

PRESS BRAKE SPECIALS



SOLUTIONS FOR PRESS BRAKE TOOLING

CUSTOM PRESS BRAKE TOOLING FOR YOUR MOST CHALLENGING APPLICATIONS.

No matter how unique your tooling needs, Wilson Tool has the ingenuity and the experience to design and manufacture press brake special tooling that will improve your bending performance.

INNOVATIVE ENGINEERING

Over the years we've helped customers solve their most challenging bending and forming applications with innovative tooling solutions for the press brake that simplify complex bends and improve productivity. This catalog is a small sampling of some of the unique solutions we've created for customers like you.

CHALLENGE US.

If you don't see a suitable special tooling on these pages, don't worry. We are up for the challenge. Bring us your parts, prints, designs, CAD files, napkin drawings – whatever you have – and our industry-leading experts will work with you to create the ideal tooling solution.

QUALITY MATERIALS. QUALITY CONTROL.

Our special tooling is produced from high quality proprietary grade tool steels that feature custom elements designed to enhance tool life and performance. We thoroughly inspect each special tool we produce and include a metal sample that was produced during this testing process. When testing is complete, data and specifications for each special tool is stored in our computer system for safe, confidential storage and easy retrieval.

QUICK QUOTES. SHORT LEAD TIMES.

Wilson Tool is committed to providing better solutions, faster. We'll respond to your special tooling request with a quote in 24 hours. We offer the fastest lead times on special tooling in the industry.

PRECISION GROUND TO REDUCE WASTE.

Wilson press brake tooling is precision ground to a tolerance of +/- .0008" (.02mm) on all critical dimensions for increased reliability. Common centerlines on all punches eliminate costly time spent locating the back gauge origin position and subsequent scrap.

CONNECT WITH US



U.S.A.	Tel: 800.445.4518	Fax: 800.539.4590	pressbrake@wilsontool.com
Canada	Tel: 800.268.4180	Fax: 905.840.1032	bending@wilsontoolcanada.com
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NITREX™ EXTENDS TOOL LIFE.

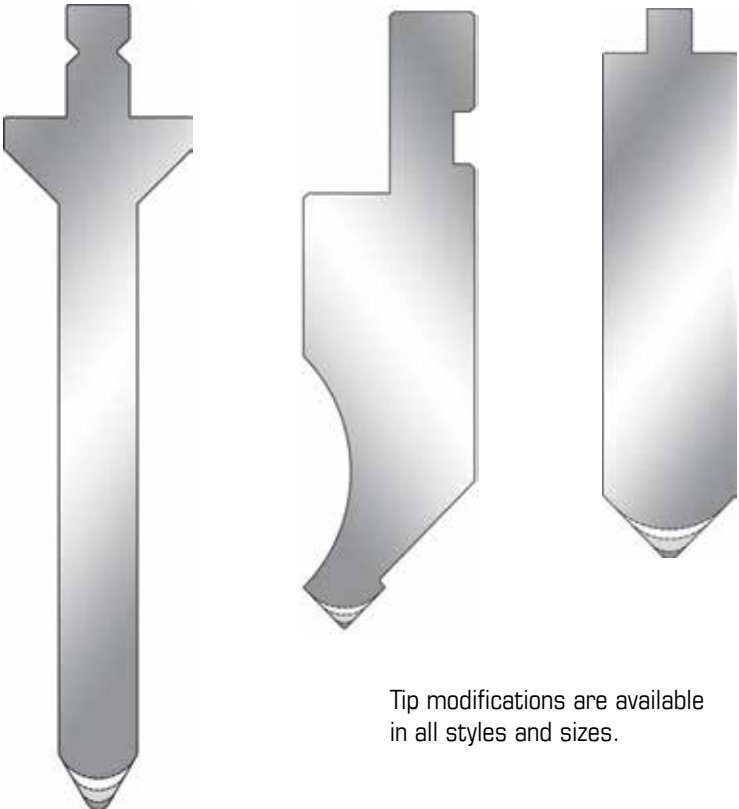
Wilson Tool's exclusive Nitrex high endurance surface enhancement increases press brake tooling life by several times that of ordinary tooling. Wilson's patented process provides a surface hardness of HRC-70, increasing long-term durability and minimizing galling in even the toughest bending applications.

Nitrex also adds lubricity to press brake tooling that lowers friction, effectively minimizing galling. Unlike ordinary press brake tooling Nitrex treated tools experience zero corrosion, resulting in faster cleanups and longer lasting tooling.

LASER HARDENING OPTIONAL.

Wilson Tool now offers optional laser hardening to further improve heat and wear resistance of press brake tooling. Laser hardening is ideal for high wear applications.

TIP MODIFICATIONS



Tip modifications are available in all styles and sizes.

SPECIALS CHECKLIST

COMPANY _____
CONTACT _____
PHONE _____ SALES ENGINEER _____
QUOTE # _____ SALES DESK CONTACT _____

MACHINE SPECIFICATIONS

Brake Make/Model _____
Open Height _____
Tonnage _____

TOOLING AND APPLICATION

Tooling Type American European WT Other _____
Length of Bend _____
Material Type _____ Thickness _____

Is customer currently performing this bend? Yes No

If yes, **W.T. Repeat** **Replicate Customer Tool** **Redesign**
Explain _____

TOLERANCE BLOCK

Part Radii Tolerance _____
Tolerances tighter than +/- 5% may affect price / lead time

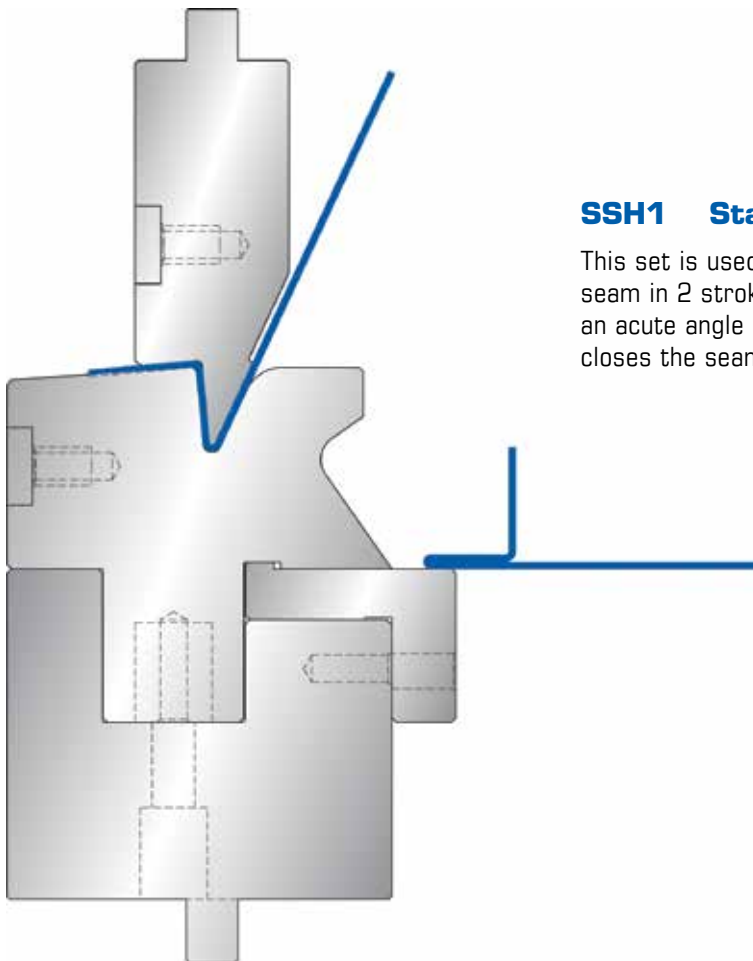
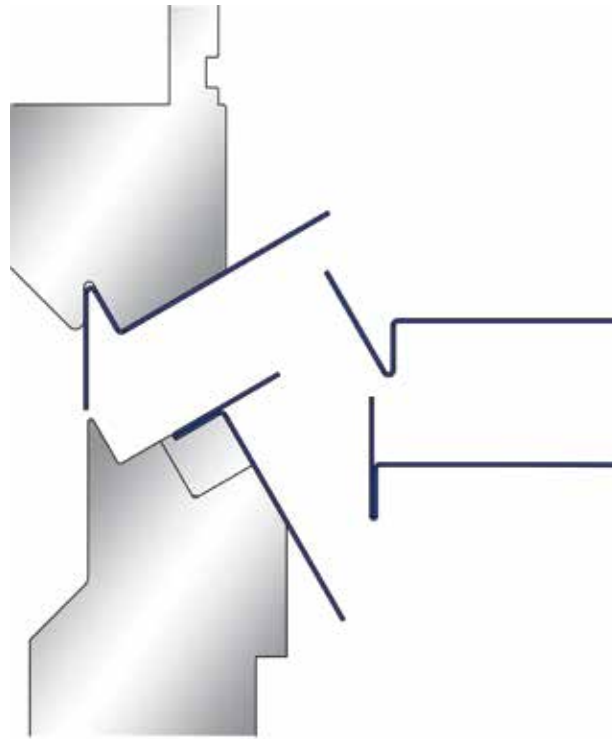
Part Bend Angle Tolerance _____
Tolerances tighter than +/- 2% may affect price / lead time

Estimated Annual Usage _____



AH1 Angle Hem

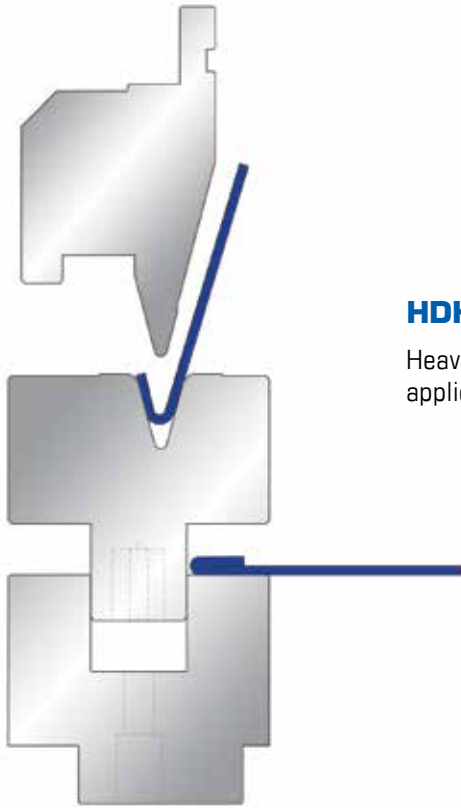
This set is typically used to form seams in excess of 1/2 inch.



SSH1 Standing Seam Hem

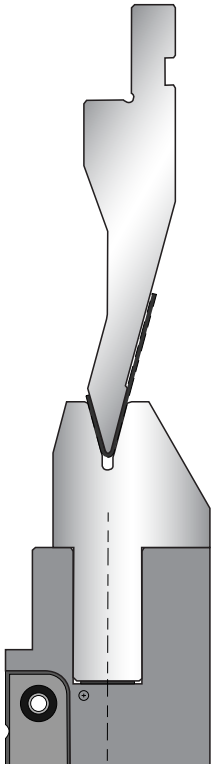
This set is used to form a standing seam in 2 strokes. The first stroke forms an acute angle offset, the second stroke closes the seam.





HDH1 Heavy Duty Hem

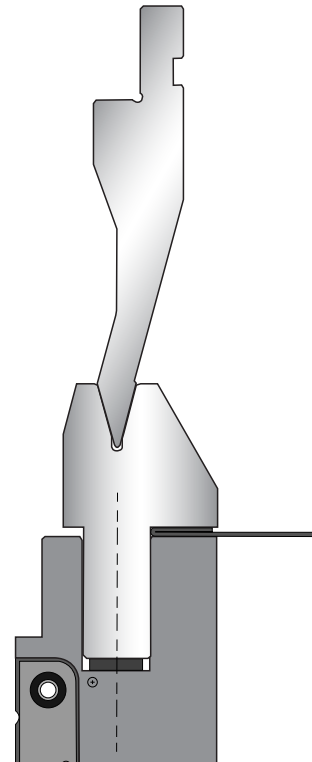
Heavy Duty Hemming for thick gauge applications.



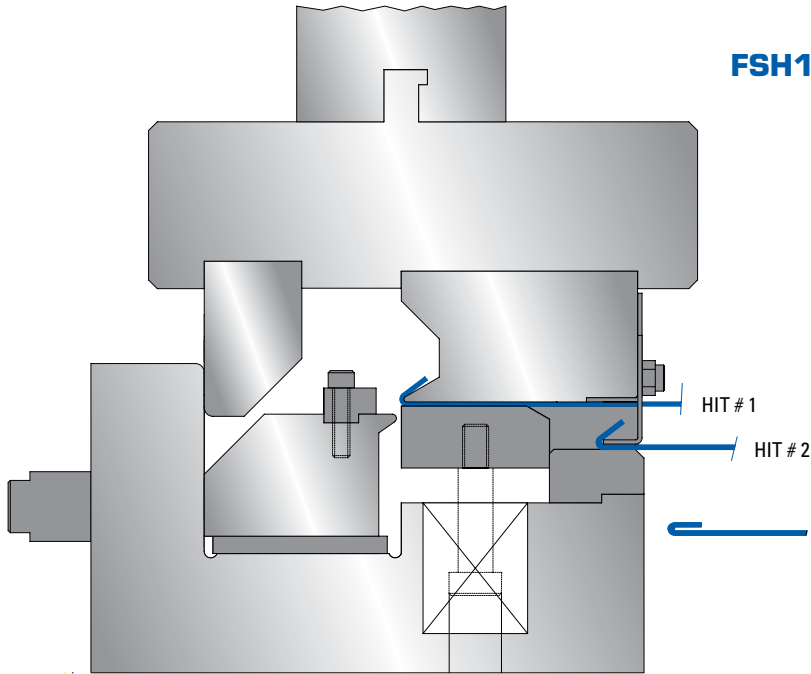
PH1 Pneumatic Hem

This tool set introduces pneumatic cylinders to rapidly open and close the pre-form insert.

This set removes the inconsistency associated with pre-forming or acute bending on a spring actuated insert.



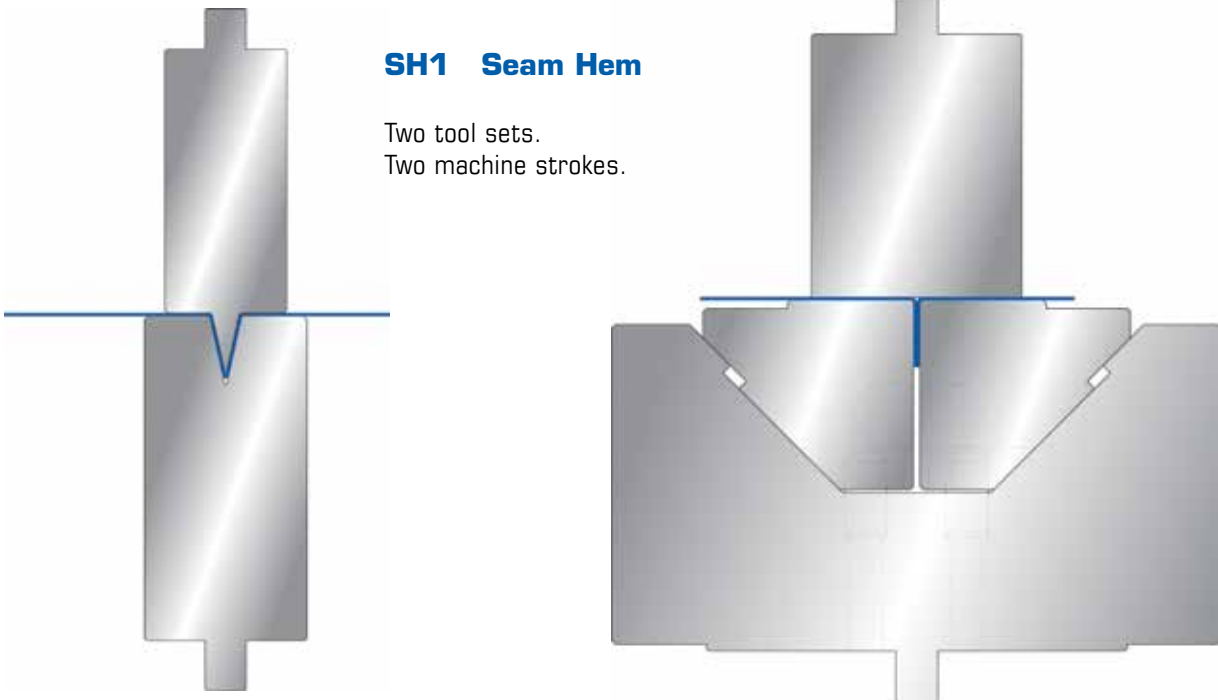
FSH1 Flat Sheet Hem



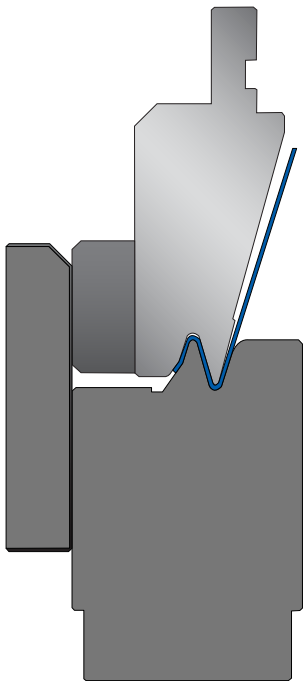
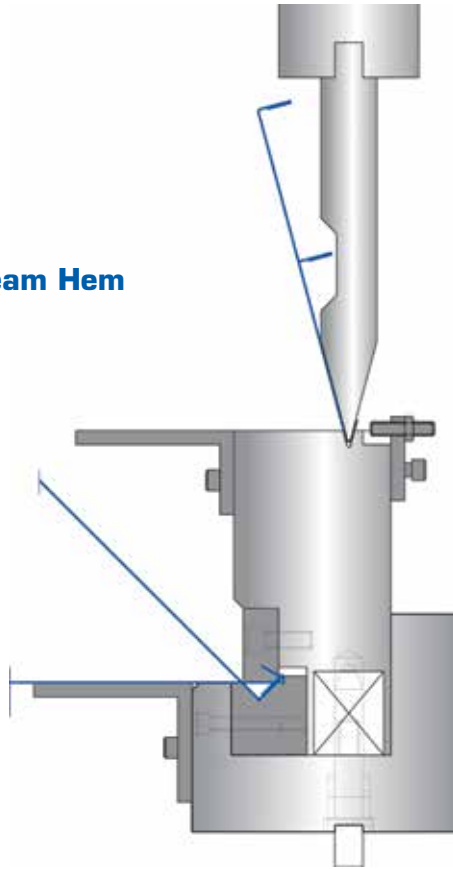
CUSTOM HEMMING

SH1 Seam Hem

Two tool sets.
Two machine strokes.



SSH2 Standing Seam Hem

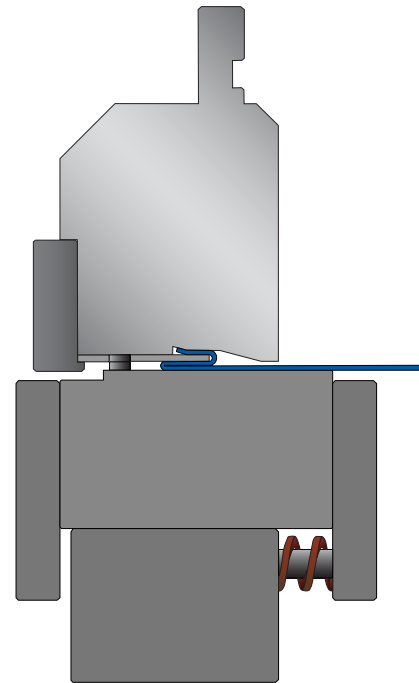


ZH1 Z Hem

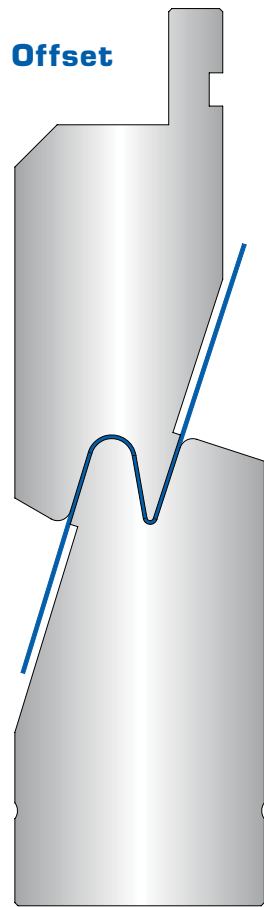
This tool creates a Z-Hem or Clip Hem.

Shim can be built in to maintain gap in hem.

Two tool sets.
Two machine strokes.



A01 Angled Offset

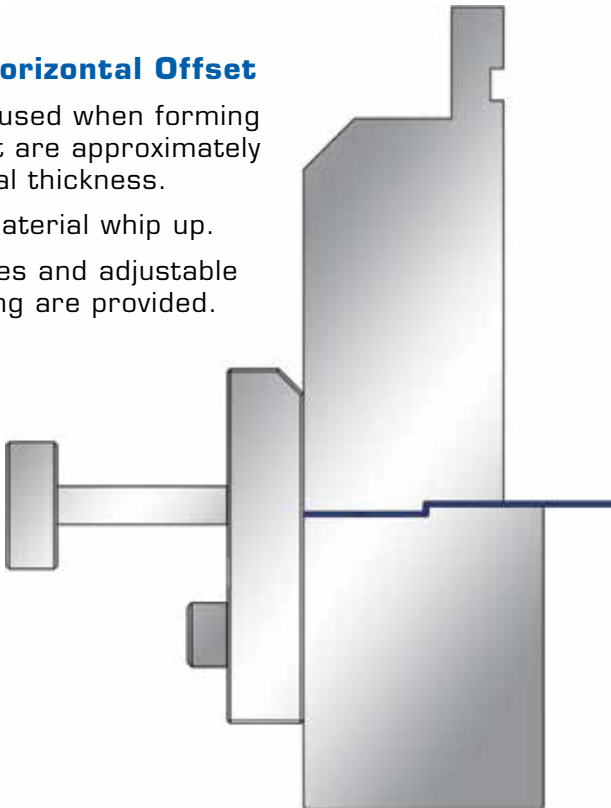


H01 Horizontal Offset

This set is used when forming offsets that are approximately one material thickness.

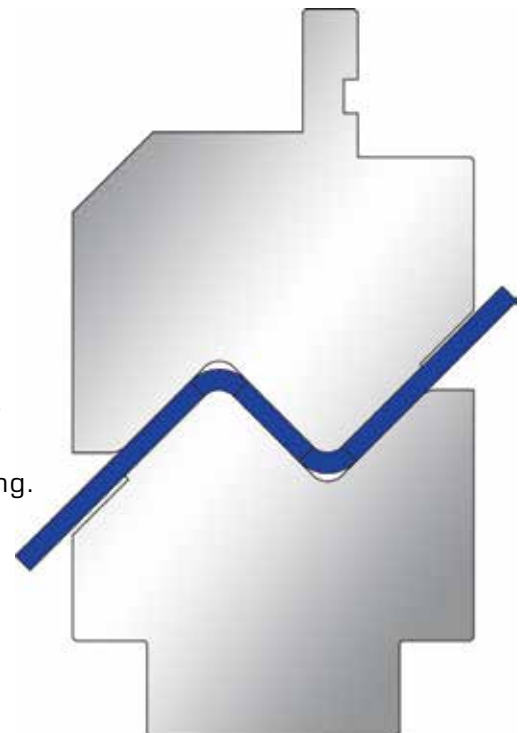
Prevents material whip up.

Thrust plates and adjustable back gauging are provided.



L01 Large Offset

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

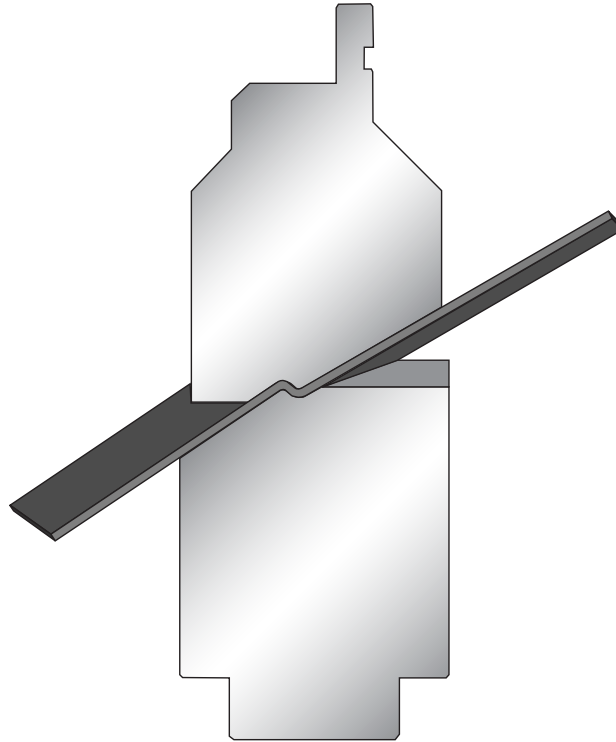


OFFSET

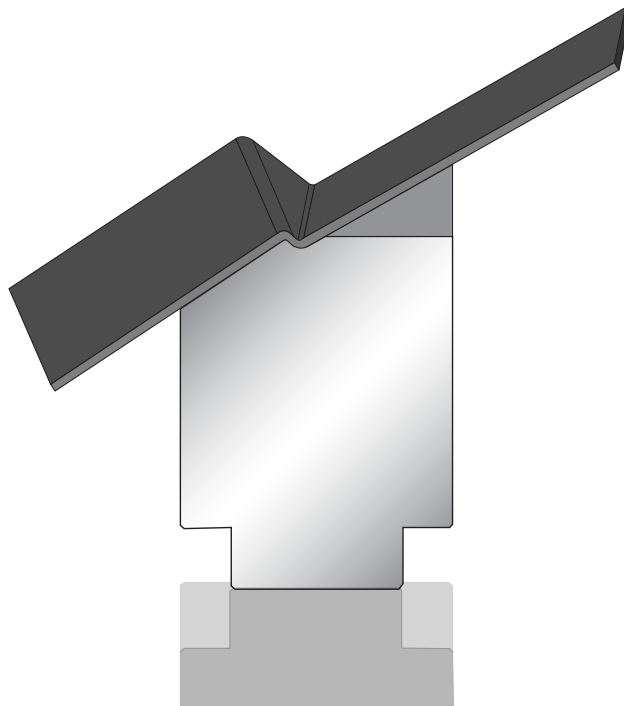


NPO1 Non Parallel

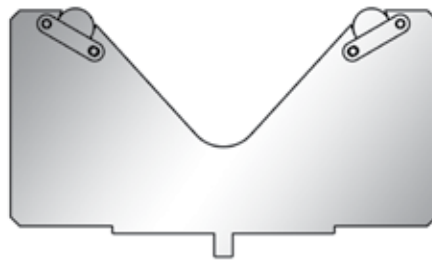
These tools are for offsets that have nonparallel flanges.



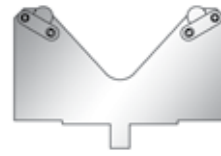
Punch has been hidden in this view to see the formed sheet better.



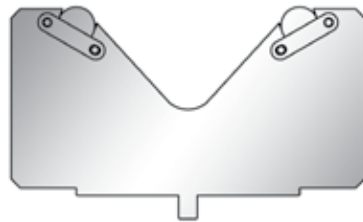
ROLLING SHOULDER DIE



8" V



4" V



6" V



2" V

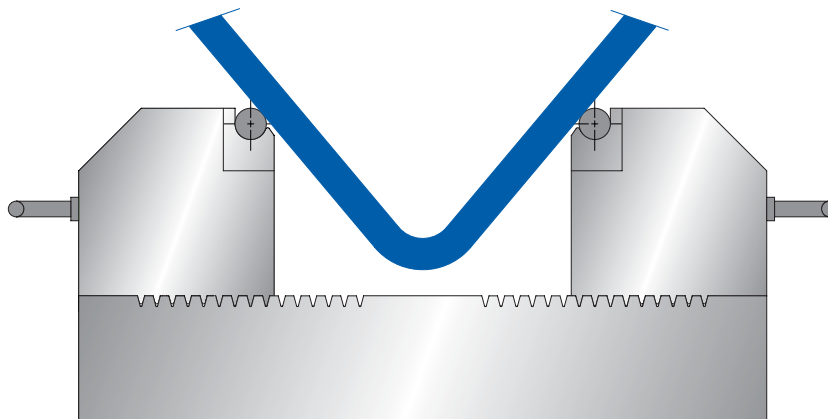
DIES

Insertable shoulder dies are ideal for extreme wear conditions created then forming heavy plate and abrasive materials.

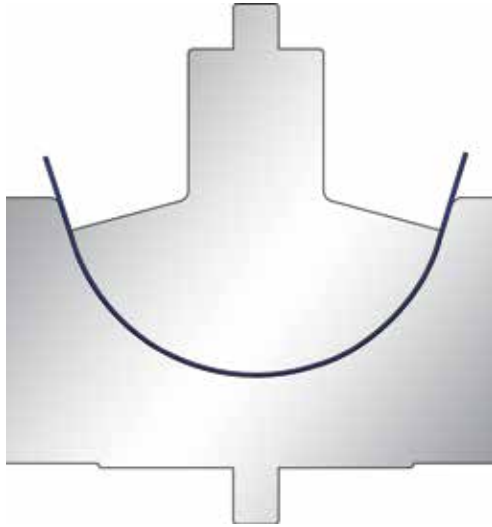
Replaceable inserts eliminate the need for replacing the entire die when the die shoulders wear.

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

ADJUSTABLE DIE

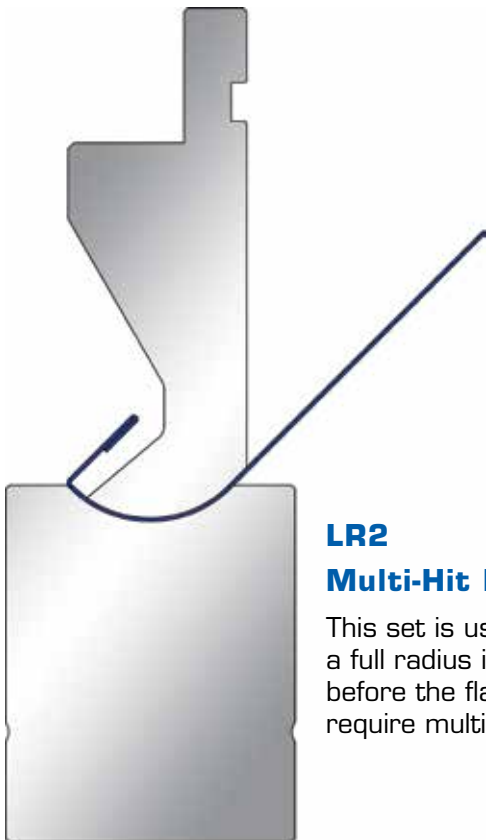


1" - 24"
opening available



LR1 Large Radius

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.



LR2 Multi-Hit Radius

This set is used when a full radius is required before the flange. May require multiple strokes.



LR3 Multi-Hit Radius

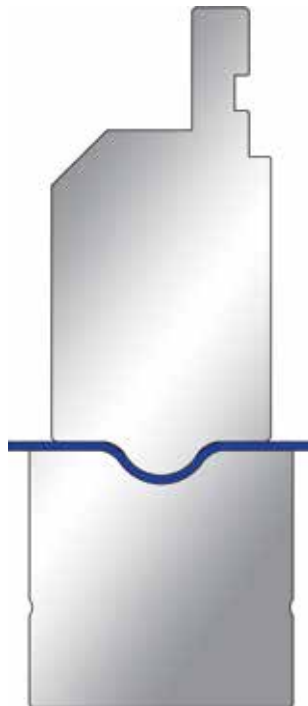
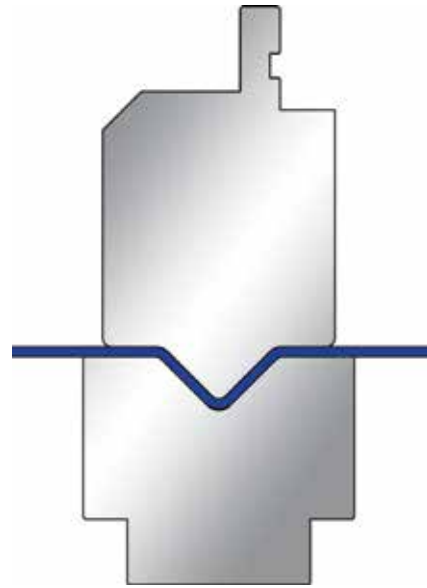
This set is used when the return flange starts at the radius end. May require multiple strokes.



VR1

V Rib

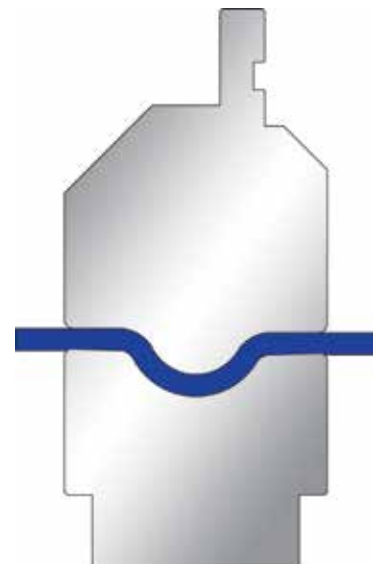
These sets produce a v-rib in one stroke. Spring back allowance is built in.

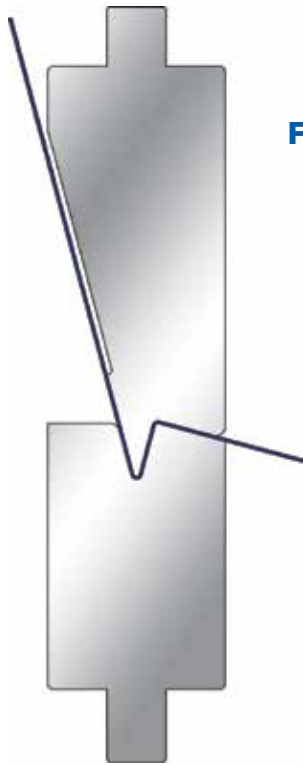


SR1

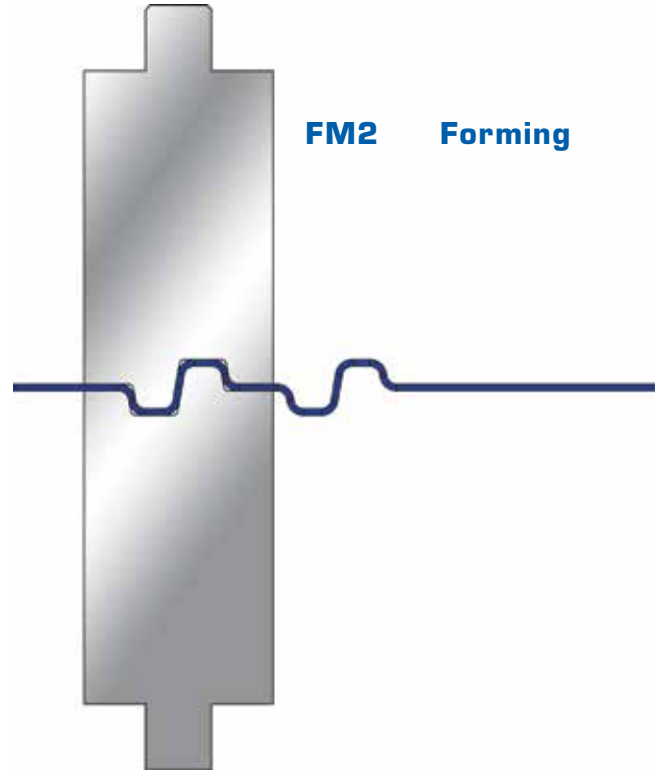
Strengthening Rib

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



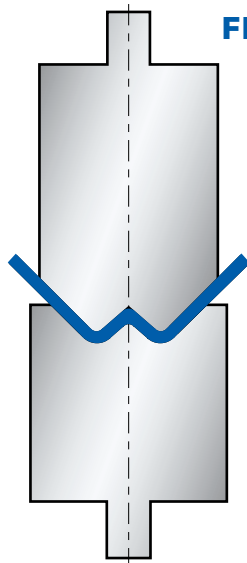


FM1 Forming

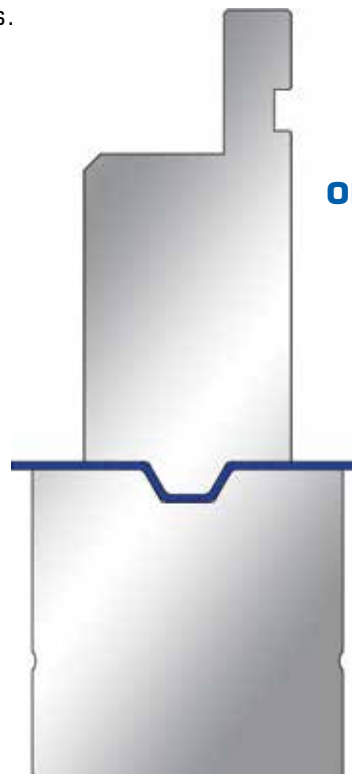


FM2 Forming

A large variety of custom forming sets are available. Custom built to suit any specific requirement. Call for specific application requirements.

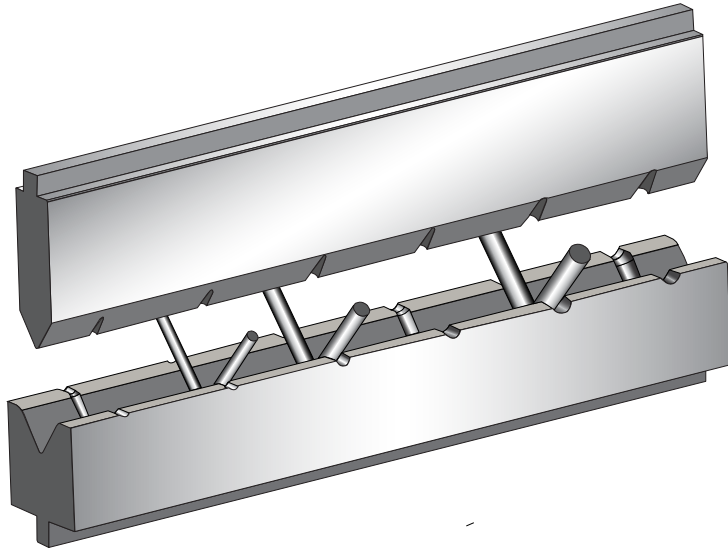


FM3 Forming



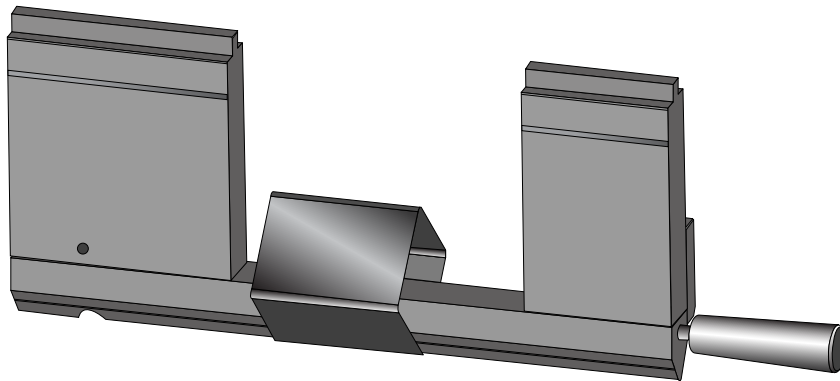
OH1 Open Hat





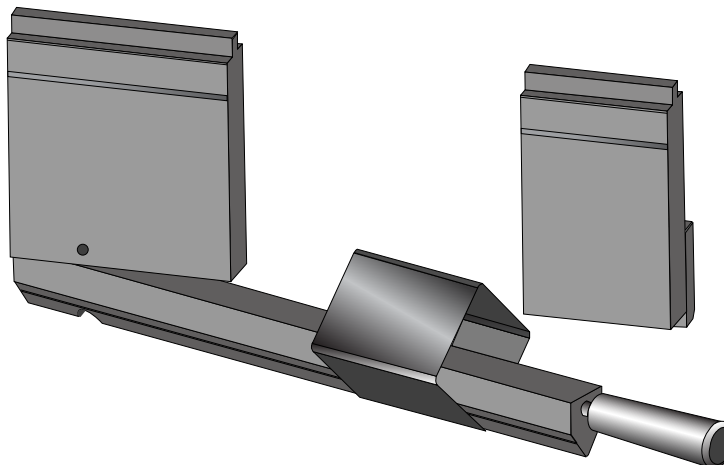
RB1 Rod Bending

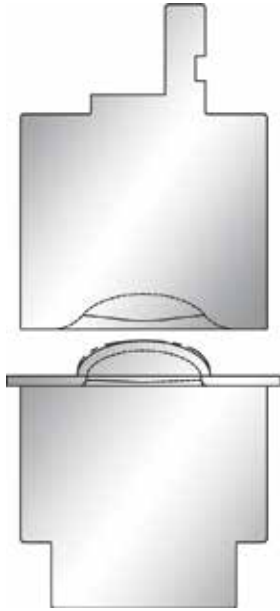
These sets provide nesting for the rod during the forming process.



W1 Window

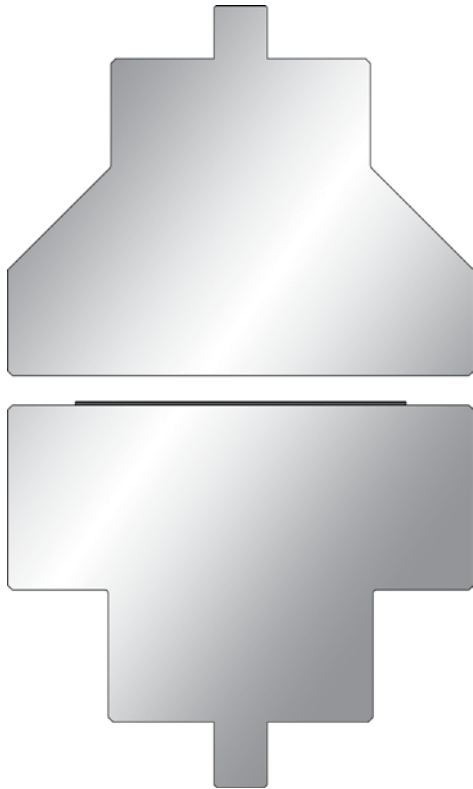
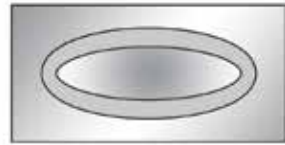
This set is used when minimum return flange clearance is required.





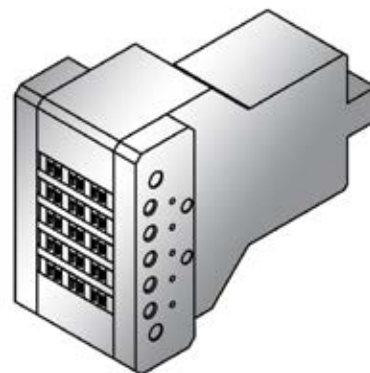
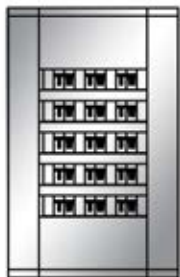
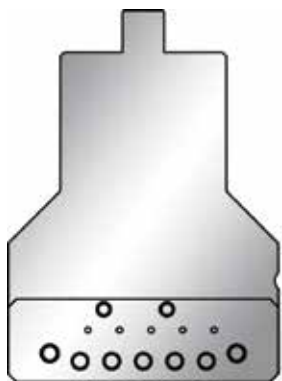
EM1 Emboss

A variety of raised emboss and chisel point emboss sets are available.



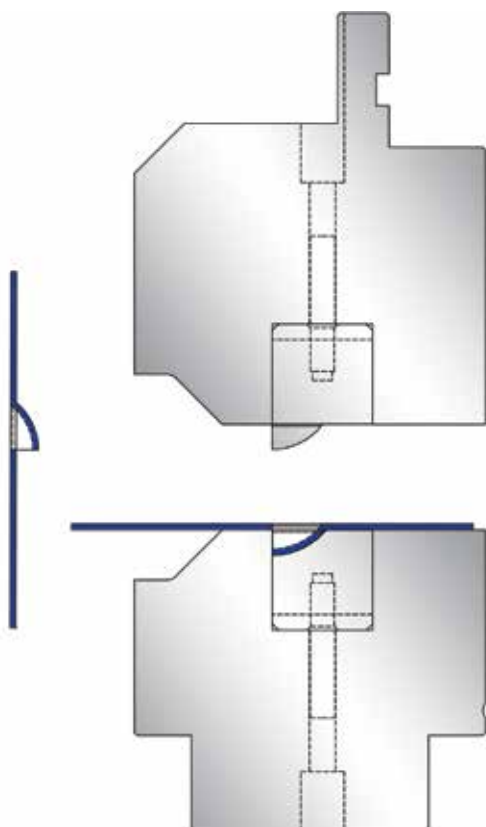
LG1 Logo





LS1 Letterstamp

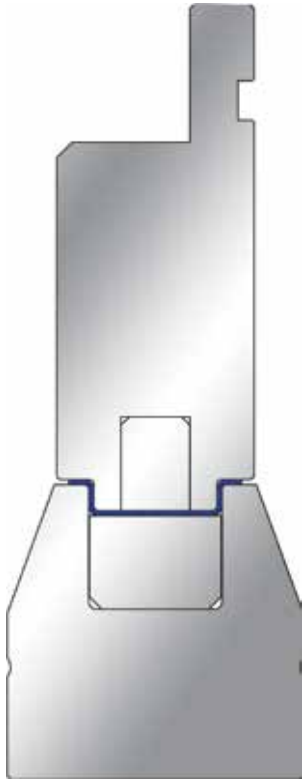
This set provides chisel point embossing with interchangeable characters. Single row or multi row available.



LL1 Louver

Multiple louver configurations are available. For louver forming, sheet perforation is required.

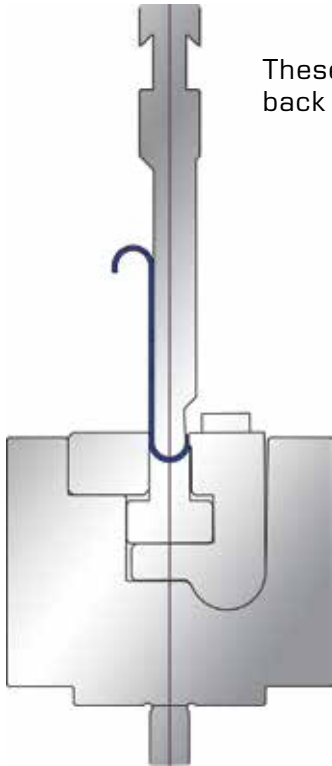




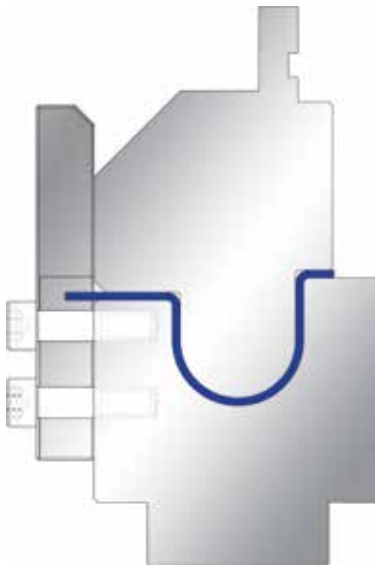
HT1 Hat Channel

These sets provide straight wall or angled wall hat channel bending in one stroke.
Spring back allowance is built in.

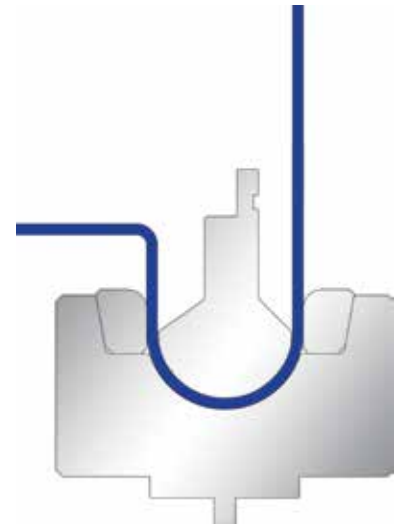
These sets are recommended for applications where considerable spring back is encountered. Secondary flattening operations may be required.



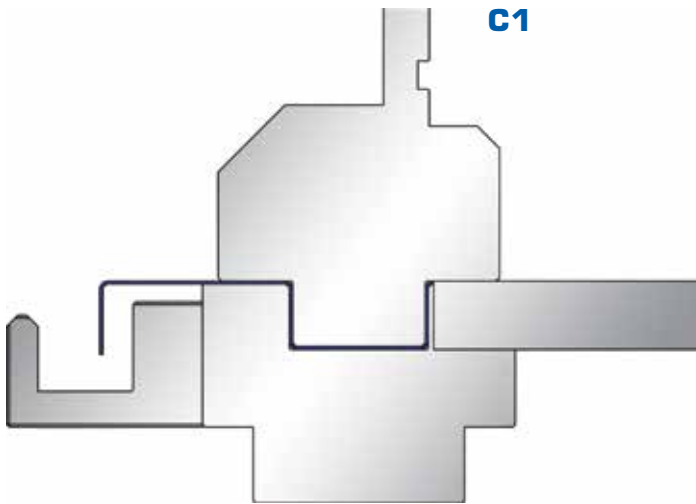
UC1 U Channel



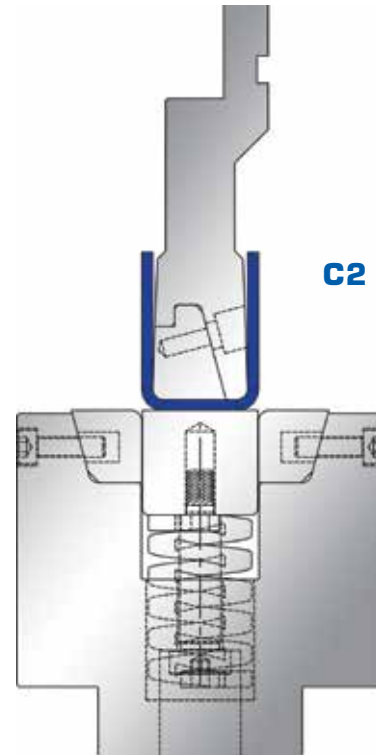
UC2 U Channel



UC3 U Channel

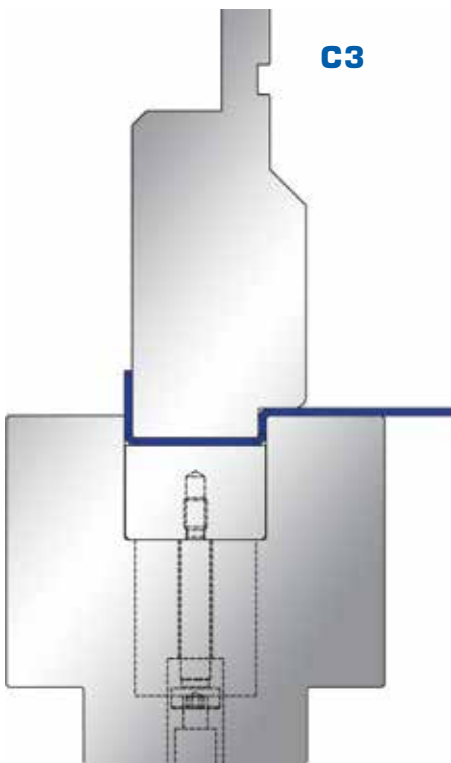


C1

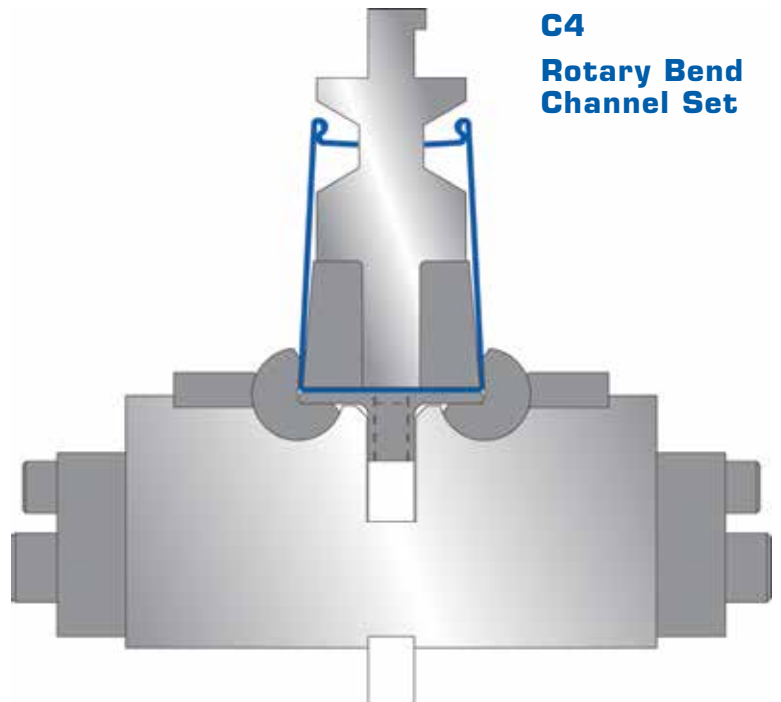


C2

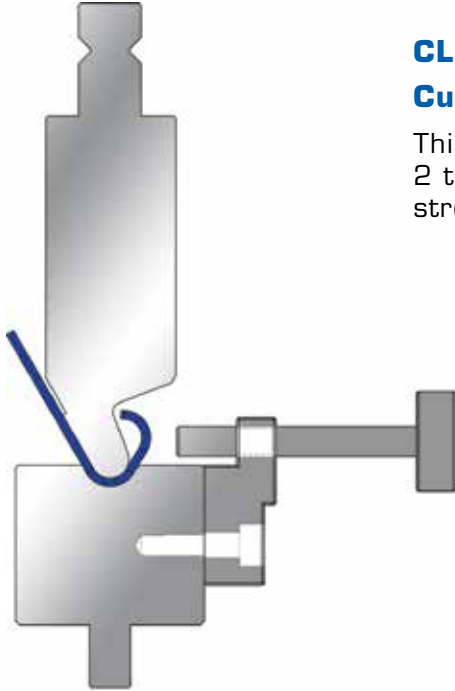
These sets are required for deep channels when the channel bottom needs to remain flat.



C3



C4
Rotary Bend
Channel Set



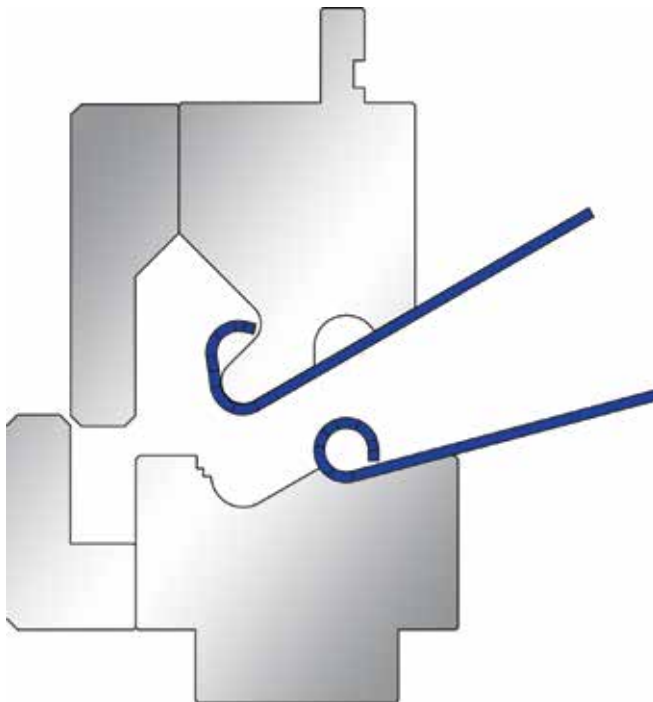
CL1 Curl Tool Set

This tool set incorporates 2 tool sets, 3 machine strokes.



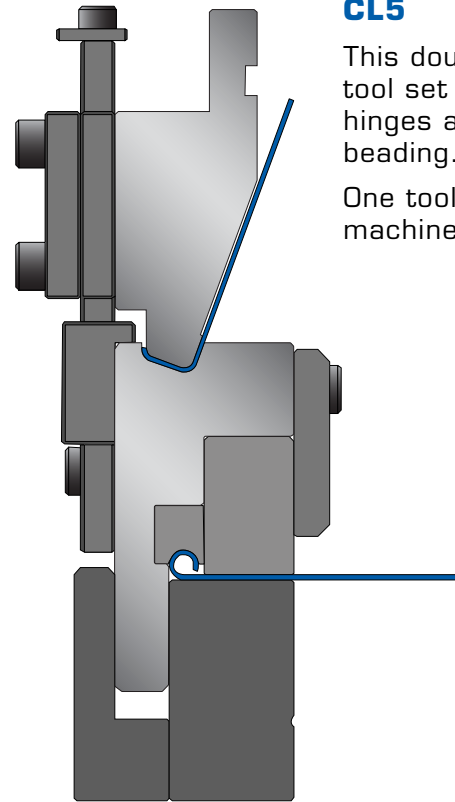
CL2

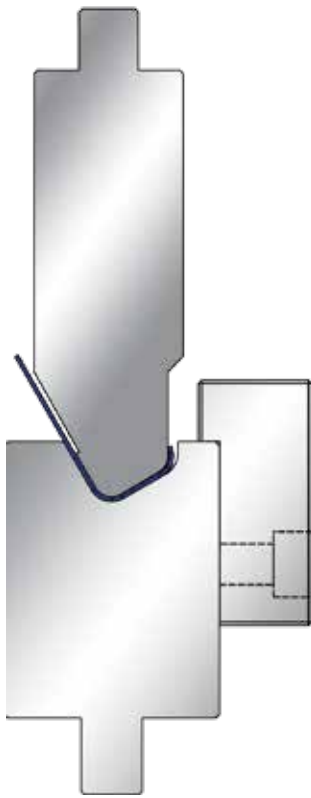
This curl tool set is typically used for thick materials and large diameter curls.
1 tool set, 3 machine strokes.



CL5

This double decker tool set is used for hinges and corner beading.
One tool set, two machine strokes.



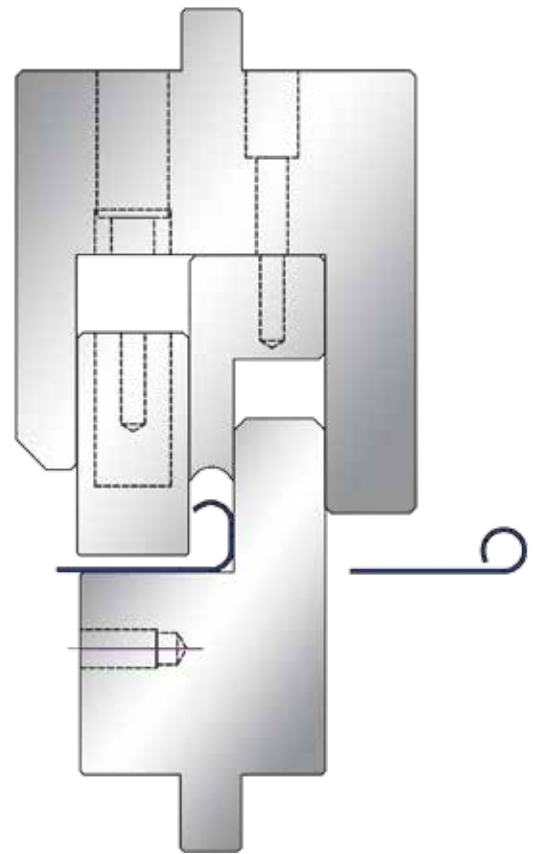


CL3

These sets are used for hinges and corner beading.

2 tool sets, 2 machine strokes.

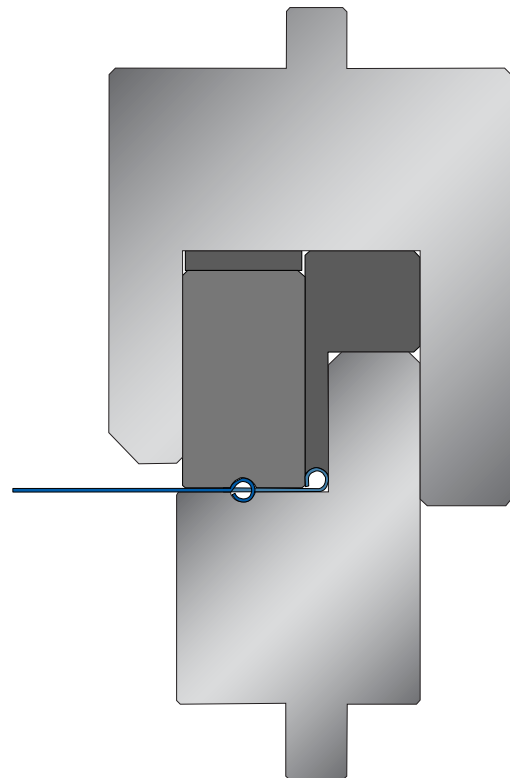
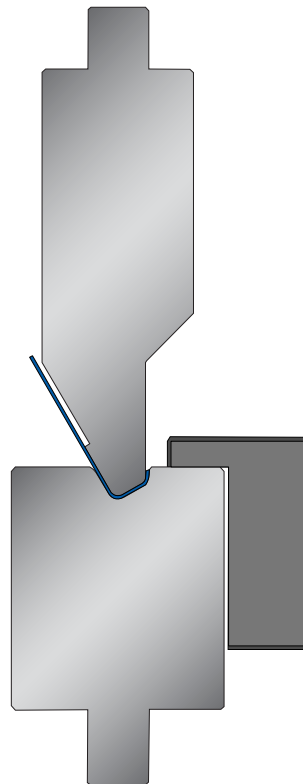
Call for specific application recommendations.



CL4

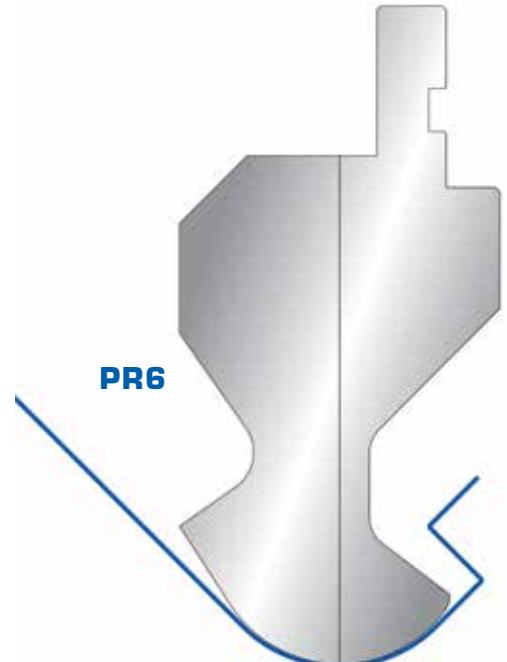
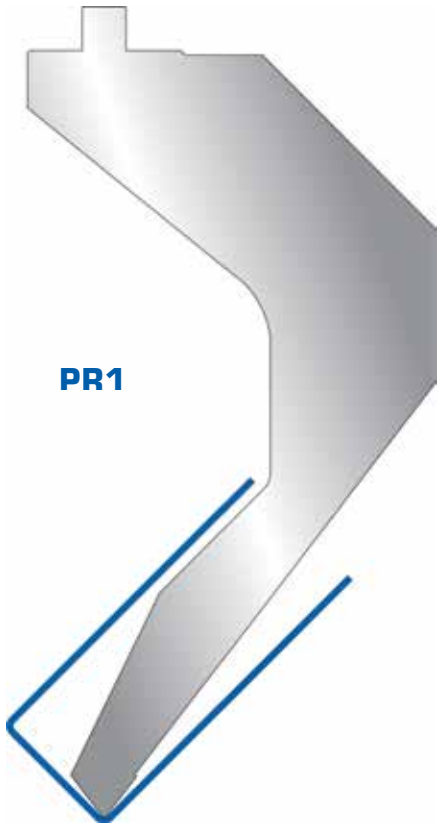
This tool set is used for on center curling applications.

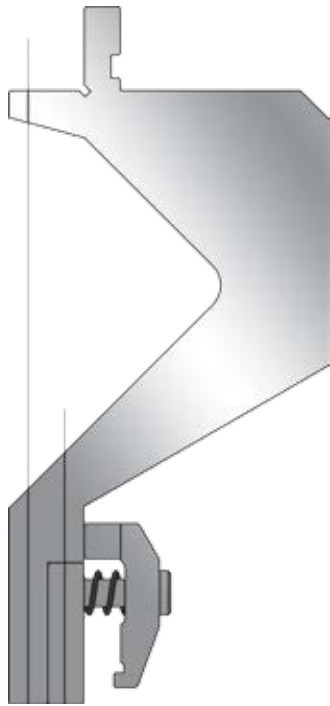
Two tool sets, three machine strokes.



SPECIAL SHAPE PUNCHES

SPECIAL SHAPE PUNCHES

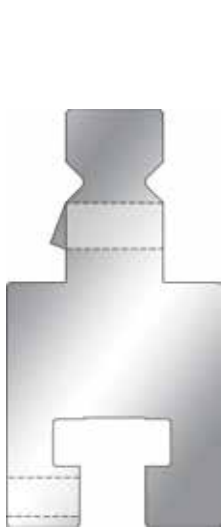




43002
Euro Z1 or Z2 Clamping



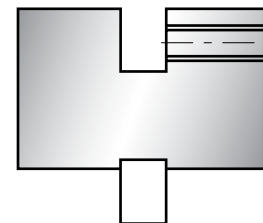
American Gooseneck
Holder



WT - American

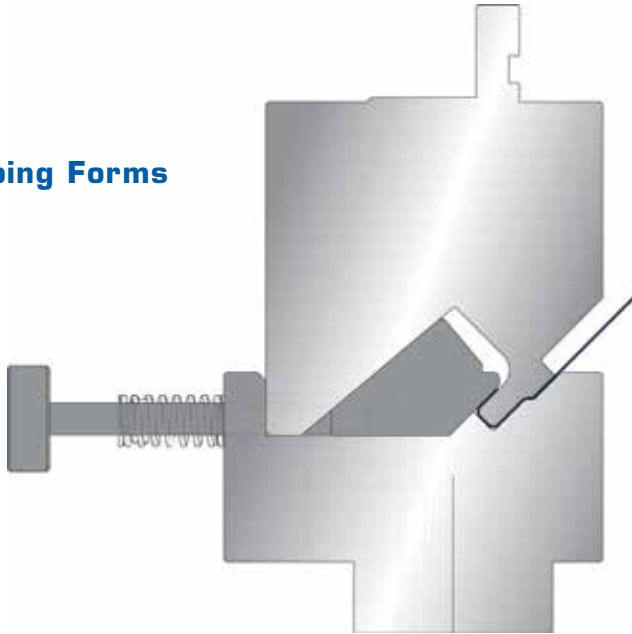


American
Self Seat



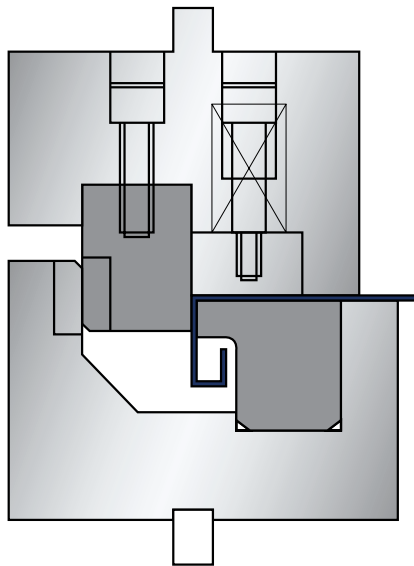
Die Holder

W01 Custom Wiping Forms



- These tool sets hold the sheet flat while wiping the flange up or down.
- Ideal for large panels and high production.

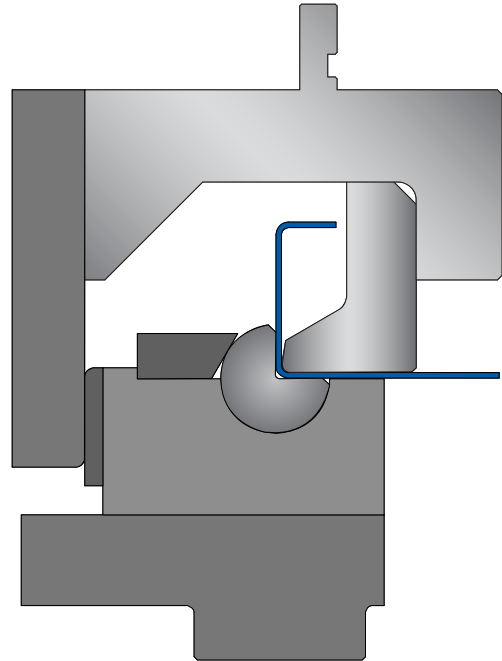
WD1 Wipe Down



RTU Rotary Flange Forming

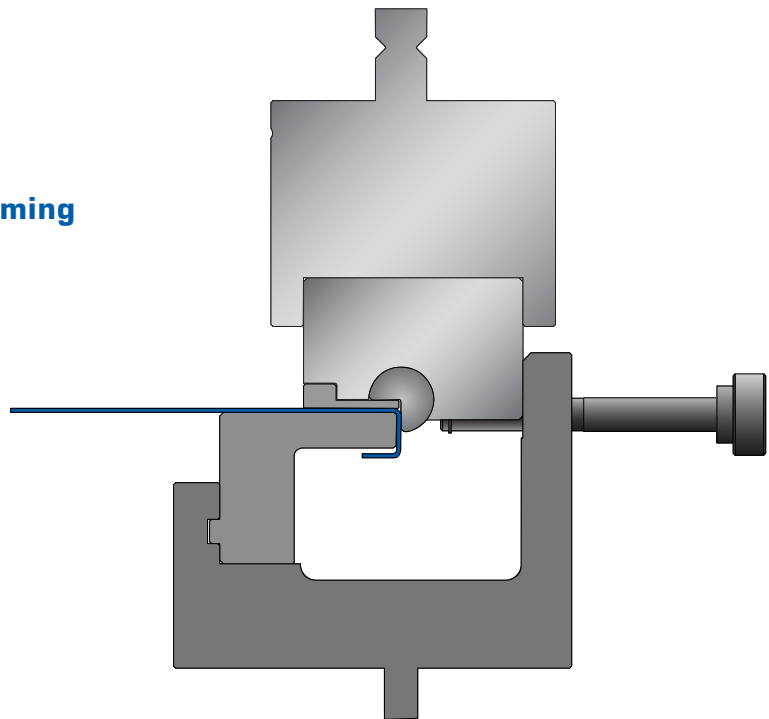
Form Up

- These tool sets hold the sheet flat while forming.
- Overbend allowance is built in to compensate for material springback
- Ideal for large panels and high production.

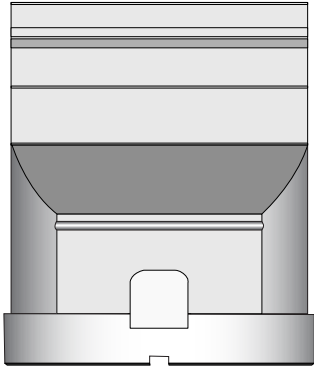


RTD Rotary Flange Forming

Form Down



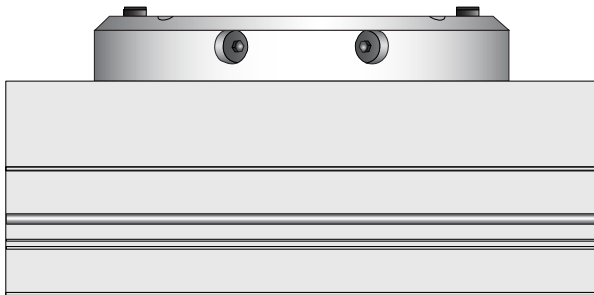
PUNCH PRESS TOOLING ADAPTERS



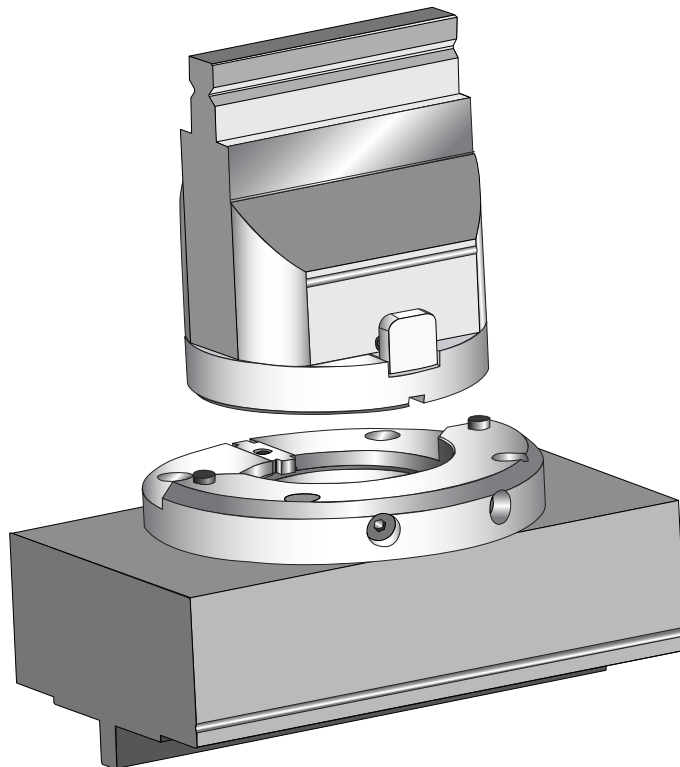
TA1 Turret Adapter

This tooling adapts punch press tooling to use in a press brake.

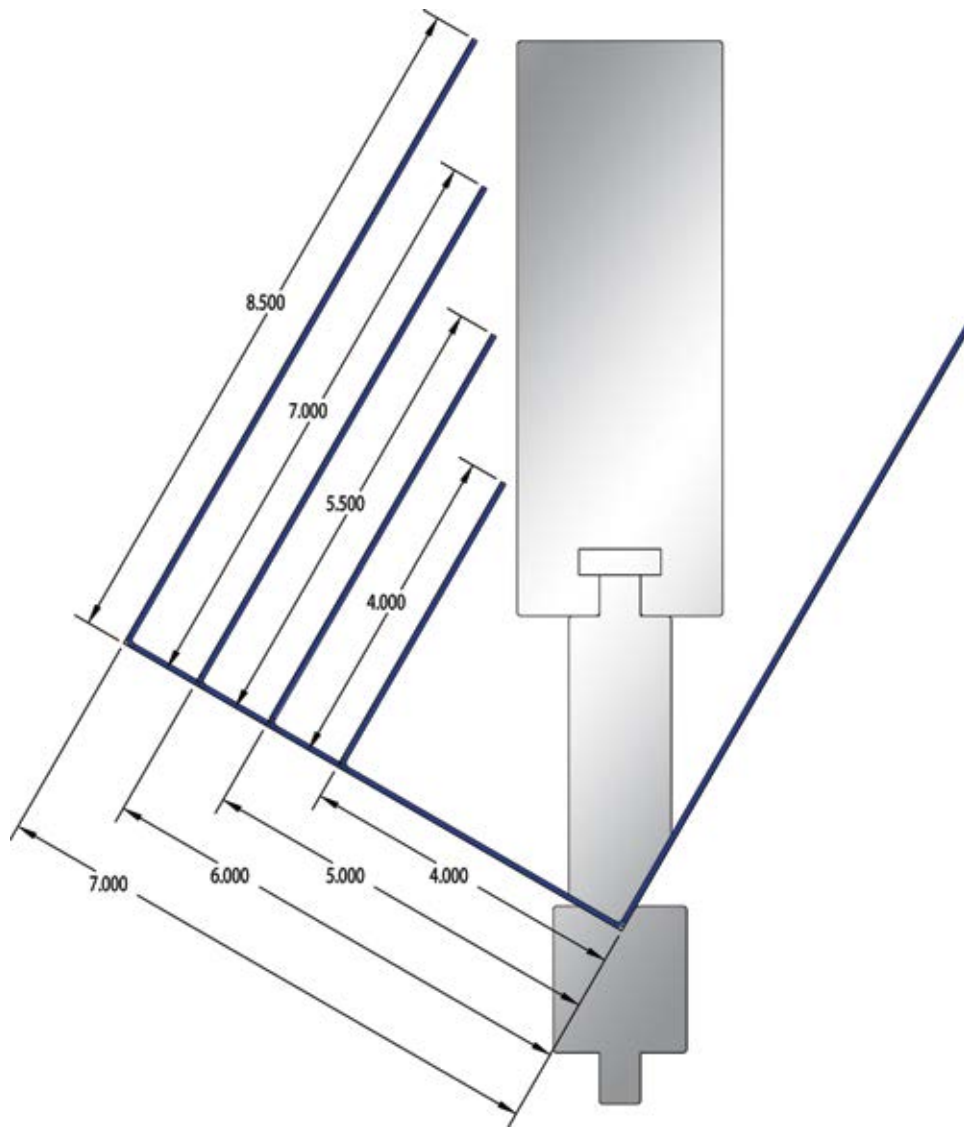
Multiple configurations and options are available.



Front View



30/60 – FOR DEEP BOX BENDING
















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.

PRESS BRAKE TONNAGE ESTIMATES

Formula for making multiple bends on a press brake.
For shape as shown, 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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Minimum order is \$50.00.

CREDIT REQUIREMENTS

All orders are subject to approval by our Credit Department. If you are a new account, please furnish us with your tax exempt status, a bank reference, three current supplier references and/or your current D&B rating with your first order. A credit limit will be imposed on new accounts until credit has been established.

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Terms are net 10 days. Catalog prices are subject to change without notice.

FREIGHT

Orders are shipped F.O.B. from our manufacturing facility. (International Shipments are Incoterms: Ex Works).

ORDER CANCELLATION

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

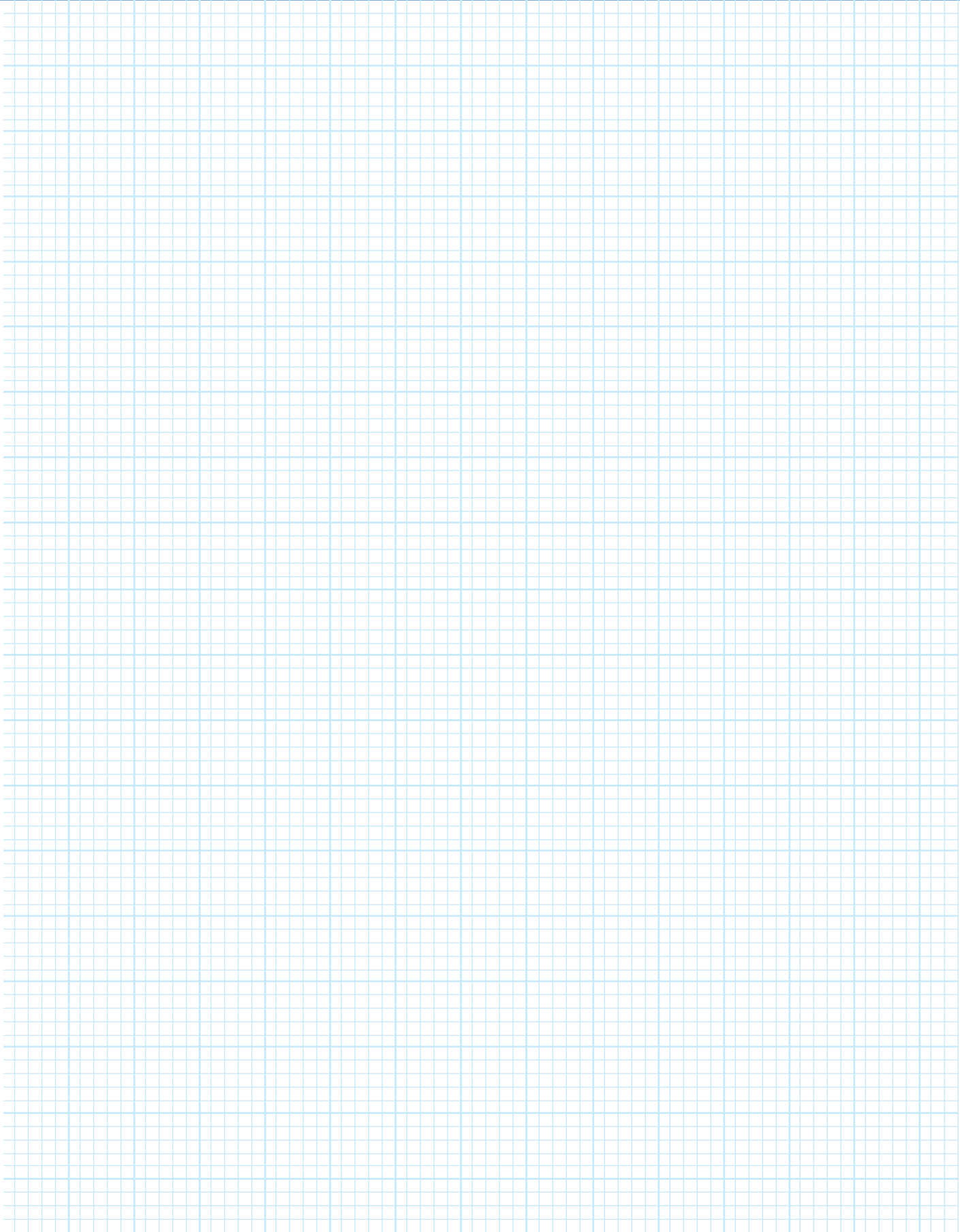
RETURNED MATERIAL

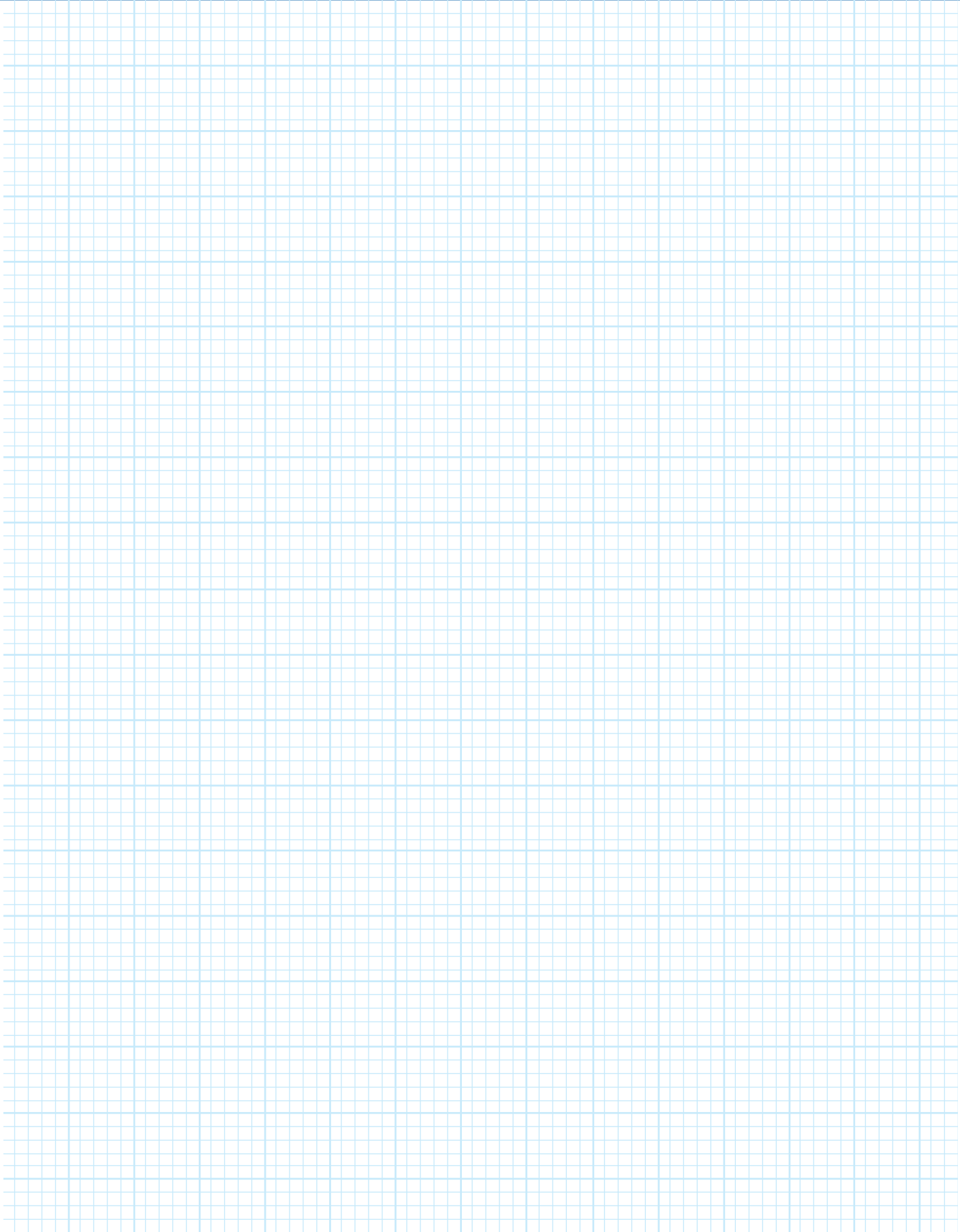
A handling/restocking fee will be applied to all products returned for credit. A return authorization number and shipping instructions must be obtained in advance before an item can be returned.

CLAIMS

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

NOTES





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