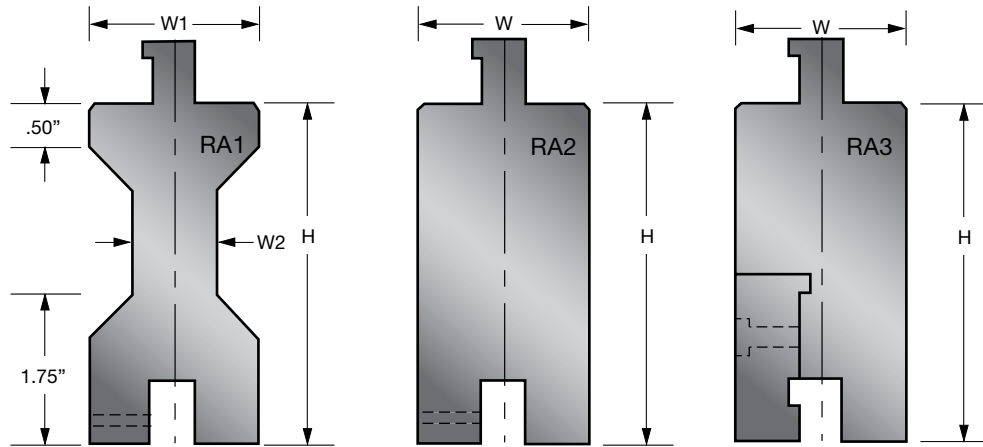
For hemming material heavier than 18 gauge refer to the specials catalog

Two strokes produce a Flattened Hem.



RADIUS PUNCHES

Radius (R) to be specified.



Part #	W1 Width	W2 Width	H Available Height		
			3-5/8"	4-1/8"	5-1/8"
RA1	1-1/2"	.62"	3-5/8"	4-1/8"	5-1/8"
RA1	2"	1"	3-5/8"	4-1/8"	5-1/8"
RA1	2-1/2"	1-1/4"	3-5/8"	4-1/8"	5-1/8"

Part #	W Width		H Available Height		
			3-5/8"	4-1/8"	5-1/8"
RA2	1-1/2"	3-1/8"	3-5/8"	4-1/8"	5-1/8"
RA2	2"	3-1/8"	3-5/8"	4-1/8"	5-1/8"
RA2	2-1/2"	3-1/8"	3-5/8"	4-1/8"	5-1/8"
RA2	3"	3-1/8"	4-1/8"	5-1/8"	5-1/8"

Part #	W Width		H Available Height		
			3-1/8"	4-1/8"	5-1/8"
RA3	2"	3-1/8"	3-5/8"	4-1/8"	5-1/8"
RA3	2-1/2"	3-1/8"	3-5/8"	4-1/8"	5-1/8"
RA3	3"	3-1/8"	3-3/4"	4-1/8"	5-1/8"

NOTE

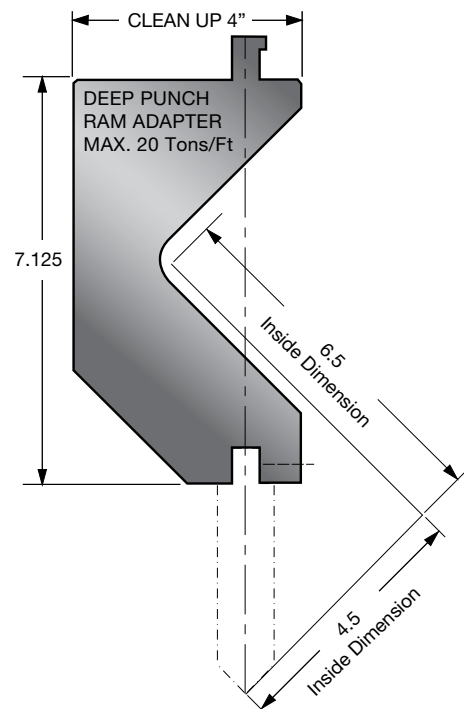
Any Punch Holder with a width of 2" or greater can be made to accept a Hook/Safety Tang.

EXTRA HIGH GOOSENECK PUNCH HOLDER

NOTE

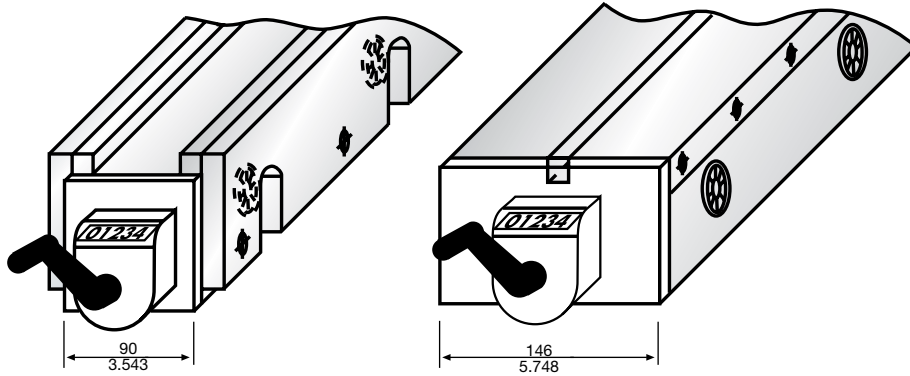
Extra High Gooseneck Punch Holders can be manufactured to accept insert style punches - this allows for a larger inside dimension to be formed.

Almost any size punch or die adapter can be made. Contact our sales desk for price and lead time.

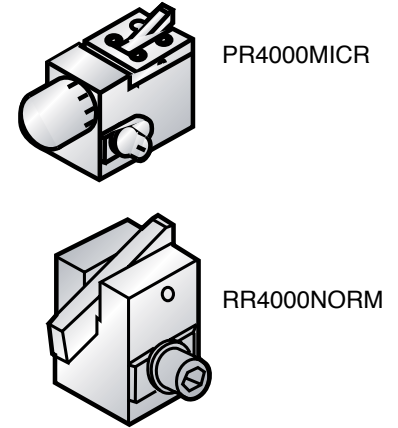


DEFLECTION COMPENSATING SYSTEMS

STANDARD DEFLECTION COMPENSATING TABLE WITH MANUAL DRIVE



FRONT GAUGE WITH 4 TILTING STOPS

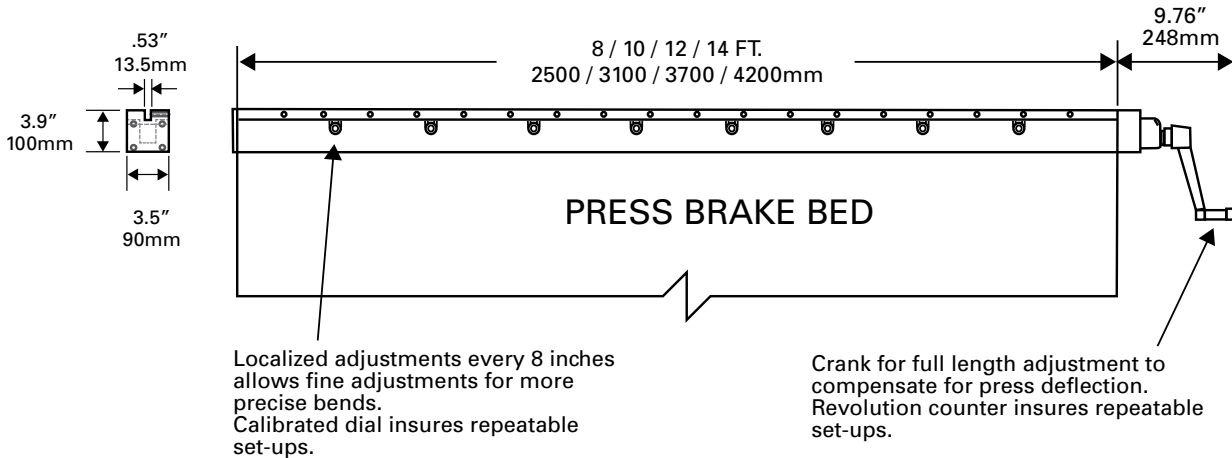


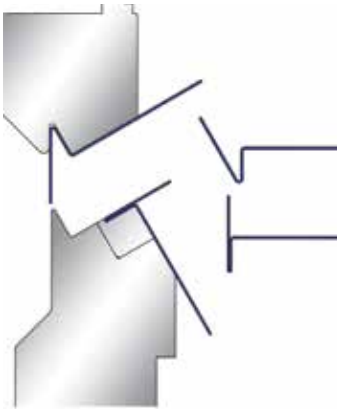
Eliminate shimming press brake tooling by using the manual deflection compensating die holder. A common problem with press brake forming is the upper ram deflecting away from the lower bed while under load, resulting in the bend being open in the middle.

MATERIAL NO.	
8 foot	980780
10 foot	980600
12 foot	980601
14 foot	980602

Custom sizes available as Make-To-Order.

SPRING LOADED CLAMPING PLATE





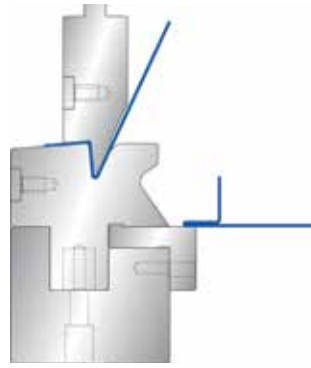
AH1

This set is typically used to form seams in excess of 1/2 inch.



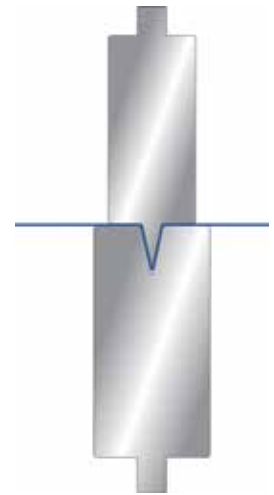
HDH1

Heavy duty hemming for thick gauge applications.



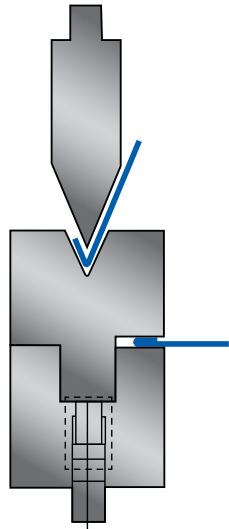
SSH1

This set is used to form a standing seam in 2 strokes. The first stroke forms an acute angle offset, the second stroke closes the seam.



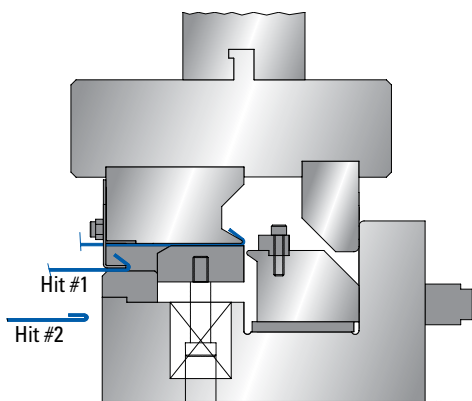
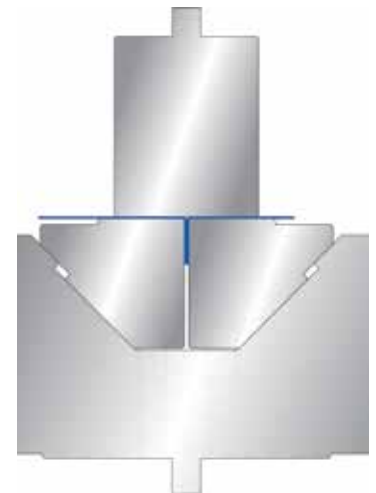
SH1

Standing seam closing die.



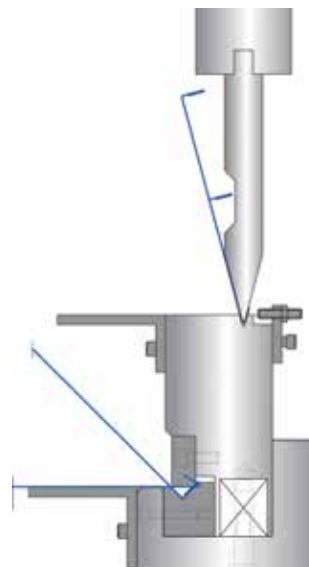
3TD

Max. material = 16g crs



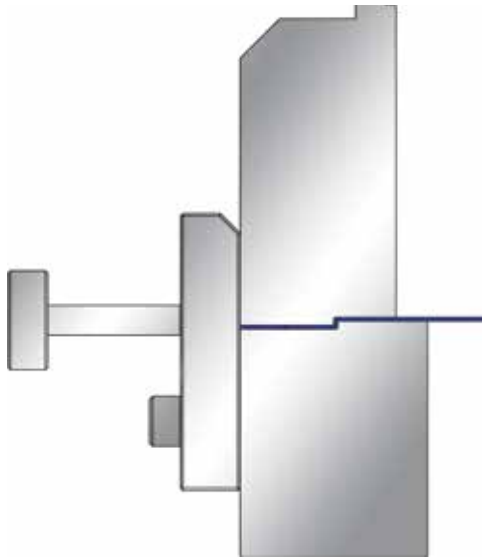
GH1

Fold Flatten Horizontal



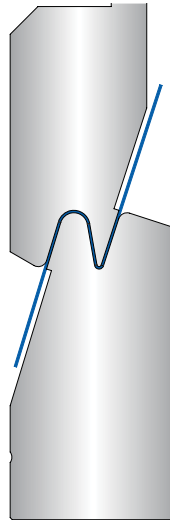
SSH2

Fold Flatten 90° Bend



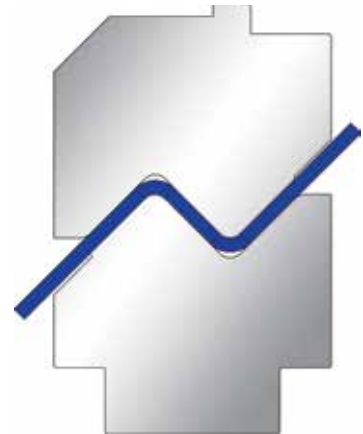
SSH2

This set is used when forming offsets that are approximately one material thickness. Prevents material whip up. Thrust plates and adjustable back gauging are provided.



A01

This set is used for offset forms when odd or uneven angles are required.



L01

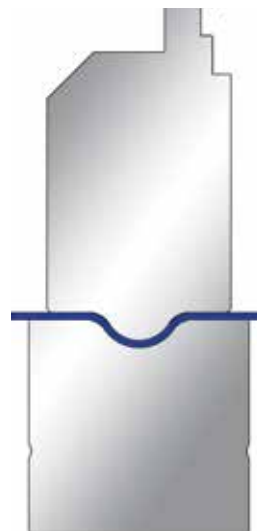
This set is used for heavy gauge, large offset bending.

V-RIB / STRENGTHENING RIB



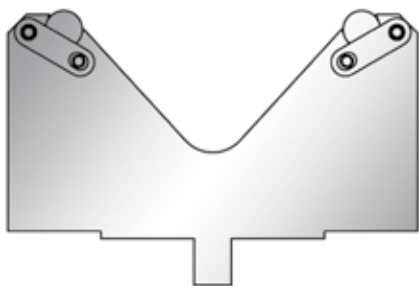
VR1

These sets produce a v-rib in one stroke. Spring back allowance is built in.



SR1

These sets produce a strengthening rib in one stroke. Spring back allowance is built in. Closed end and open end ribs are available.

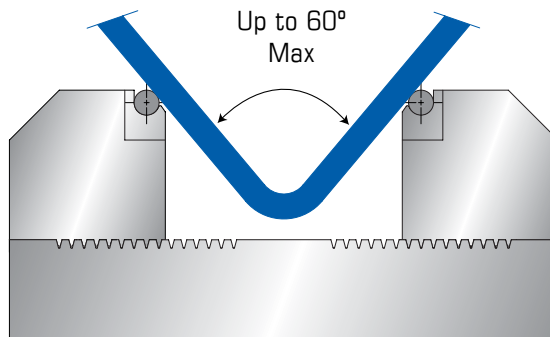


ROLLING SHOULDER DIE

Ideal for extreme wear conditions created when forming heavy plate and abrasive materials.

Replaceable inserts eliminate the need for replacing the entire die when the die shoulders wear.

Available in multiple V sizes and 75° and 85° configurations



ADJUSTABLE V DIE

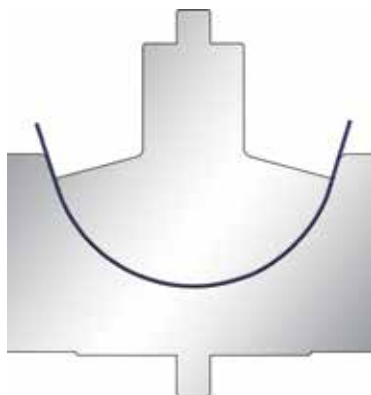
Ideal for extreme wear conditions created when forming heavy plate and abrasive materials.

Replaceable inserts eliminate the need for replacing the entire die when the die shoulders wear.

Available in multiple V sizes and 75° and 85° configurations

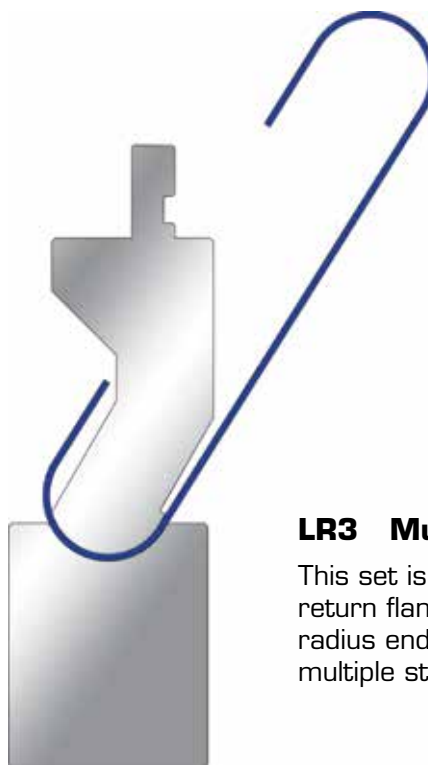
V opening quickly adjusts in 1" increments

For more detail see the Thick Material Solutions Flyer on our website.



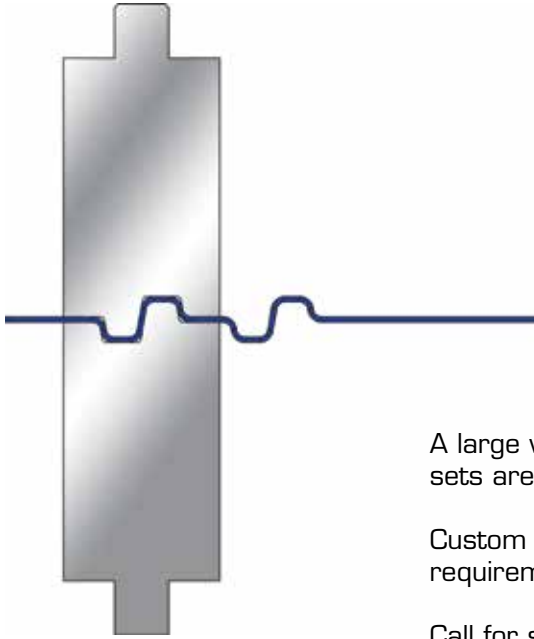
LR1

This is a bottoming radius set with spring-back allowance built in. It is manufactured to form a radius in a specific type and thickness of material for tight tolerance requirements.



LR3 Multi Hit Rad

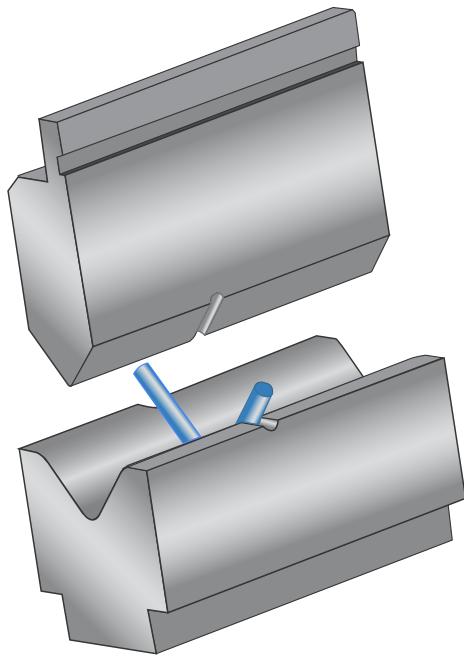
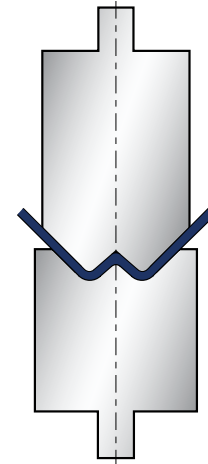
This set is used when the return flange starts at the radius end. May require multiple strokes.



A large variety of custom forming sets are available.

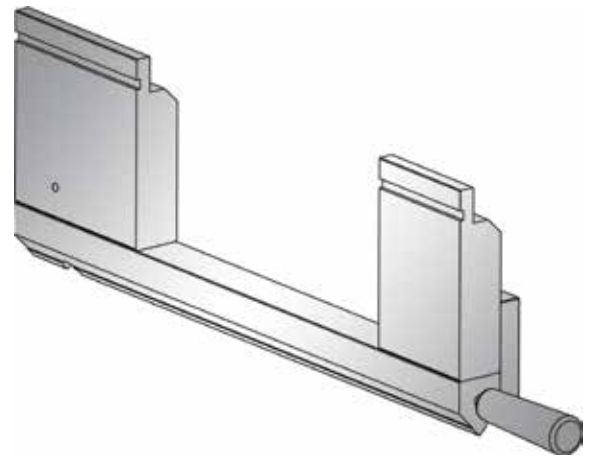
Custom built to suit any specific requirement.

Call for specific application requirements.



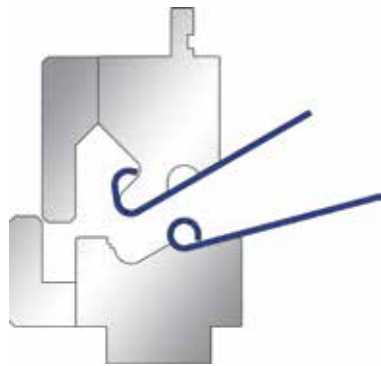
RB1

These sets provide nesting for the rod during the forming process.



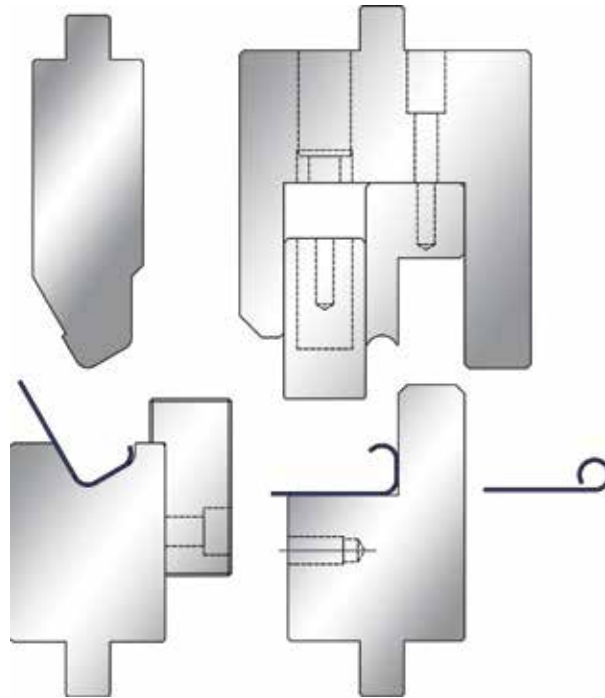
W1

This set is used when minimum return flange clearance is required.



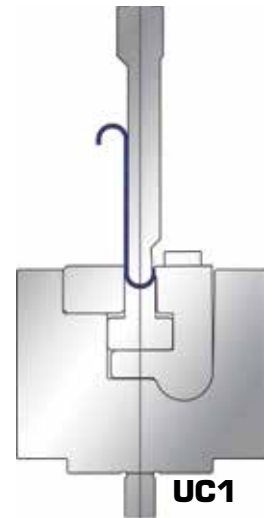
**CL2
CURL TOOL SET**

One tool set used to create curls in 3 strokes

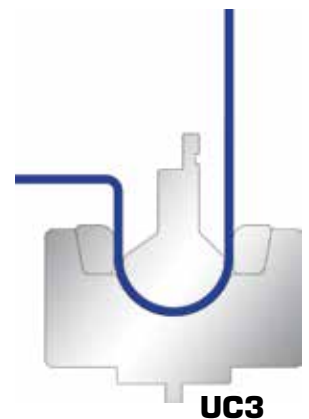


CL3

These sets are used for hinges and corner beading.



UC1



UC3

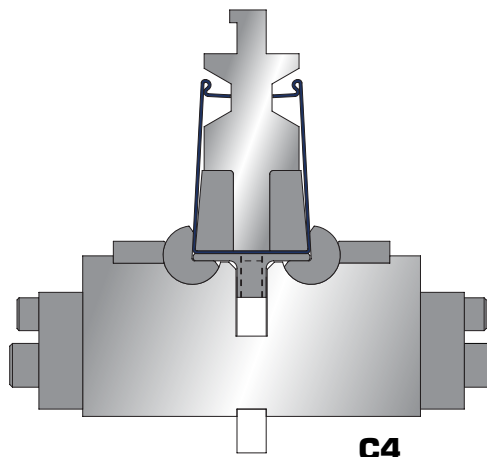
These sets are required for deep channels when the channel bottom needs to remain flat.



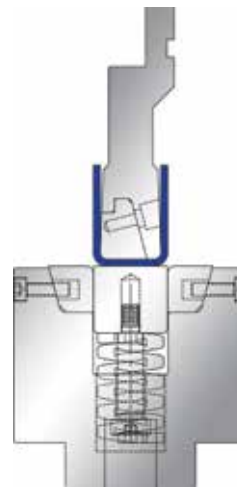
HT1

These sets provide straight wall or angled wall hat channel bending in one stroke.

Spring back allowance is built in.



C4

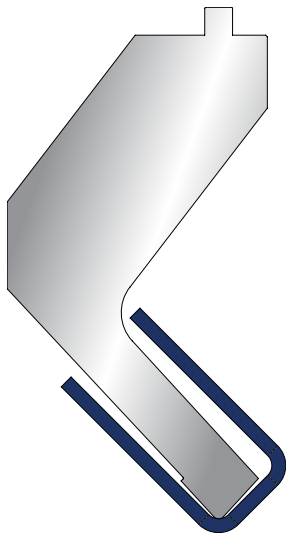


C2

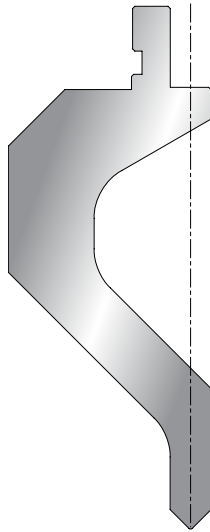
These sets are recommended for applications where considerable spring back is encountered.

Secondary flattening operations may be required.

SPECIAL SHAPE PUNCHES / HOLDER



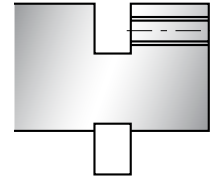
PR2



PR3



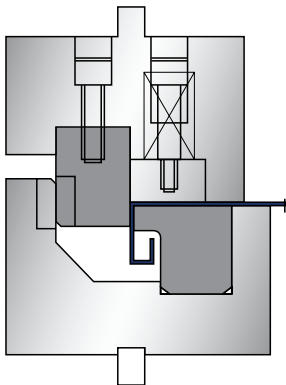
Punch Holder



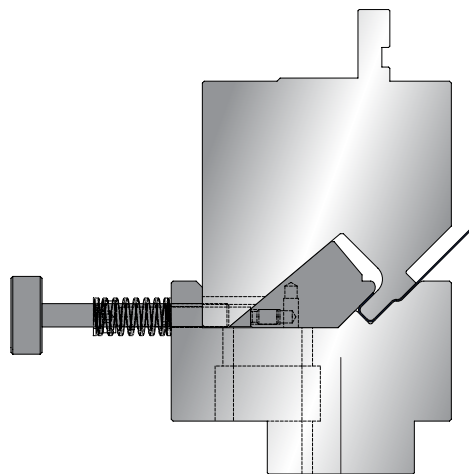
Die Holder

Available in all mounting tang styles.

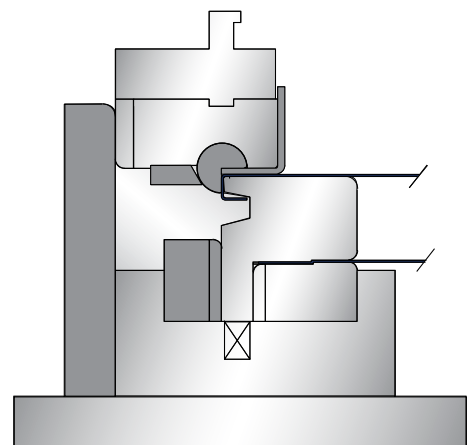
WIPING AND ROTARY BENDING



WD1



WO1



RB1



Wilson American Precision style tooling incorporates a one-of-a-kind design that's faster loading and more versatile than any other American style press brake tooling available today.

Longer tool life, less scrap and quick set-ups make **Wilson Tool European Style** Press Brake Tooling a great choice for fabricators worldwide.

With **WT Style Precision™** press brake tooling, Wilson Tool has developed extremely durable tooling that significantly improves your press brake productivity with faster tool changes.

Thick Material Solutions

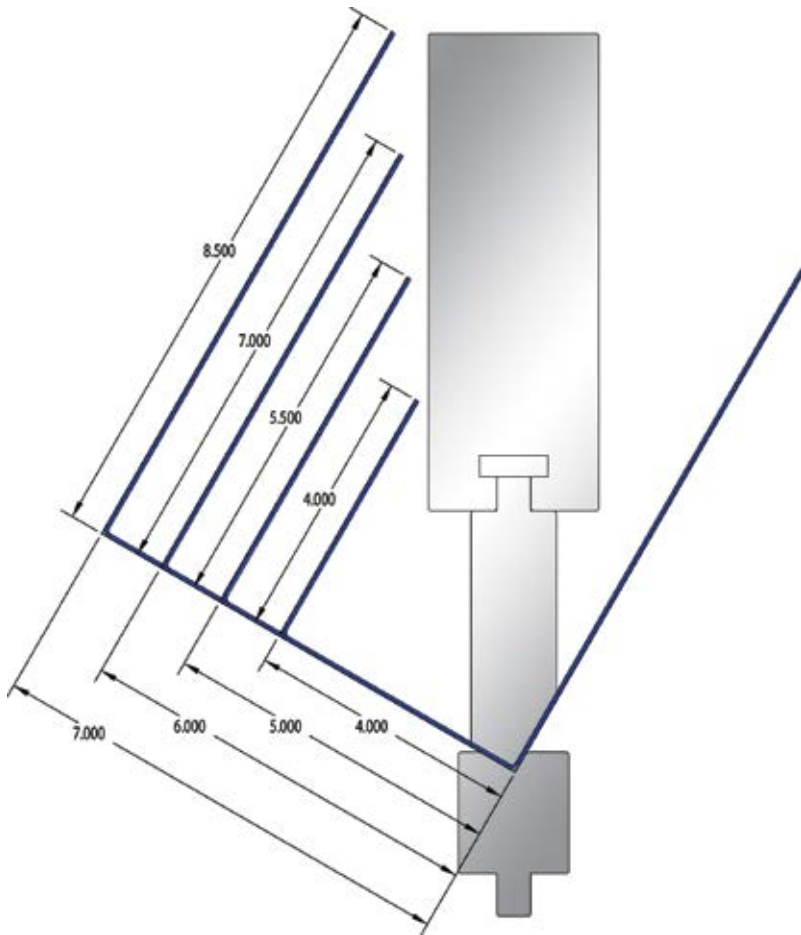
From conventional press brake tooling to Ironworker punches, Wilson Tool has solutions to address the most demanding applications.



PRESS BRAKE SPECIALS

No matter how unique your tooling needs, Wilson Tool can design and manufacture press brake tooling to your specifications. If you have a challenging bending and forming application, our industry-leading experts will work with you to create the ideal tooling solution.

REFERENCE CHARTS



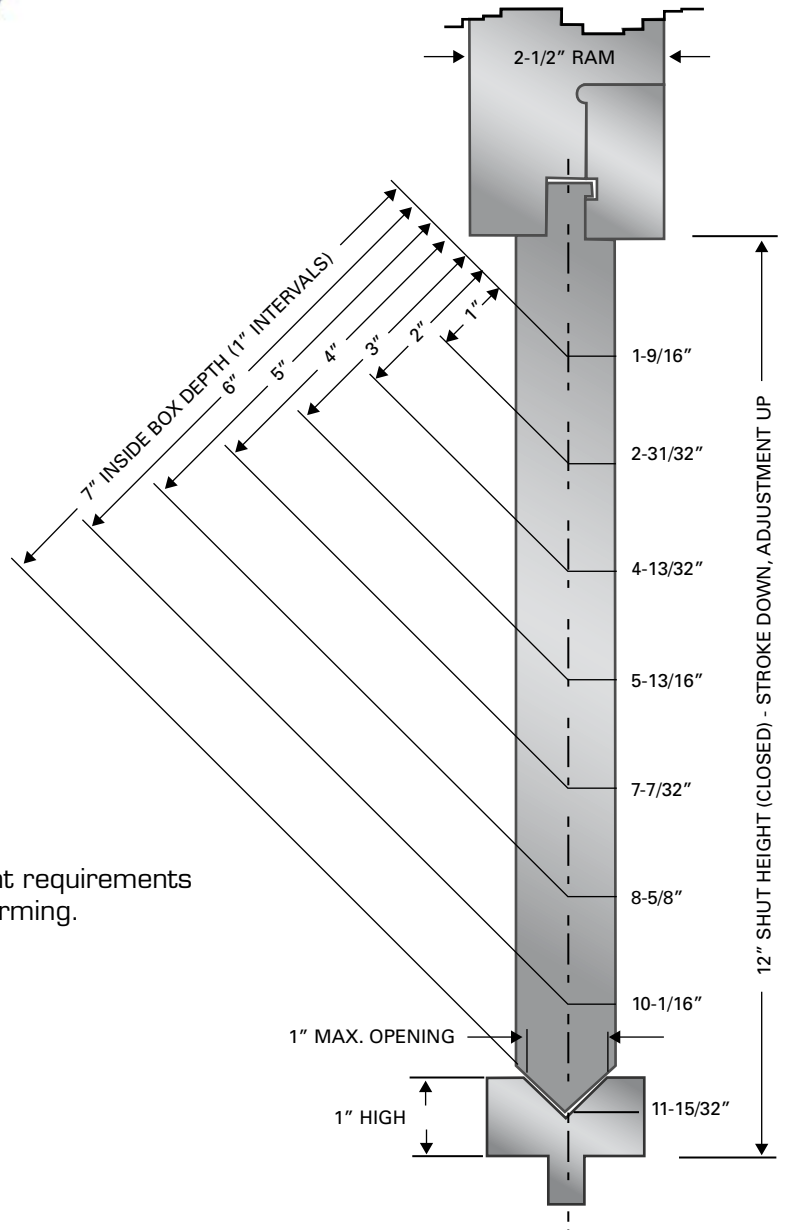
30/60

When forming a four-sided box, the punch must be sufficient height to prevent the pre-formed side from striking the upper beam.

Recommended for up to 16g.

BOX FORMING

Punch and die showing height requirements for different depths of box forming.
















MULTIPLE BEND ALLOWANCES / TONNAGE ESTIMATES

FORMULA FOR MAKING MULTIPLE BENDS ON A PRESS BRAKE

For shape as show, in mild steel with radii equal the metal thickness unless otherwise noted.

Multiply metal thickness by Factor = Tons Per Ft.

SHAPE	DESCRIPTION	AIRFORM	BOTTOMING
	VEE DIE	60	150
	WIPING	---	250
	OFFSET	150	300/600
	MT'L THK OFFSET	300	600
	CHANNEL	225	300
	VEE RIB	200	600
	W DIE	300	600
	OPEN HAT CHANNEL	300	450
	SQ HAT CHANNEL	---	600
	PREFORM CURL	---	300
	PREFORM CURL	---	200
	CLOSE CURL	---	300
	RADIUS	---	180/300
Shape Considerations		Large Radii Angle Variation Concave or Convex Sides	Mat'l Thk. Radii Min. Angle Variation Maintain Flatness

Stainless Steel	(18-8 Annealed) Type 304	1.55
Aluminum	3303-H14 (1/2Hard)35
	5052-H34 (1/2 Hard)65
	6061-T6475
Brass	70/30 (1/2 Hard)	1.10

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