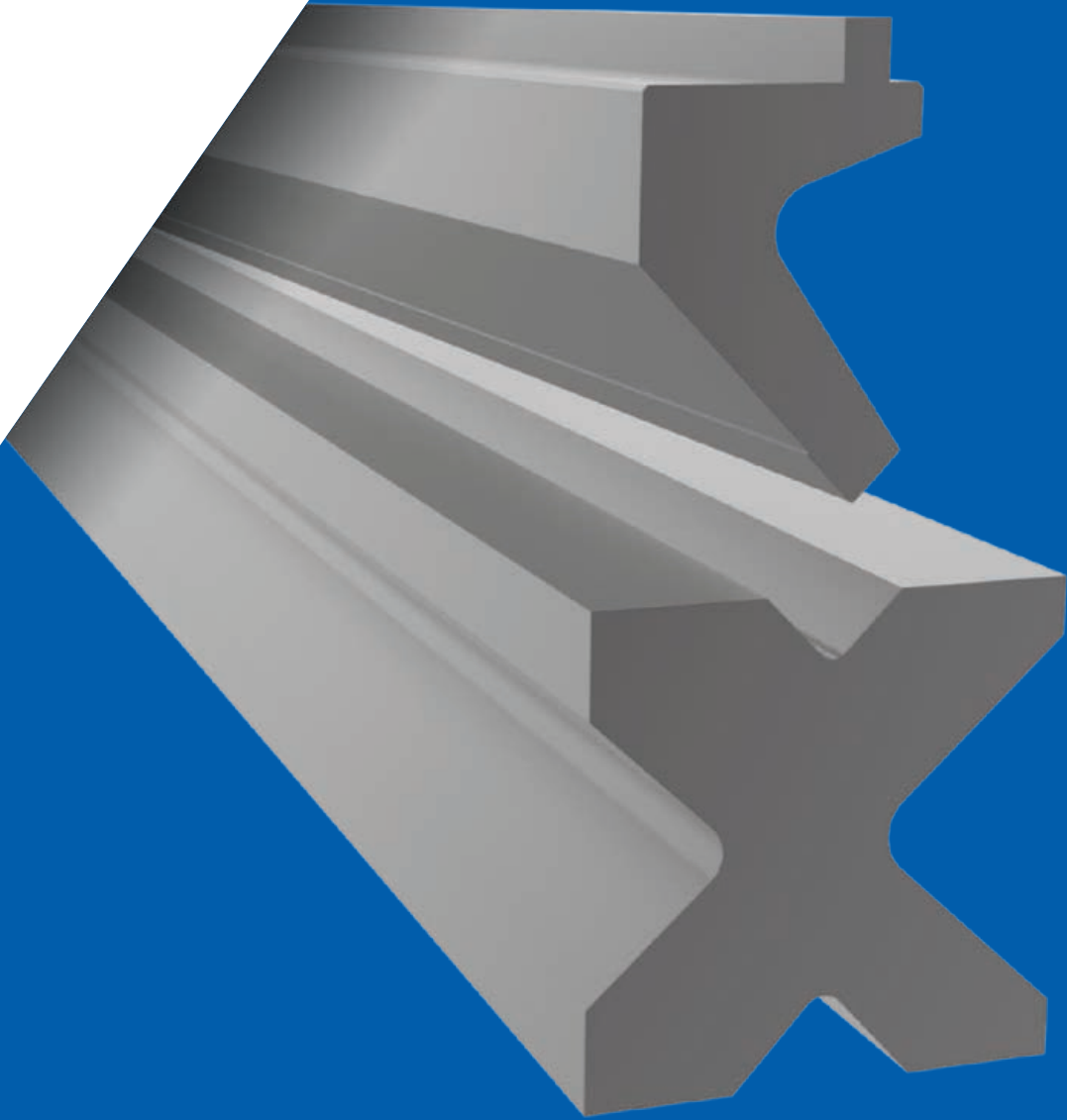




CANADA



AMERICAN PLANED

PRESS BRAKE TOOLING SOLUTIONS

2026

ABOUT WILSON TOOL INTERNATIONAL

From humble beginnings in a small manufacturing facility in St. Paul, Minnesota, Wilson Tool International has added manufacturing facilities and sales channels around the world to better serve our thousands of global customers. Throughout our expansion, our mission has never wavered — we continue to offer products and services that help you be more successful. Every product you buy, every employee with whom you communicate, and every training event you attend, are designed to help customers just like you be more successful.

At Wilson Tool, we continue to invest in your success through constant innovation. Our tooling and solutions represent decades of knowledge and experience in assisting manufacturers resolve their most challenging fabrication issues. We understand that no two jobs are the same. Change is the only constant in manufacturing. So, working with a tooling supplier who's flexible, nimble, and knowledgeable is important.

"Our goal is to deliver exceptional customer service along with the most reliable and innovative products and solutions so that our customers can be more successful."

When you have a challenge, reach out to us. At Wilson Tool we are more than tools... we are solutions. Your local Sales Engineer is available in person, by phone and through e-mail. Let us put our many decades of expertise to the test. We will work with you to find the best possible solution to whatever challenge you may be facing. And every order comes with our guarantee to outperform your current tooling.

From all of us at Wilson Tool, thank you for the trust you have placed in us to provide products and services that are critical to your business. We look forward to your continued success as we head into the future.



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Prices and product availability are subject to change without notice.

CONNECT WITH WILSON TOOL

Keep up with everything that's new at Wilson Tool International! Visit our website or find us on social media for the latest information, news, videos and product releases.

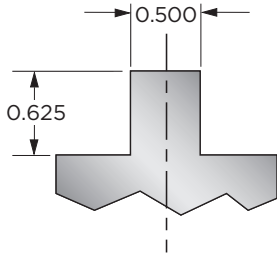


TERMS AND CONDITIONS

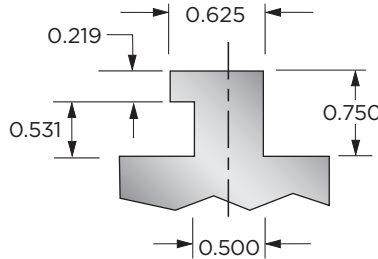
Please note, all orders are subject to Wilson Tool International's Terms and Conditions which include pricing, payment, delivery, warranties, and our return policy. To view our full Terms and Conditions, visit wilsontool.com/en-us/terms-conditions.

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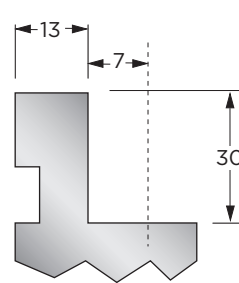
STANDARD PUNCH TANGS AVAILABLE



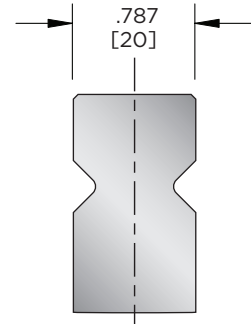
American - Standard
(no safety hook)



American - Safety Hook



European



WT

American punches come standard with **NO SAFETY HOOK**.
Specify when ordering if a safety hook is required.

REFERENCE INFORMATION

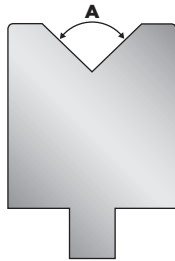
MODIFICATIONS



Punch Modifications

Tip modifications are available in all styles and sizes. No charge for:

- Tip Radius changes up to .250"
- Angle changes to 75°-90°



Die Modifications

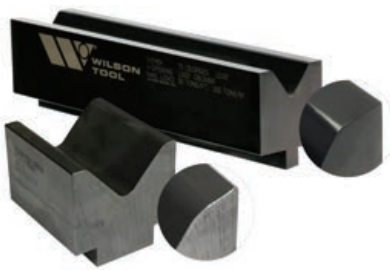
Angles can be modified to 80° at no charge.

Lengths Available

Tell us your needs and we can make the lengths you need, from smaller sectionalized pieces to lengths up to 13 feet — and everywhere in between.

Ends can be milled for a better end-of-tool surface finish.

UPGRADES



Ground Surface Finish

Upgrade to a ground finish for a better finish on parts. The improved surface will reduce sheet marking and match to sectionalized pieces better.

Induction Hardened for Thicker Material

Induction harden punch or die radii to draw hardness up to 58-60 for longer tool life. Recommended when bending thicker materials.



PRESS BRAKE TOOLING

Wilson Tool Planed (or "conventional") press brake tooling is produced from tool steel that is through hardened to 28-32 HRC. American punches come standard with NO SAFETY HOOK. Specify when ordering if a safety hook is required.

Air Bending Dies

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.

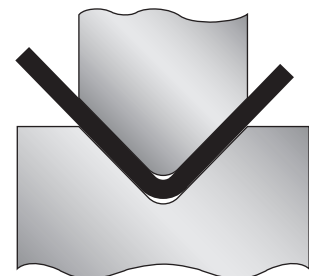
Most Wilson Tool American Planed press brake air bending dies are made with an included angle of 85°. When forming 90° flanges in mild steel, the material's natural spring-back achieves the 90° angle. To form angles greater than the die's included angle, the ram is adjusted for less die penetration.



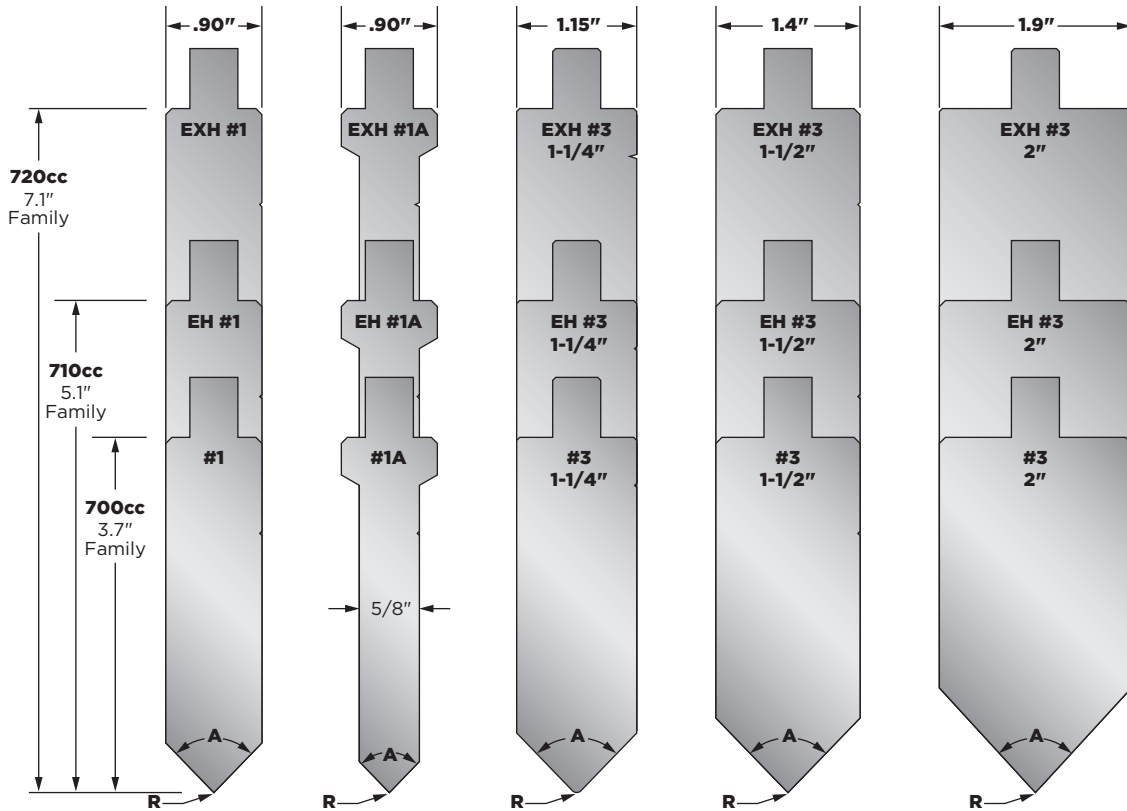
Bottoming/Coining

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 American Planed press brake 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 spring-back, the die opening is five times the material thickness.



BLOCK PUNCHES

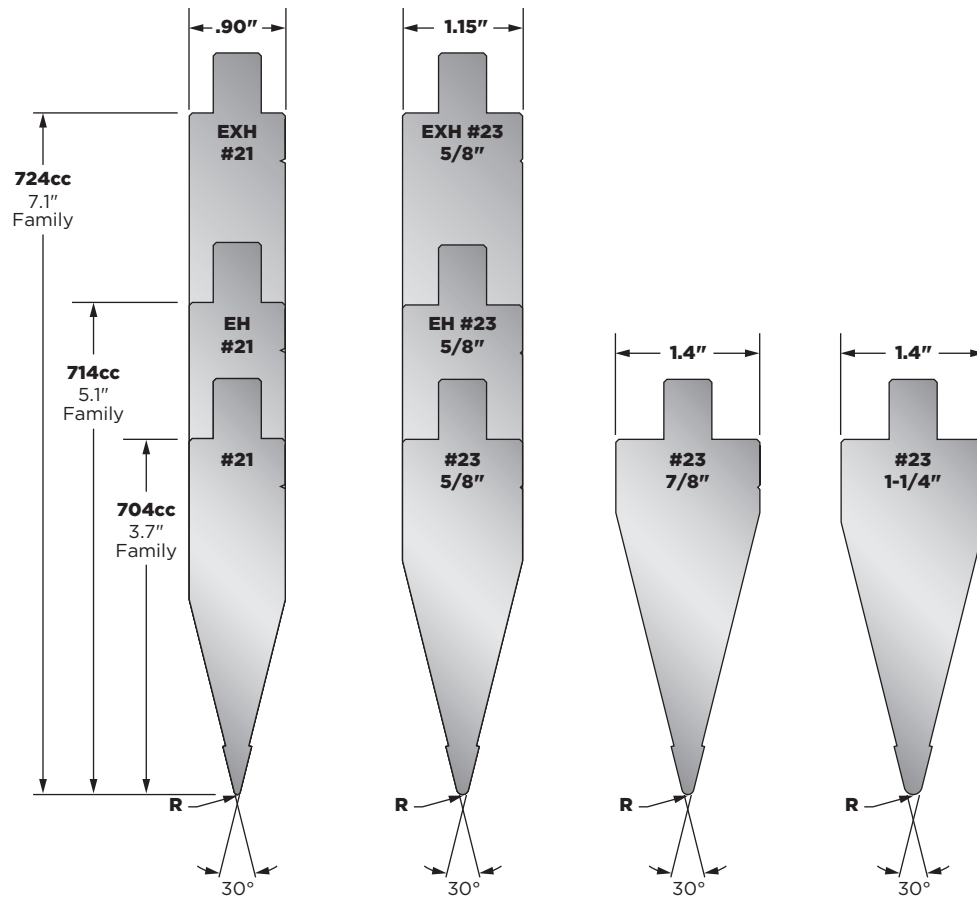


PUNCHES

Part No.	A Angle	R Tip Radius inch [mm]		Weight per foot lbs.	Bend Limit Graph
		Min.	Max.		
SERIES 700cc — 3.7" FAMILY					
#1	75° - 90°	1/64 [0.4]	1/8 [3.18]	14	pg. 11
#1A				11	pg. 12
#3 1-1/4"				17	pg. 13
#3 1-1/2"				20	pg. 14
#3 2"				22	pg. 15
SERIES 710cc — 5.1" FAMILY					
EH #1	75° - 90°	1/64 [0.4]	1/8 [3.18]	19	pg. 11
EH #1A				14	pg. 12
EH #3 1-1/4"				22	pg. 13
EH #3 1-1/2"				27	pg. 14
EH #3 2"				31	pg. 15
SERIES 720cc — 7.1" FAMILY					
EXH #1	75° - 90°	1/64 [0.4]	1/8 [3.18]	26	pg. 11
EXH #1A				18	pg. 12
EXH #3 1-1/4"				30	pg. 13
EXH #3 1-1/2"				37	pg. 14
EXH #3 2"				45	pg. 15

Outside widths shown are bar sizes prior to cleanup.

ACUTE PUNCHES

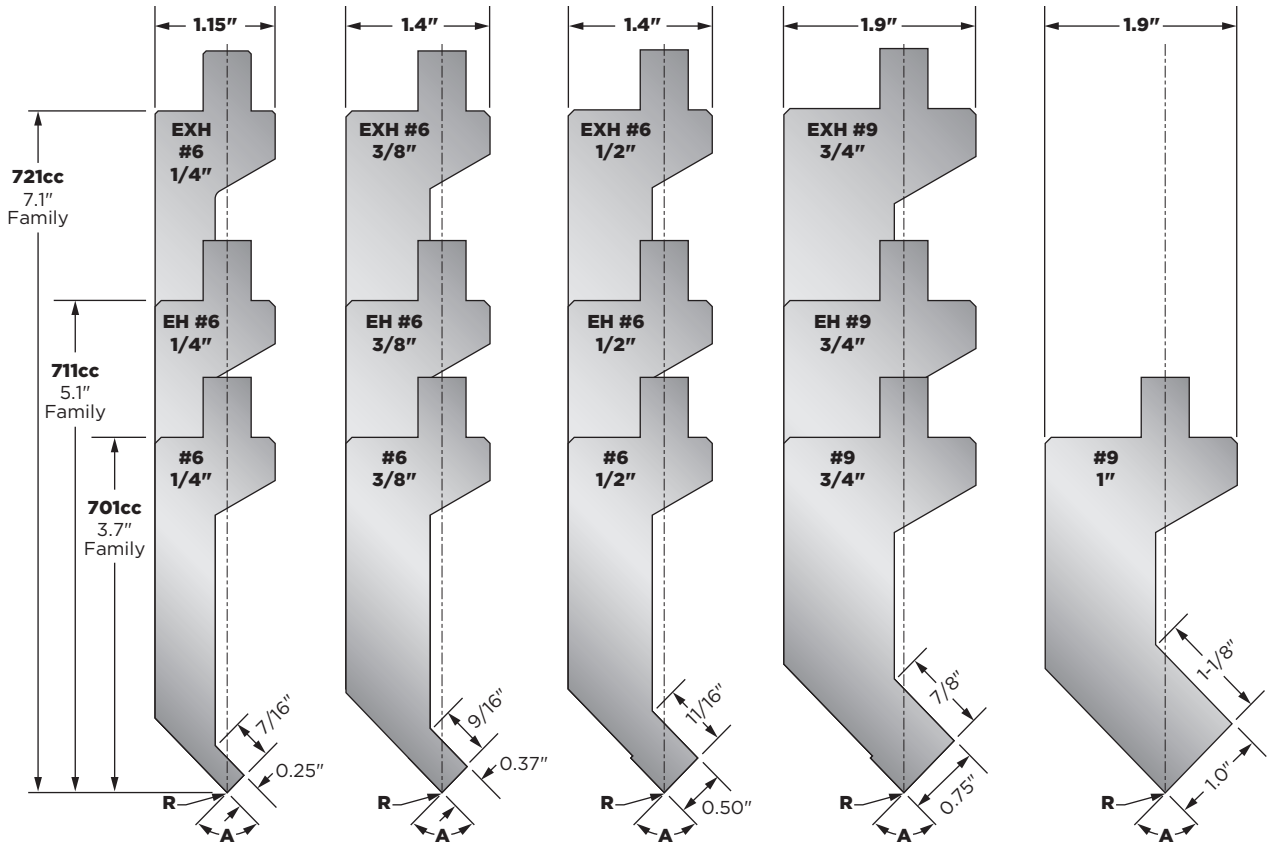


Part No.	Angle	R Tip Radius inch [mm]		Weight per foot lbs.	Bend Limit Graph
		Min.	Max.		
SERIES 704cc – 3.7" FAMILY					
#21	30°	1/64 [0.4]	1/8 [3.18]	13	pg. 16
#23 5/8"				15	pg. 17
#23 7/8"				15	pg. 18
#23 1-1/4"				15	pg. 19
SERIES 714cc – 5.1" FAMILY					
EH #21	30°	1/64 [0.4]	1/8 [3.18]	18	pg. 16
EH #23 5/8"				20	pg. 17
SERIES 724cc – 7.1" FAMILY					
EXH #21	30°	1/64 [0.4]	1/8 [3.18]	25	pg. 16
EXH #23 5/8"				28	pg. 17

Outside widths shown are bar sizes prior to cleanup.

SASH PUNCHES

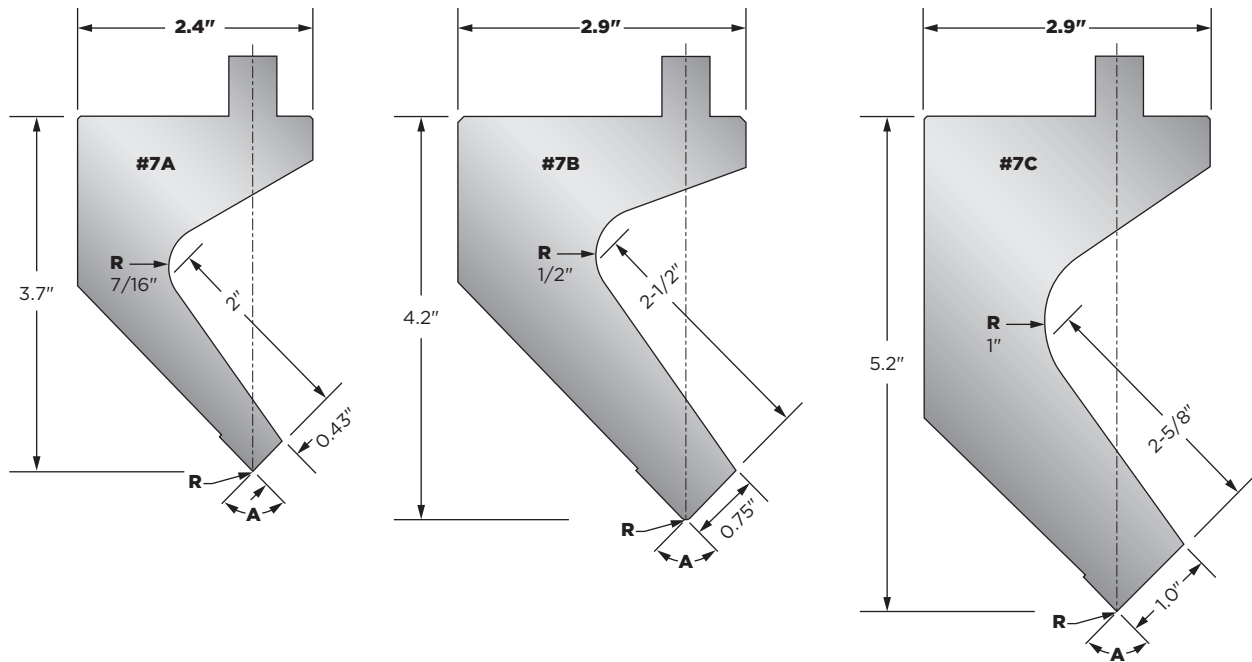
PUNCHES



Part No.	A Angle	R Tip Radius inch [mm]		Weight per foot lbs.	Bend Limit Graph
		Min.	Max.		
SERIES 701cc — 3.7" FAMILY					
#6 1/4"	75° - 90°	1/64 [0.4]	1/16 [1.59]	14	pg. 20
#6 3/8"				16	pg. 21
#6 1/2"		1/32 [0.794]	16	pg. 22	
#9 3/4"		1/8 [3.18]	22	pg. 23	
#9 1"		1/2 [12.7]	22	pg. 24	
SERIES 711cc — 5.1" FAMILY					
EH #6 1/4"	75° - 90°	1/64 [0.4]	1/16 [1.59]	18	pg. 20
EH #6 3/8"				20	pg. 21
EH #6 1/2"		1/32 [0.794]	20	pg. 22	
EH #9 3/4"		1/8 [3.18]	27	pg. 23	
SERIES 721cc — 7.1" FAMILY					
EXH #6 1/4"	75° - 90°	1/64 [0.4]	1/16 [1.59]	22	pg. 20
EXH #6 3/8"				24	pg. 21
EXH #6 1/2"		1/32 [0.794]	24	pg. 22	
EXH #9 3/4"		1/8 [3.18]	34	pg. 23	

Outside widths shown are bar sizes prior to cleanup.

GOOSENECK PUNCHES



Part No.	A Angle	R Tip Radius inch [mm]		Weight per foot lbs.	Bend Limit Graph
		Min.	Max.		
SERIES 702cc					
#7A	75° - 90°	1/32 [0.794]	1/16 [1.59]	16	pg. 25
#7B		1/8 [3.18]	1/2 [12.7]	24	pg. 26
#7C				32	pg. 27

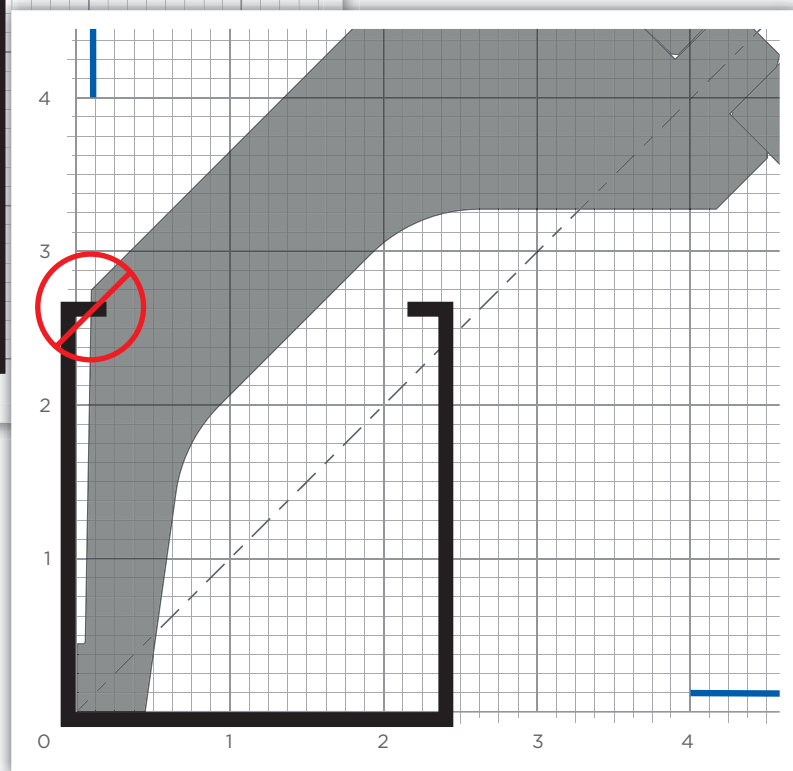
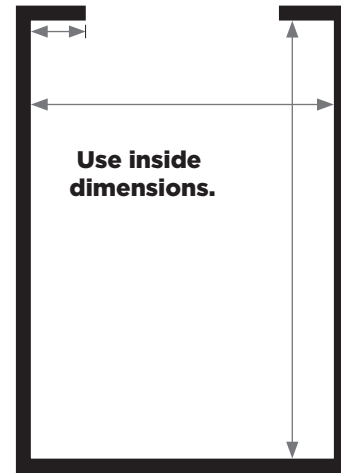
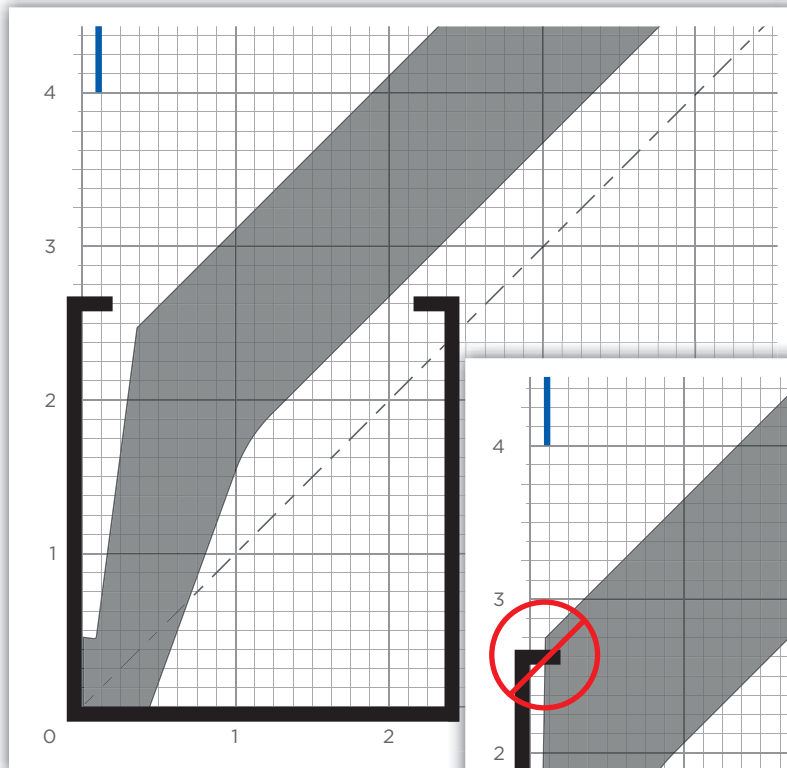
Outside widths shown are bar sizes prior to cleanup.

HOW TO USE A BEND LIMIT GRAPH

Although a bend limit graph won't help with bend sequencing, it will help determine what punch profile is best for you. Visit our YouTube channel for a step-by-step video on using these graphs.

- The graphs are 1:1
- Your part can be laid on top of the catalog page
- Use inside dimensions — always account for material thickness

This application works.

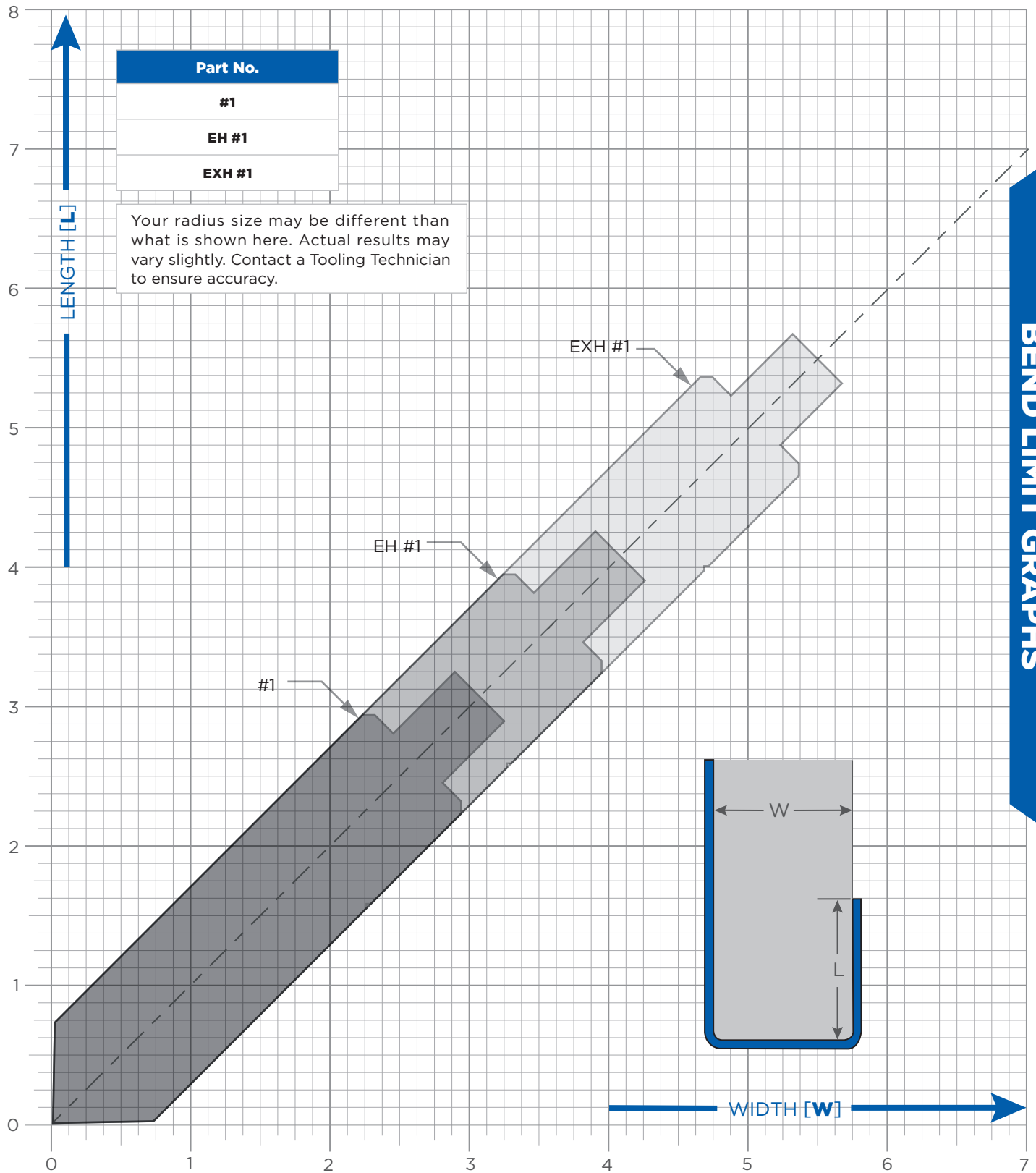


This application doesn't work.



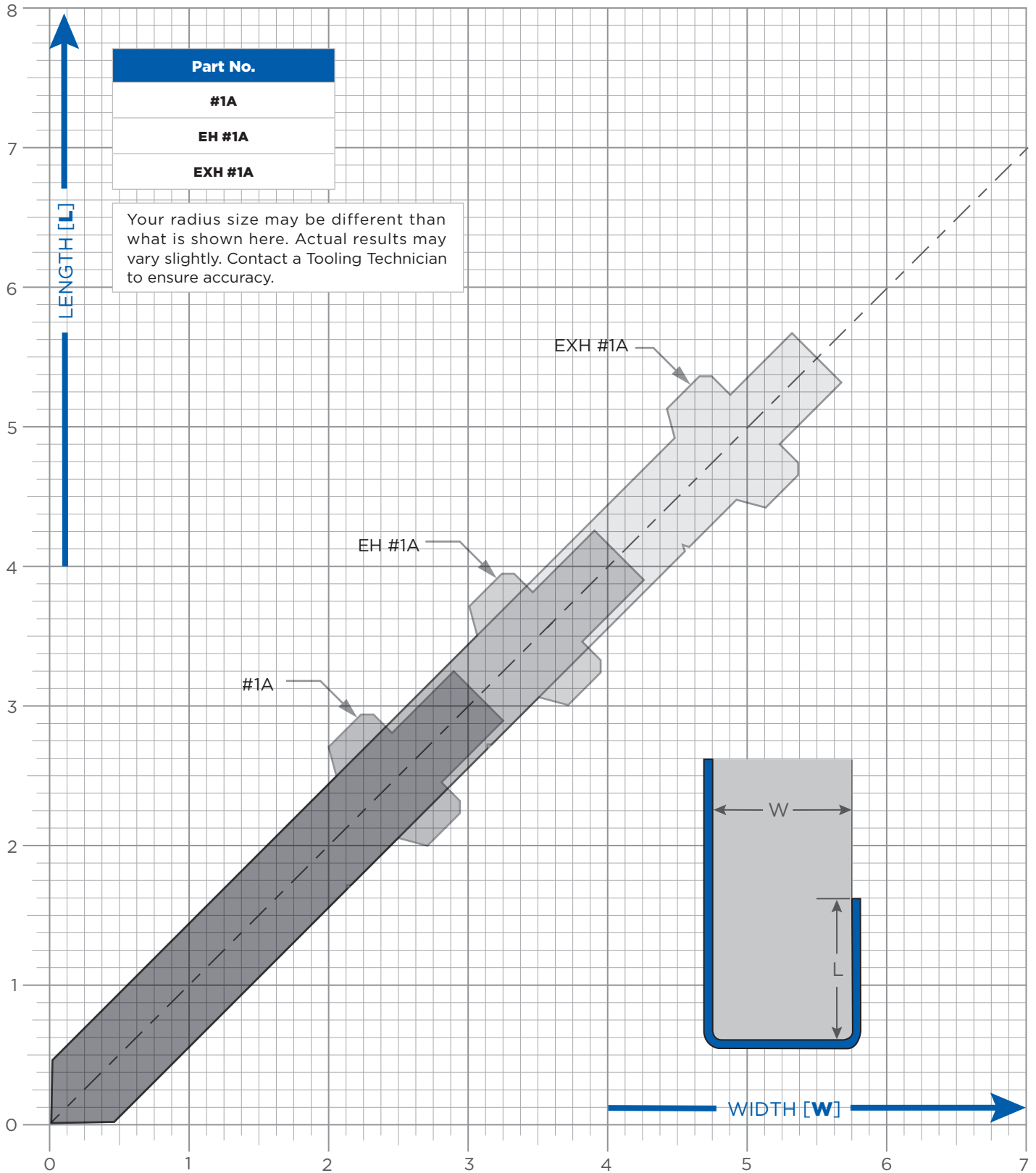
Scan QR Code to
Watch the Video

BLOCK PUNCHES #1

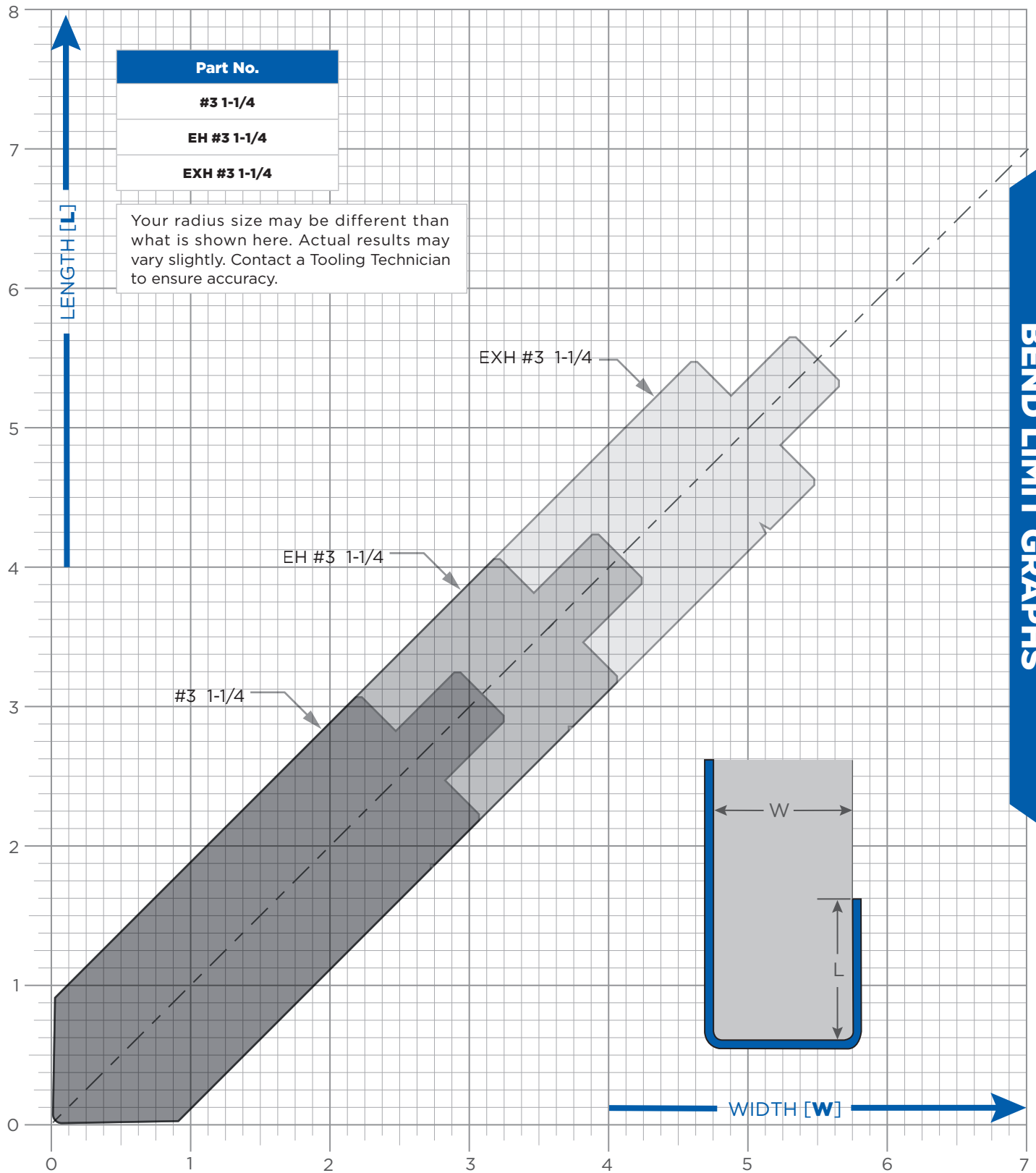


BLOCK PUNCHES #1A

BEND LIMIT GRAPHS



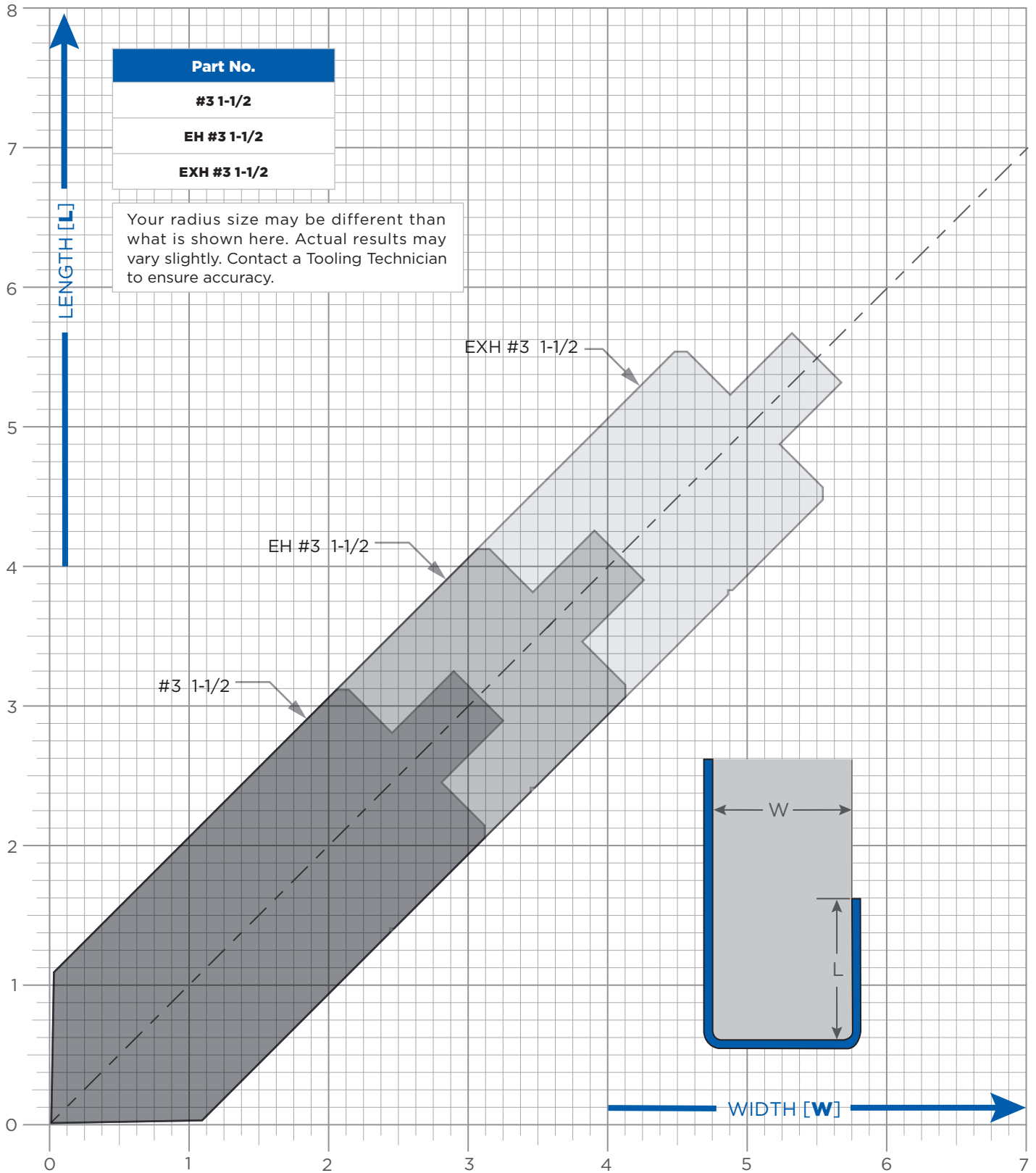
BLOCK PUNCHES #3 1-1/4"



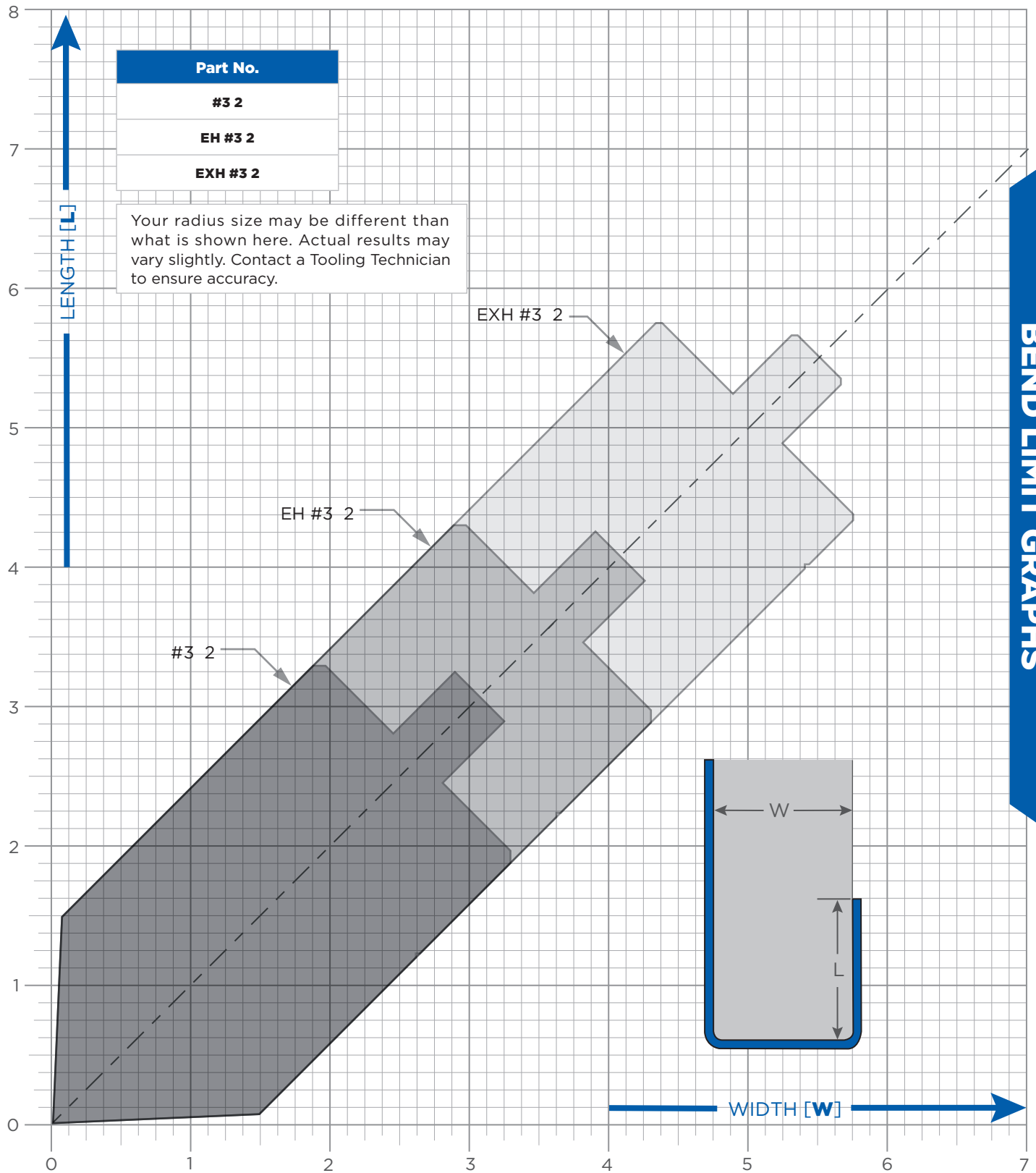
BLOCK PUNCHES

#3 1-1/2"

BEND LIMIT GRAPHS

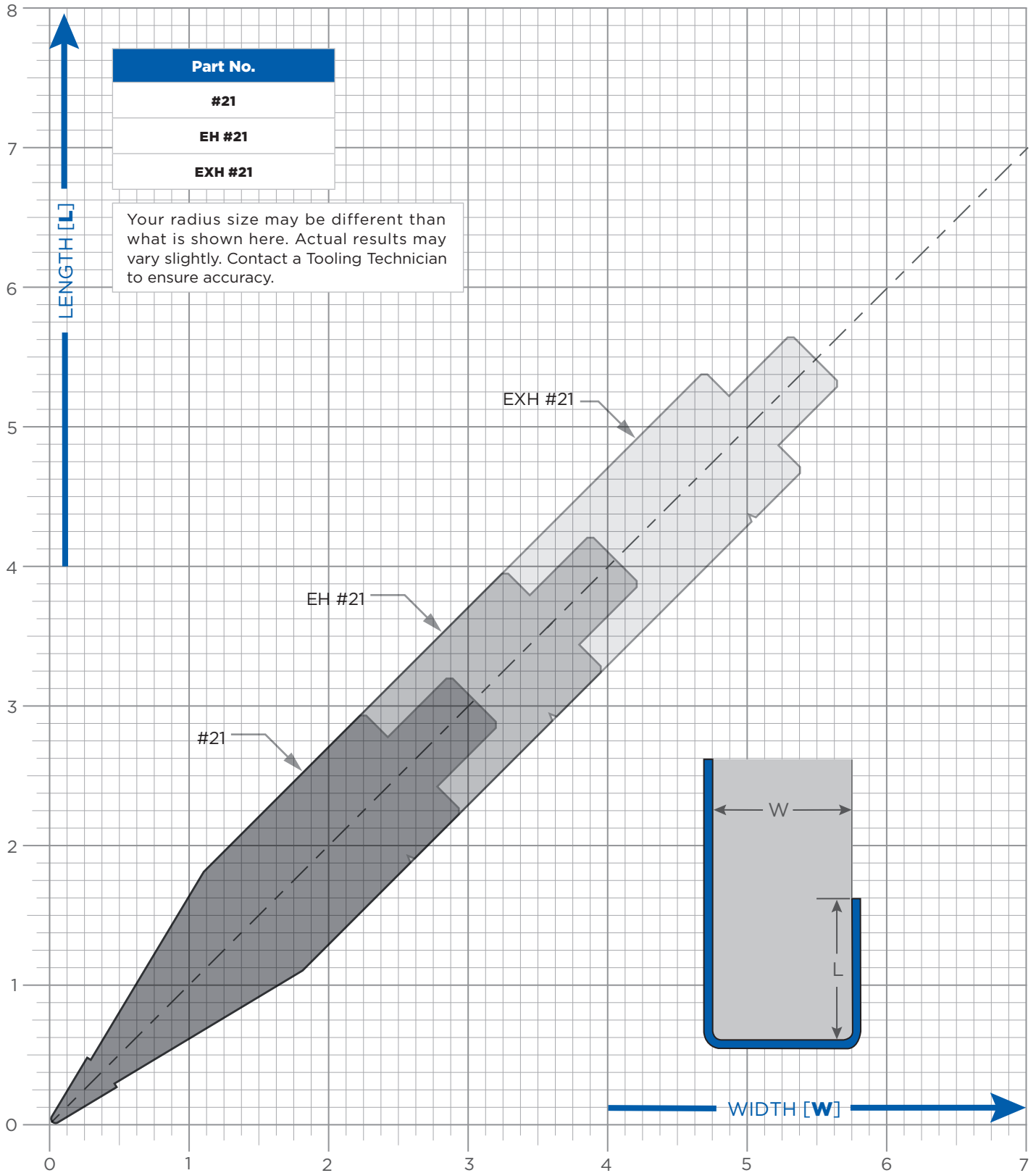


BLOCK PUNCHES #3 2"

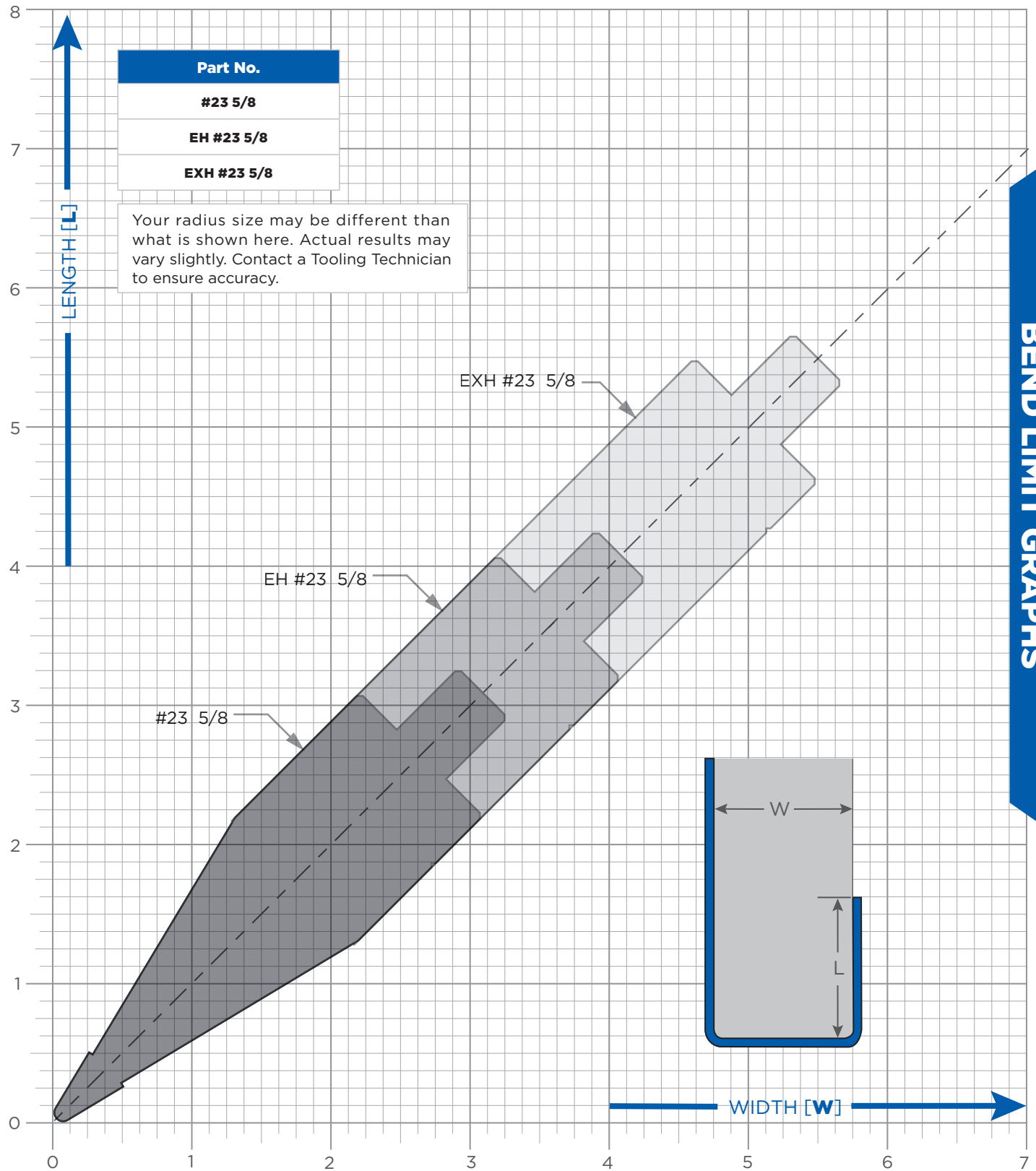


ACUTE PUNCHES #21

BEND LIMIT GRAPHS

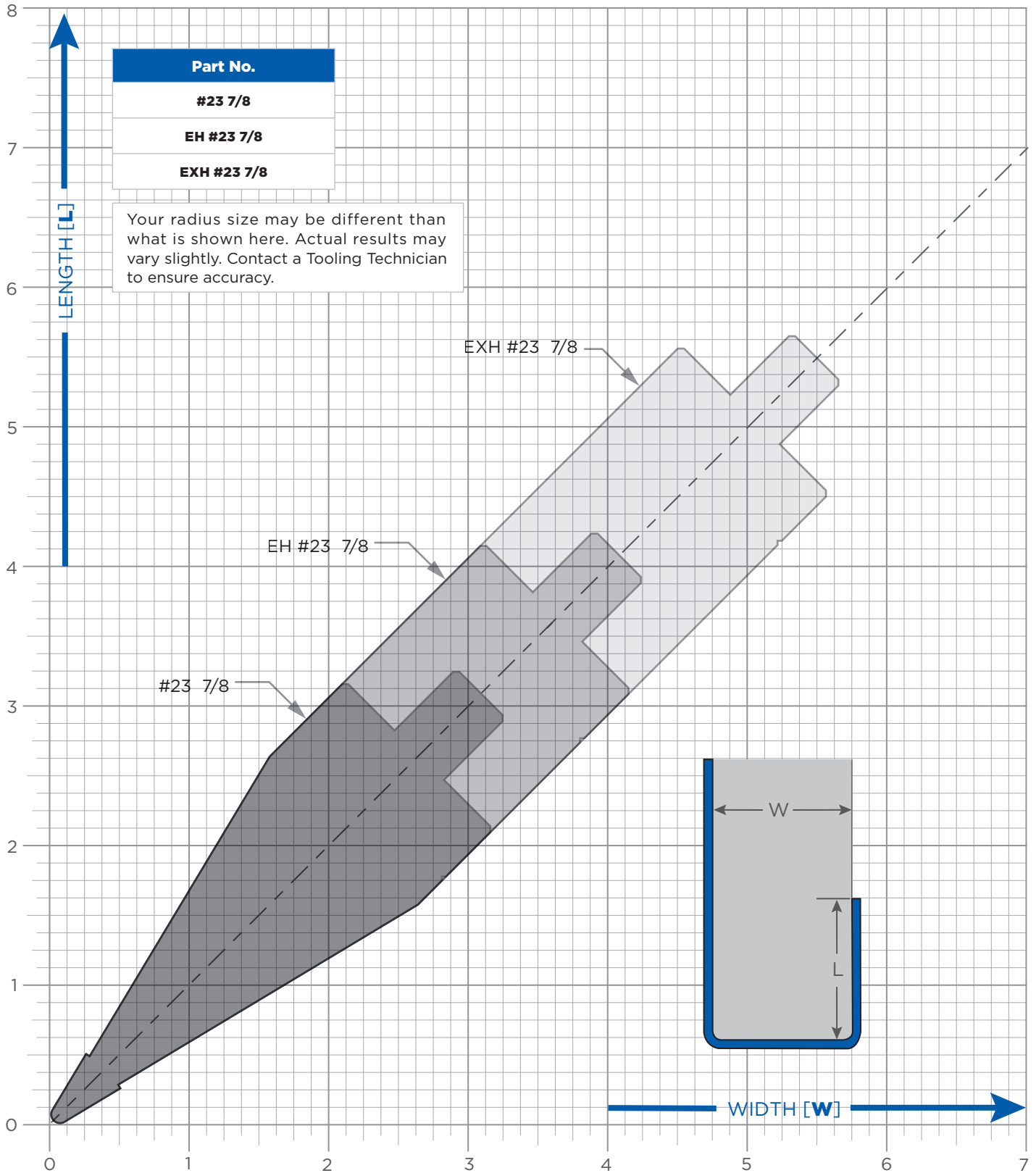


ACUTE PUNCHES #23 5/8"

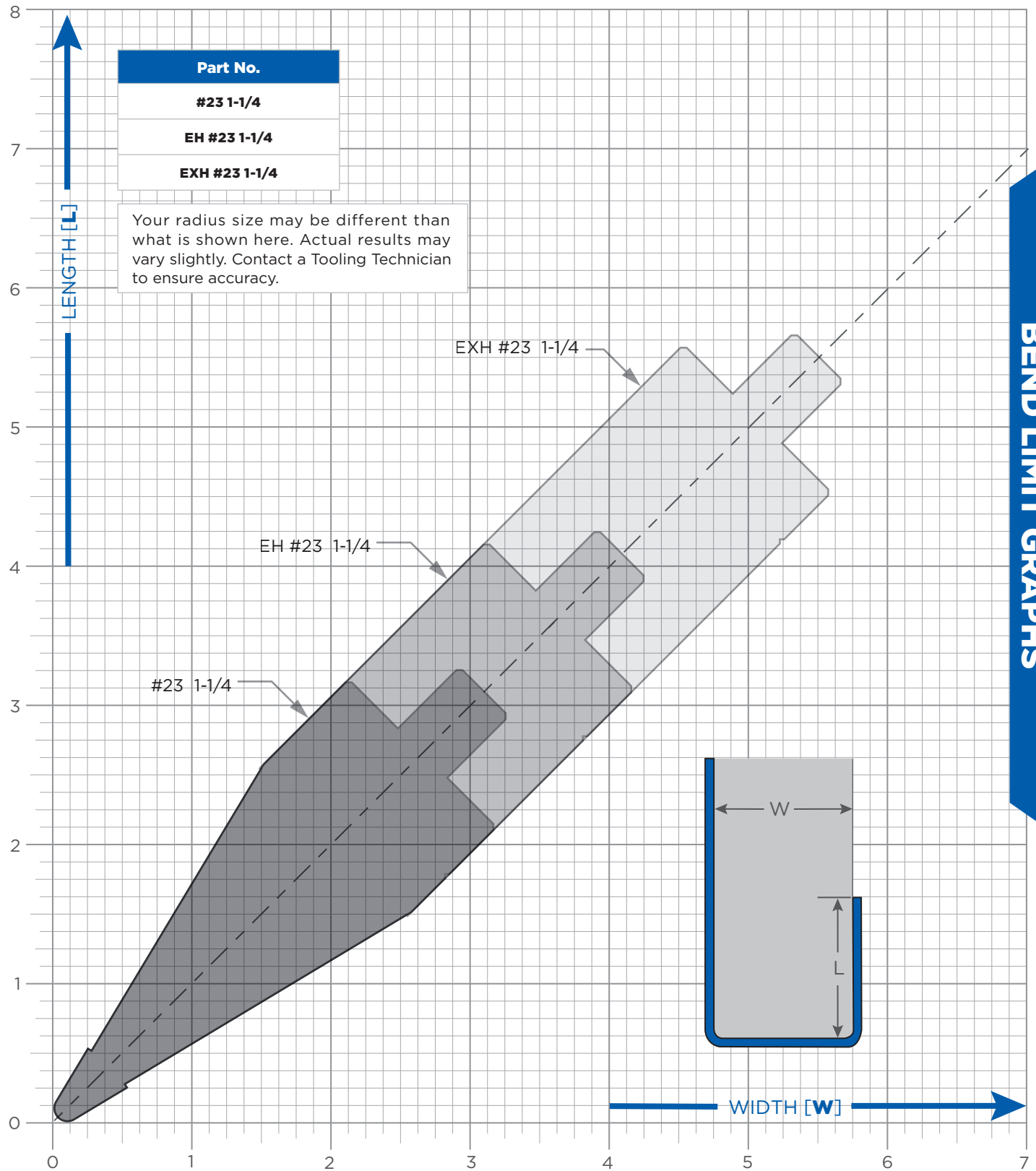


ACUTE PUNCHES #23 7/8"

BEND LIMIT GRAPHS



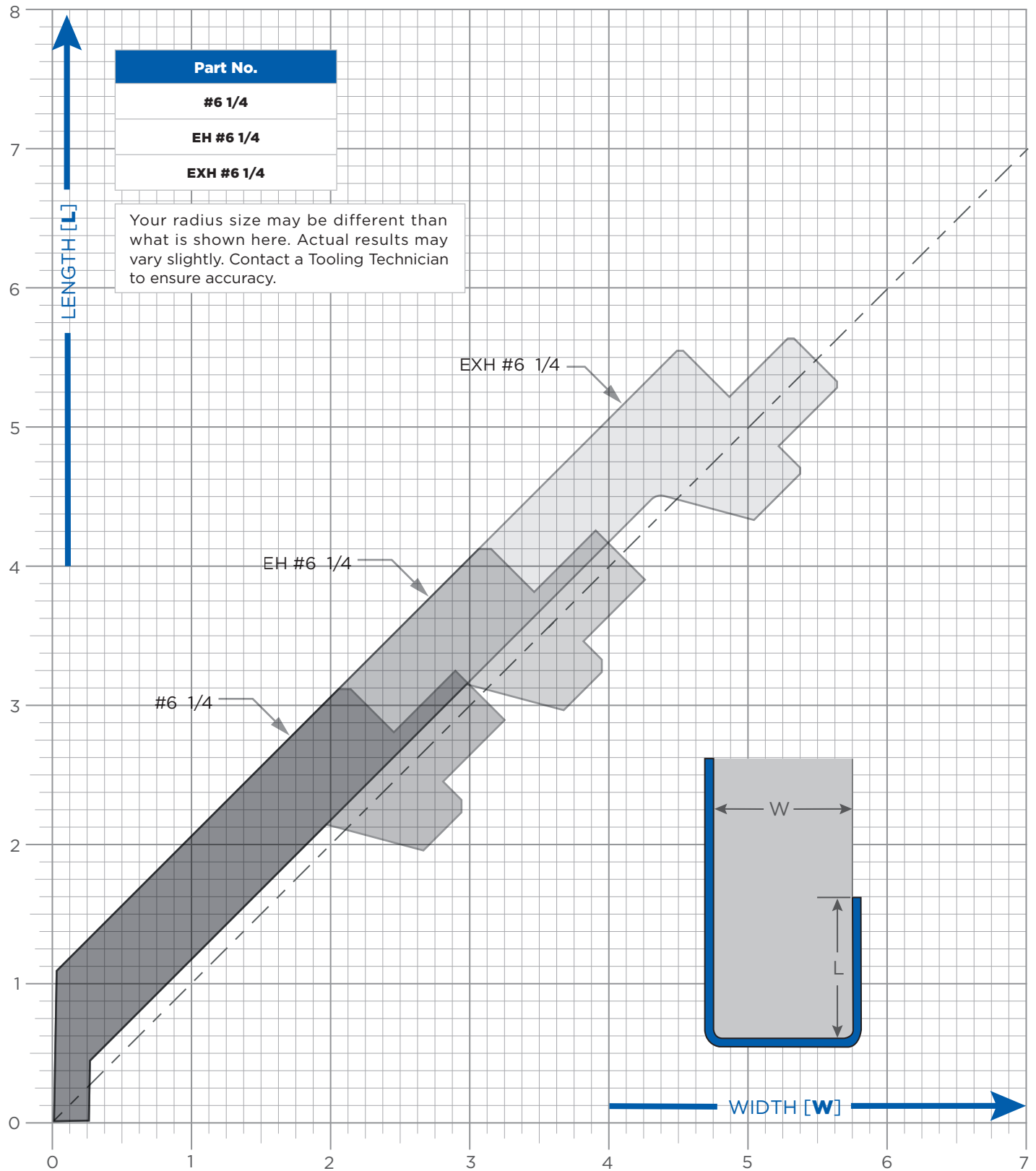
ACUTE PUNCHES #23 1-1/4"



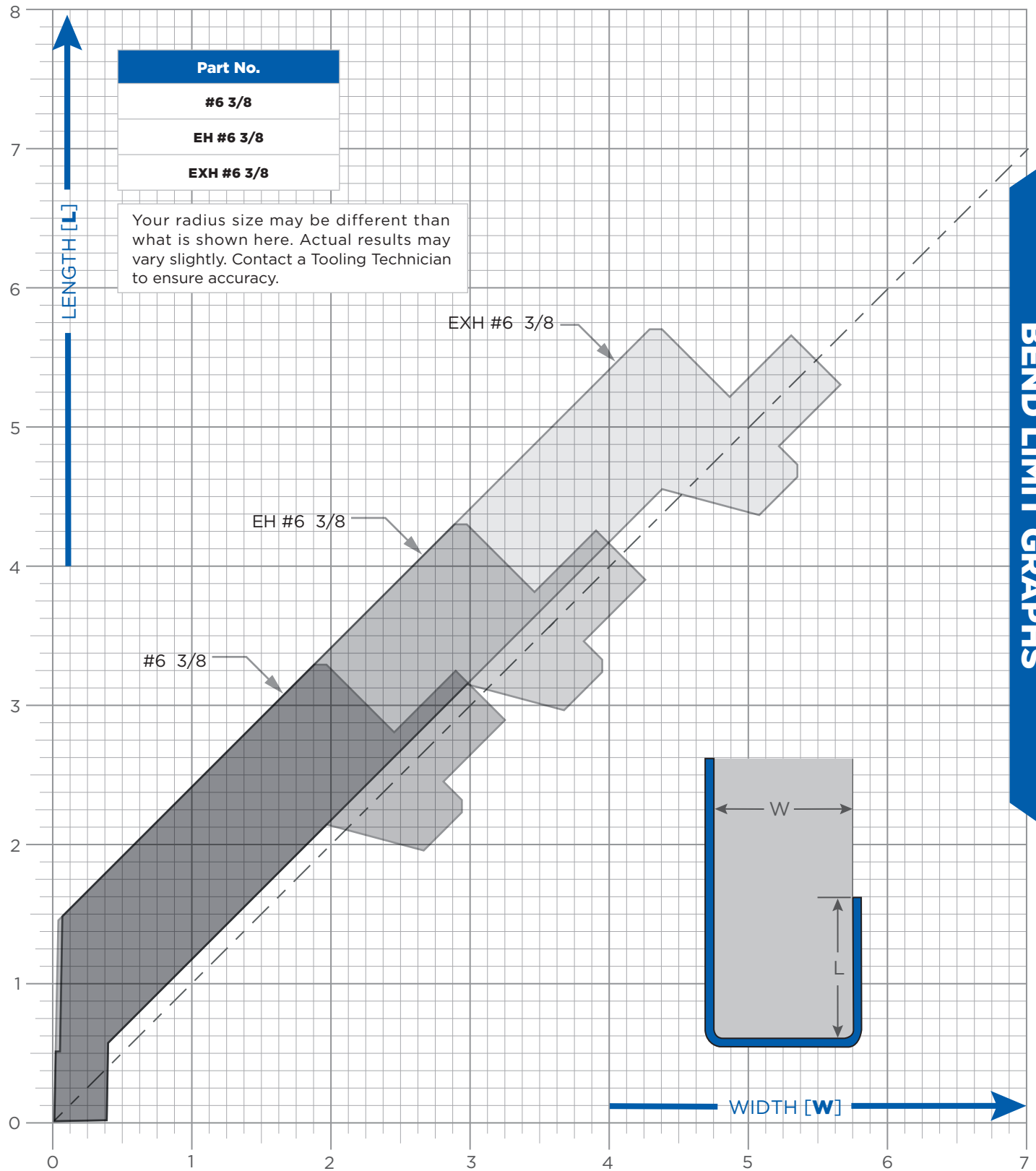
SASH PUNCHES

#6 1/4"

BEND LIMIT GRAPHS



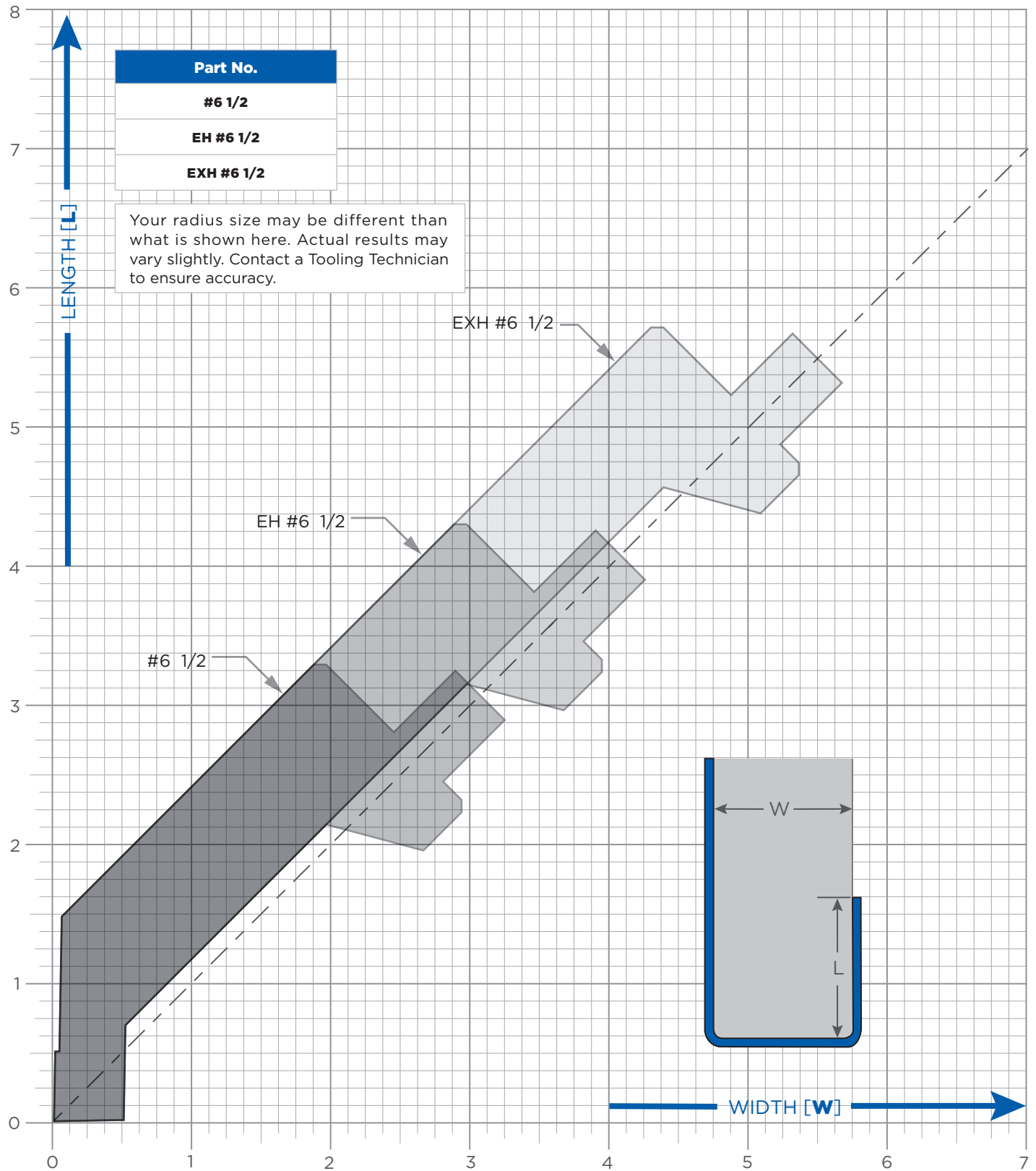
SASH PUNCHES #6 3/8"



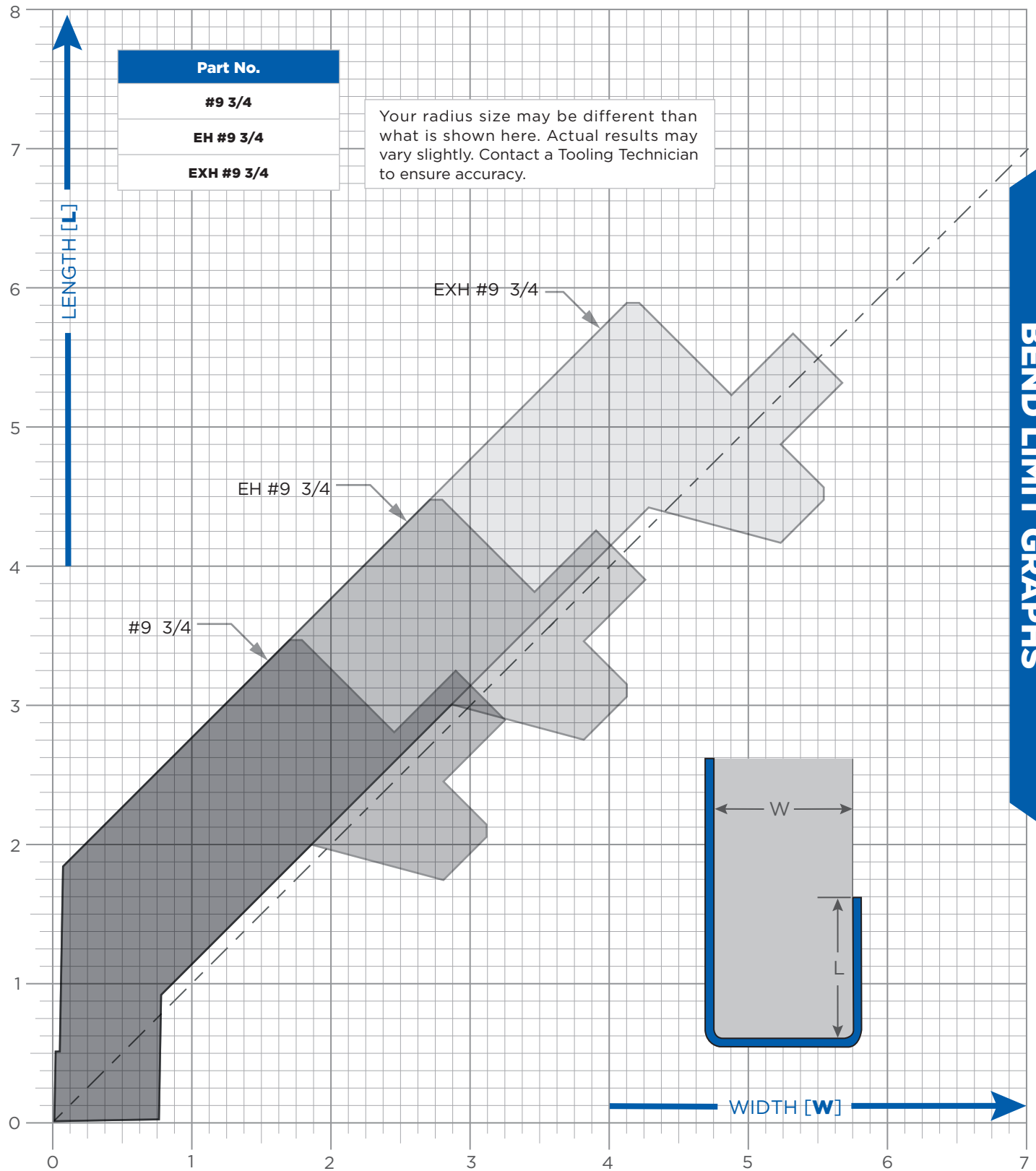
SASH PUNCHES

#6 1/2"

BEND LIMIT GRAPHS



SASH PUNCHES #9 3/4"

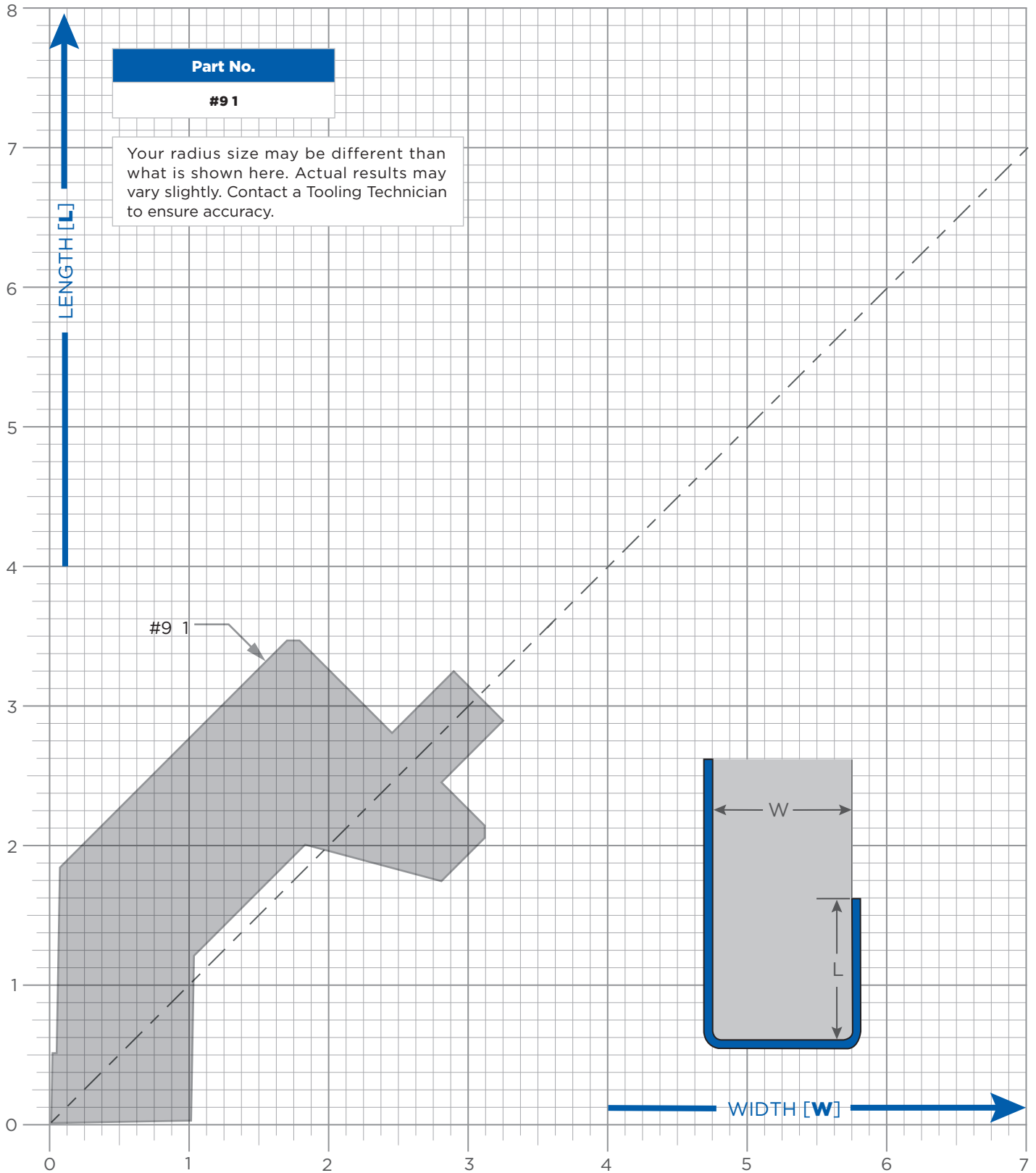


BEND LIMIT GRAPHS

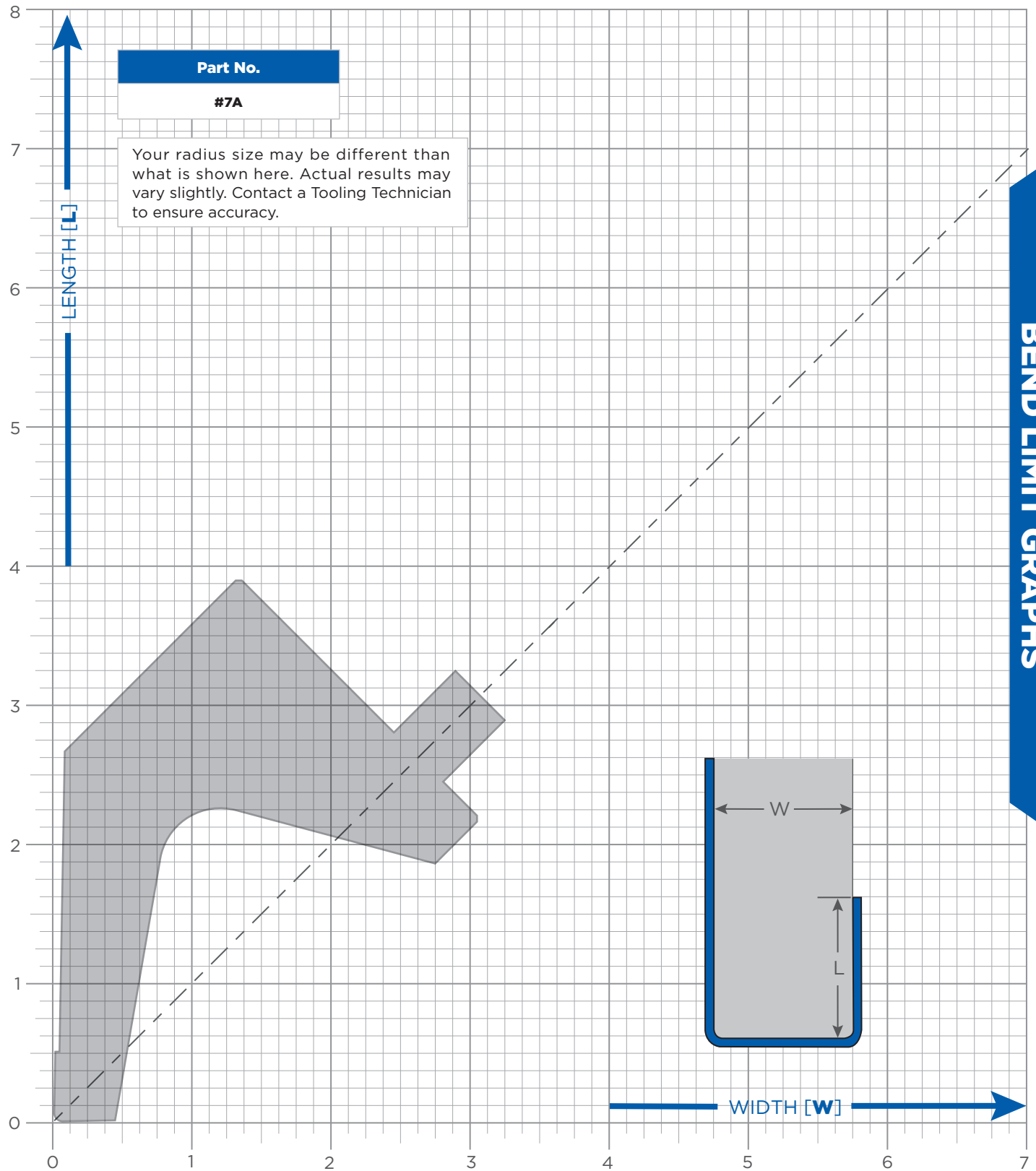
SASH PUNCHES

#9 1"

BEND LIMIT GRAPHS

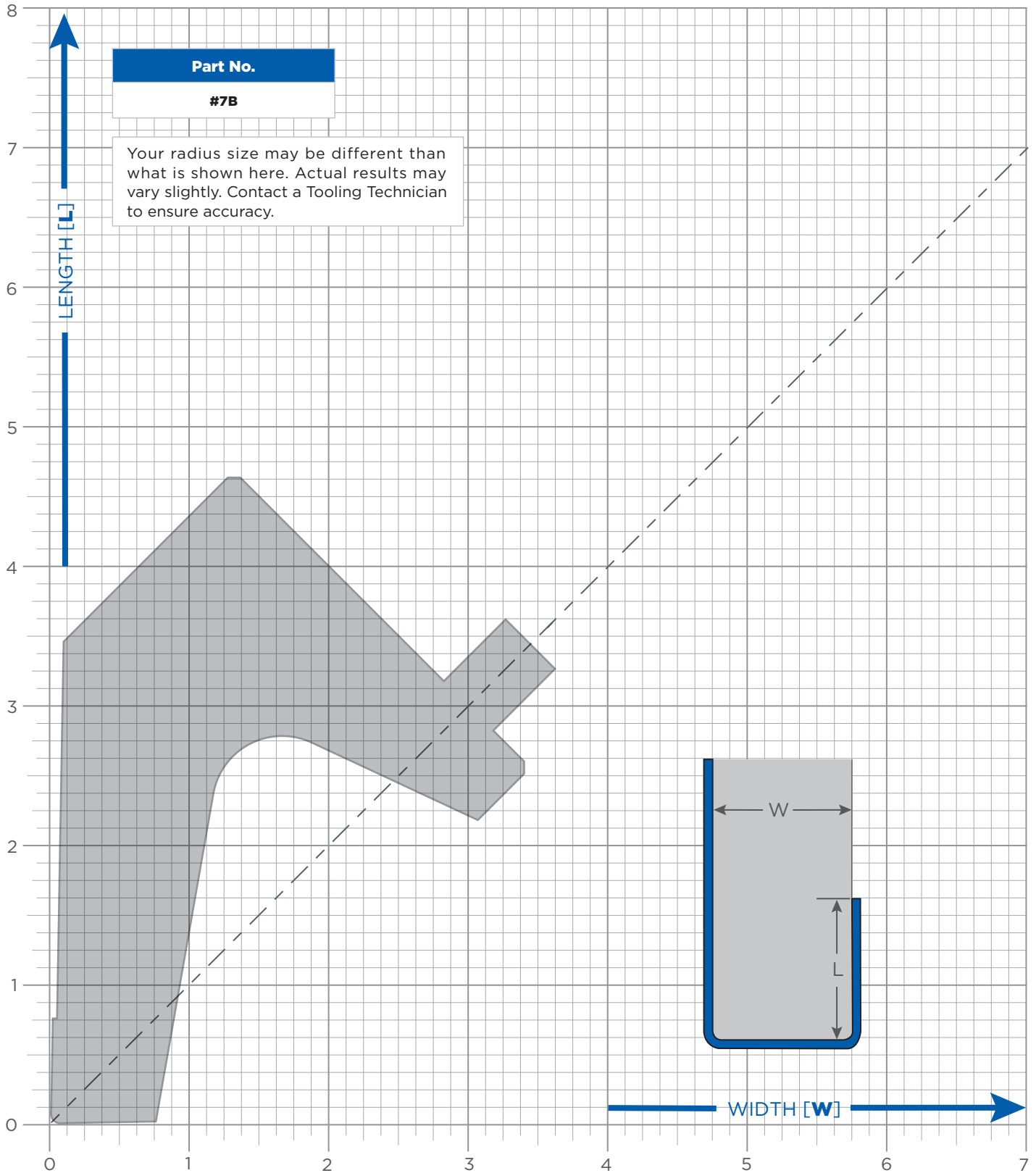


GOOSENECK PUNCH #7A

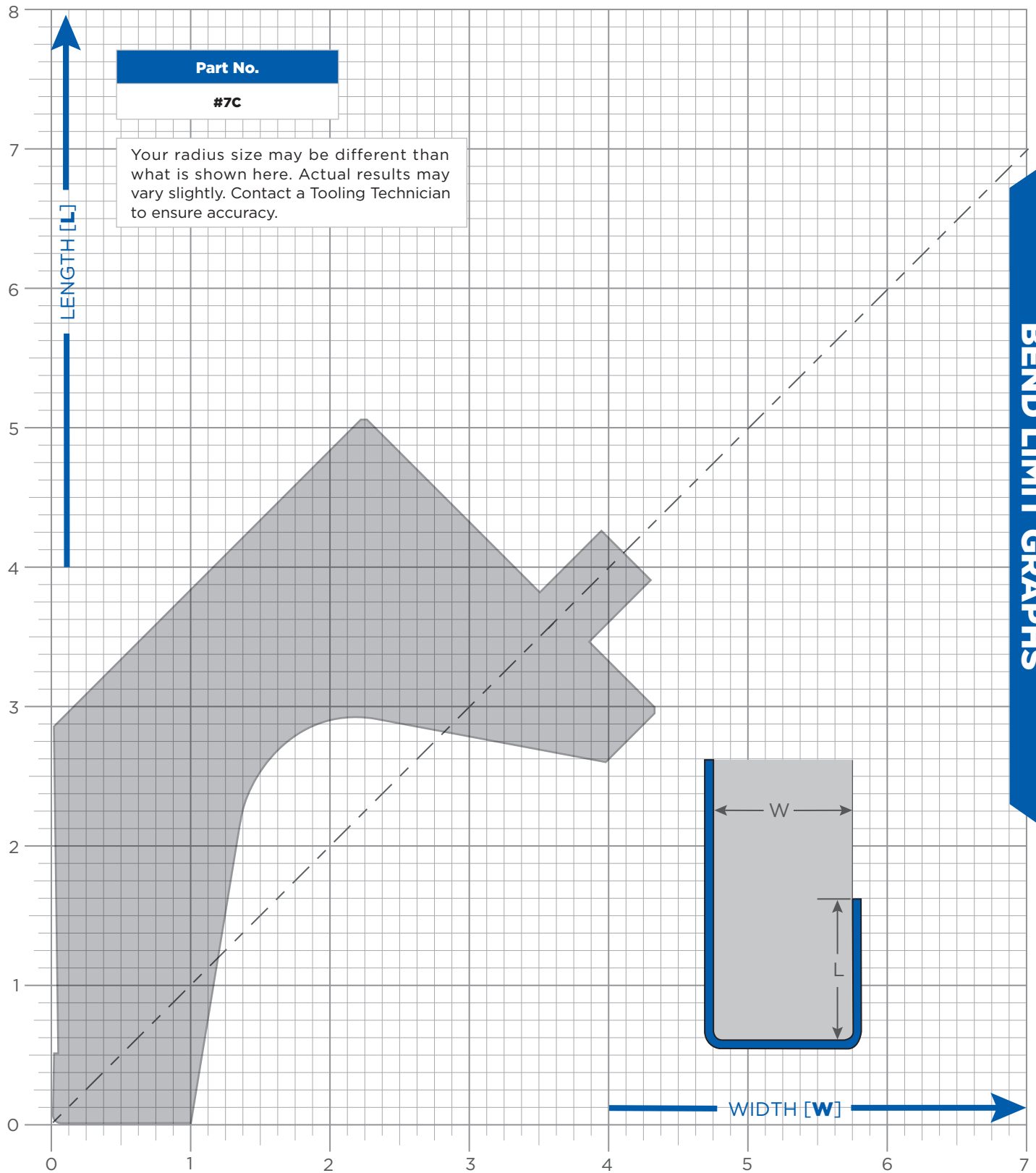


GOOSENECK PUNCH #7B

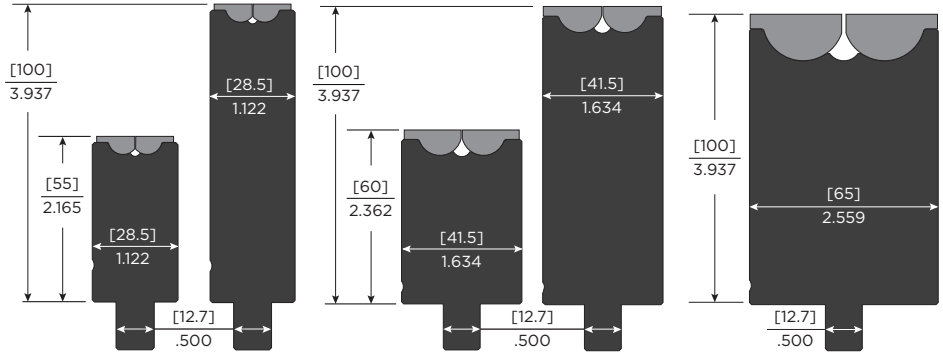
BEND LIMIT GRAPHS



GOOSENECK PUNCH #7C



V-SERIES BLACK (VSB) DIES – MODELS 1, 2 & 2.5



51055 51100
MODEL 1

52060 52100
MODEL 2

525100
MODEL 2.5

Scan QR Code to Watch the Video



MODEL 1	SOLID				SECTIONAL		X1		X2	
Length	9.84" [250mm]		19.68" [500mm]		21.65" [550mm]		10.83" [275mm]		10.83" [275mm]	
Height	55mm	100mm	55mm	100mm	55mm	100mm	55mm	100mm	55mm	100mm
Assembly Part No.	51055-250	51100-250	51055-500	51100-500	51055-550	51100-550	51055x1	51100x1	51055x2	51100x2
Spring	(20 qty.) 980682	(20 qty.) 981031	(40 qty.) 980682	(40 qty.) 981031	(44 qty.) 980682	(44 qty.) 981031	(22 qty.) 980682	(22 qty.) 981031	(22 qty.) 980682	(22 qty.) 981031
Weight	6 lbs.	10 lbs.	11 lbs.	20 lbs.	13 lbs.	22 lbs.	6 lbs.	11 lbs.	6 lbs.	11 lbs.
Insert Part No.	(2) 980872A		(4) 980872A		(2) 980873A & (2) 980874A		(2) 987158A		(2) 987159A	

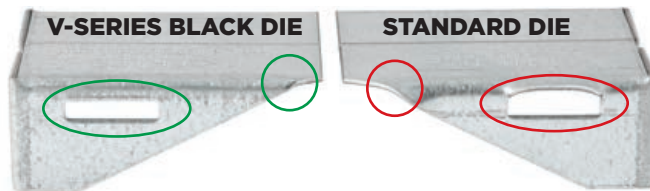
MODEL 2	SOLID				SECTIONAL		X1		X2	
Length	9.84" [250mm]		19.68" [500mm]		21.65" [550mm]		10.83" [275mm]		10.83" [275mm]	
Height	60mm	100mm	60mm	100mm	60mm	100mm	60mm	100mm	60mm	100mm
Assembly Part No.	52060-250	52100-250	52060-500	52100-500	52060-550	52100-550	52060x1	52100x1	52060x2	52100x2
Spring	(20 qty.) 980683	(20 qty.) 981032	(40 qty.) 980683	(40 qty.) 981032	(44 qty.) 980683	(44 qty.) 981032	(22 qty.) 980683	(22 qty.) 981032	(22 qty.) 980683	(22 qty.) 981032
Weight	9 lbs.	14 lbs.	15 lbs.	25 lbs.	17 lbs.	29 lbs.	8 lbs.	14 lbs.	8 lbs.	14 lbs.
Insert Part No.	(2) 980948		(4) 980948		(2) 980949 & (2) 980950		(2) 987160		(2) 987161	

MODEL 2.5	SOLID		X1	X2
Length	9.84" [250mm]		10.83" [275mm]	10.83" [275mm]
Height	100mm		100mm	100mm
Assembly Part No.	525100-250		525100x1	525100x2
Spring	(20 qty.) 981032		(22 qty.) 981032	(22 qty.) 981032
Weight	24 lbs.		27 lbs.	27 lbs.
Insert Part No.	(2) 990646		(2) 990644	(2) 990645

NOT INTENDED FOR MECHANICAL PRESS BRAKES
Control in the press brake stroke is required for consistent results.

Model	Material Thickness inch [mm]	Min. Outside Flange inch [mm]	Ton/ Ft.	Min. Angle	Punch Radius Required @ Min. Angle	Min. Outside Radius @ Min. Angle inch [mm]	Max. Outside Radius @ 90° inch [mm]	US Short Ton/Ft.	Metric Tons/M	kN/M
V-SERIES BLACK (VSB) SPECIFICATIONS										
1	.018 [.45]	.118 [3.0]	1.8	34°	.054	.125 [3.17]	.175 [4.45]	38	112	1100
	.020 [.50]		1.8		.052					
	.024 [.60]		2		.047					
	.032 [.80]	2.5	.036							
	.035 [.90]	3.3	.031							
	.040 [1.0]	4								
	.048 [1.2]	5.8								
.059 [1.5]	.165 [4.2]	9								
2	.075 [1.9]	.335 [8.5]	7	42°	.122	.216 [5.5]	.354 [9.0]	57	168	1650
	.105 [2.7]	.347 [8.8]	13		.112					
	.118 [3.0]	.366 [9.3]	19		.099					
	.126 [3.2]		22	.091						
	.134 [3.4]	25	55°	.082	.276 [7.9]					
2.5	.079 [2.0]	.732 [18.6]	4	46°	.368	.447 [11.35]	.500 [12.7]	84	250	2450
	.157 [4.0]		16		.221	.378 [9.6]				
	.197 [5.0]		28	55°	.146	.343 [8.71]				

Model	Shoulder Radius inch [mm]	Desired Angle	Theoretical V inch [mm]	Center Line of Inserts inch [mm]
V-OPENING AND SHOULDER RADIUS DIMENSIONS				
1	.043 [1.1]	90°	.283 [7.2]	.315 [8]
		34°	.256 [6.5]	
2	.050 [1.3]	90°	.547 [13.9]	.591 [15]
		42°	.524 [13.3]	
2.5	.079 [2.0]	90°	1.037 [26.3]	1.102 [28]
		55°	1.007 [25.6]	

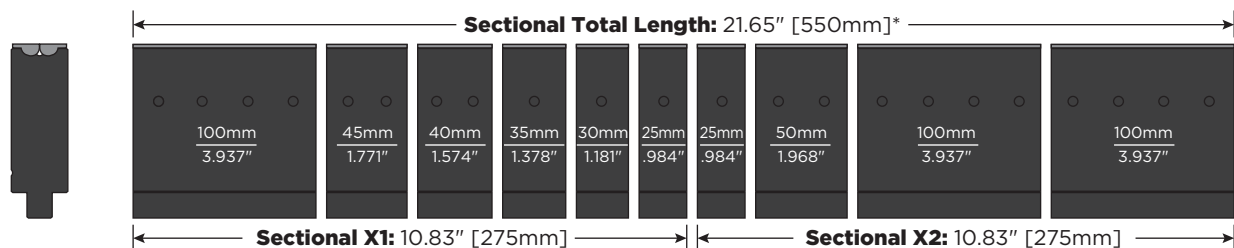


DESCRIPTION	Part No.
INSTALLATION TOOLS	
Spring Installation Tool Kit	981002
Spring Extension Wire (short)	981003
Spring Extension Wire (long)	981004

V-Series Black (VSB) Standard Lengths

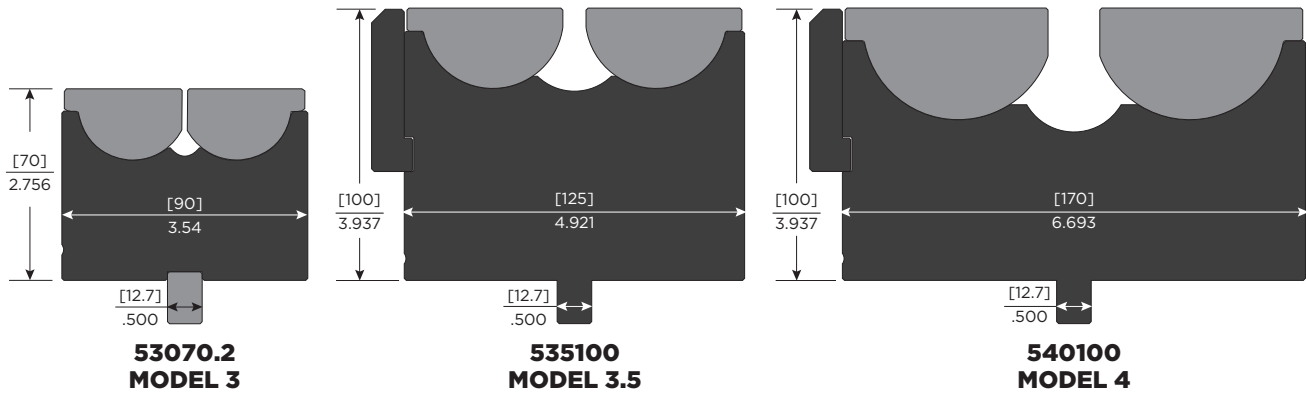
Models 1, 2 & 2.5

Solid Length Available: 19.68" [500mm] and 9.84" [250mm]



*550mm sectional length not available in Model 2.5

V-SERIES BLACK (VSB) DIES – MODELS 3, 3.5 & 4



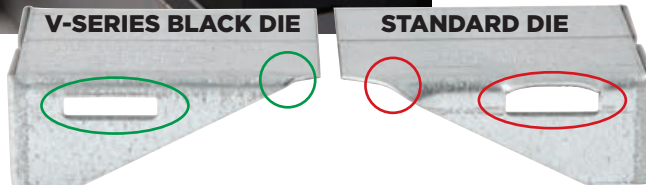
MODEL 3	SOLID		SECTIONALIZED	
Length	3.94" [100mm]	9.84" [250mm]	17.91" [455mm]	10.04" [255mm]
Height	70mm	70mm	70mm	70mm
Assembly Part No.	53070.2-100	53070.2-250	53070.2-455	53070.2x1
Spring	(4 qty.) 980881	(8 qty.) 980881	(18 qty.) 980881	(10 qty.) 987315
Weight	11 lbs.	27 lbs.	47 lbs.	19 lbs.
Insert Part No.	(2) 987163	(2) 980959	(2) 987162 & (4) 987163	(2) 987162

MODEL 3.5	SOLID		X1
Length	3.94" [100mm]	9.84" [250mm]	10.04" [255mm]
Height	100mm	100mm	100mm
Assembly Part No.	535100-100	535100-250	535100x1
Spring	(4 qty.) 990656	(10 qty.) 990656	(10 qty.) 990656
Weight	20 lbs.	51 lbs.	52 lbs.
Insert Part No.	(2) 990650	(2) 990651	(2) 990648

MODEL 4	SOLID		X1
Length	3.94" [100mm]	9.84" [250mm]	10.04" [255mm]
Height	100mm	100mm	100mm
Assembly Part No.	540100-100	540100-250	540100x1
Spring	(4 qty.) 990657	(10 qty.) 990657	(10 qty.) 990657
Weight	25 lbs.	62 lbs.	64 lbs.
Insert Part No.	(2) 990653	(2) 990654	(2) 990652

NOT INTENDED FOR MECHANICAL PRESS BRAKES
Control in the press brake stroke is required for consistent results.

Model	Material Thickness inch [mm]	Min. Outside Flange inch [mm]	Ton/ Ft.	Min. Angle	Punch Radius Required @ Min. Angle	Min. Outside Radius @ Min. Angle inch [mm]	Max. Outside Radius @ 90° inch [mm]	US Short Ton/Ft.	Metric Tons/M	kN/M
V-SERIES BLACK (VSB) SPECIFICATIONS										
3	.157 [4.0]	.886 [22.5]	12	65°	.078	.453 [11.5]	.625 [15.9]	84	250	2450
	.187 [4.75]		26		.094					
	.250 [6.35]		30		.125					
3.5	.236 [6.0]	1.476 [37.5]	15	75°	.031	.267 [6.78]	.945 [24]	84	250	2450
	.315 [8.0]		29			.346 [8.79]				
	.394 [10.0]		49			.425 [10.8]				
4	.236 [6.0]	2.126 [54]	9	78°	.031	.267 [6.78]	1.433 [36.4]	101	300	2942
	.315 [8.0]		17	76°		.346 [8.79]				
	.472 [12.0]		44	73°		.503 [12.78]				



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Model	Shoulder Radius inch [mm]	Desired Angle	Theoretical V inch [mm]	Center Line of Inserts inch [mm]
V-OPENING AND SHOULDER RADIUS DIMENSIONS				
3	.236 [6.0]	90°	1.299 [33.0]	1.496 [38]
		65°	1.236 [31.4]	
3.5	.138 [3.5]	90°	2.248 [57.1]	2.362 [60]
		75°	2.226 [56.6]	
4	.236 [6.0]	90°	3.151 [80.0]	3.346 [85]
		73°	3.108 [79.0]	

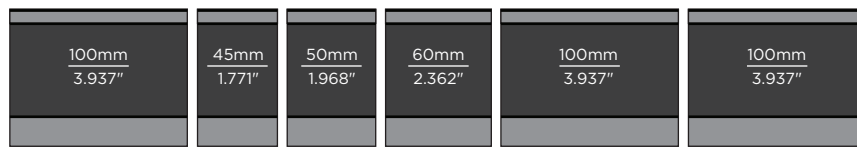
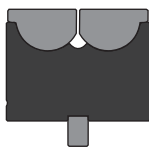


DESCRIPTION	Part No.
INSTALLATION TOOLS	
Spring Installation Tool Kit	981002
Spring Extension Wire (short)	981003
Spring Extension Wire (long)	981004

V-Series Black (VSB) Standard Lengths

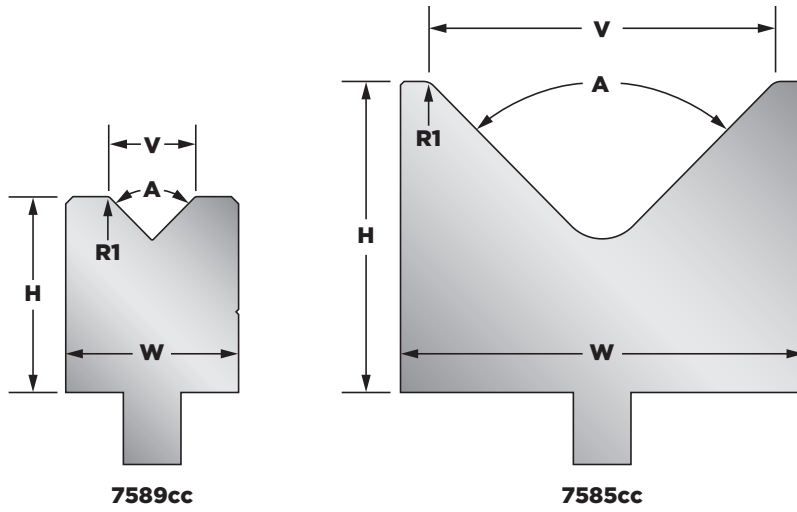
Models 3, 3.5 & 4

Solid Length Available: 9.84" [250mm] and 3.937" [100mm]



Sectional X1: 10.04" [255mm]

BLOCK DIES



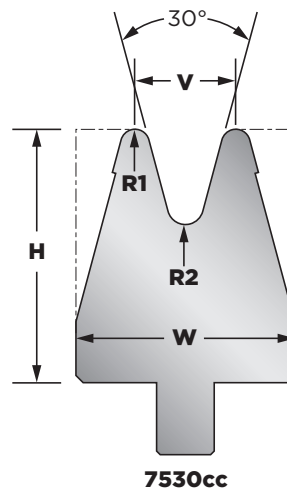
DIES

Part No.	A Angle	V-Opening inch [mm]	H Height inch [mm]	W Width inch [mm]	R1 Sh. Rad. inch [mm]	Weight per foot lbs.	
SERIES 7589cc							
#2 1/4"	85° 88° 89° 90°	.250 [6.4]	1.7 [43.2]	1.0 [25.4]	.031 [0.8]	7	
#2 3/8"		.375 [9.5]	1.7 [43.2]	1.0 [25.4]		7	
#2 1/2"		.500 [12.7]	1.7 [43.2]	1.0 [25.4]	.062 [1.6]	7	
#2 5/8"		.625 [15.9]	1.7 [43.2]	1.25 [31.8]		9	
#2 3/4"		.750 [19.1]	1.7 [43.2]	1.5 [38.1]		10	
#2 7/8"		.875 [22.2]	1.7 [43.2]	1.5 [38.1]		10	
#4 1"		1.00 [25.4]	1.7 [43.2]	1.5 [38.1]		10	
#4 1-1/8"		1.125 [28.6]	1.7 [43.2]	1.5 [38.1]		10	
#4 1-1/4"		1.25 [31.8]	2.2 [55.9]	2.0 [50.8]		.094 [2.4]	15
SERIES 7585cc							
#4 1-1/2"	85° 88° 89° 90°	1.5 [38.1]	2.2 [55.9]	2.0 [50.8]	.125 [3.2]	15	
#4 2"		2.0 [50.8]	2.2 [55.9]	2.5 [63.5]	.188 [4.8]	17	
#4 2-1/2"		2.5 [63.5]	2.2 [55.9]	3.0 [76.2]	.250 [6.4]	18	
#4 3"		3.0 [76.2]	2.7 [68.9]	3.5 [88.9]		24	
#4 4"		4.0 [101.6]	4.25 [108]	5.0 [127.0]		54	

V openings larger than 4" are available.

Outside widths shown are bar sizes prior to cleanup.

ACUTE DIES



Part No.	A Angle	V V-Opening inch [mm]	H Height inch [mm]	W Width inch [mm]	R1 Sh. Rad. inch [mm]	R2 V Rad. inch [mm]	Weight per foot lbs.
SERIES 7530cc							
#20 1/4"	30°	.250 [6.4]	1.7 [43.2]	1.0 [25.4]	.045 [1.1]	.030 [0.8]	5
#20 3/8"		.375 [9.5]	1.7 [43.2]	1.0 [25.4]			5
#20 1/2"		.500 [12.7]	1.7 [43.2]	1.0 [25.4]	.063 [1.6]	.063 [1.6]	5
#22 5/8"		.625 [15.9]	2.2 [55.9]	1.5 [38.1]			14
#22 7/8"		.750 [19.1]	2.2 [55.9]	2.0 [50.8]	.125 [3.2]	.156 [4.0]	14
#22 1"		1.00 [25.4]	2.7 [68.6]	2.0 [50.8]			14
#22 1-1/4"		1.25 [31.75]	2.7 [68.6]	2.5 [63.5]	.156 [4.0]	.188 [4.8]	19
#22 1-1/2"		1.5 [38.1]	2.7 [68.6]	3.0 [76.2]			.250 [6.4]

V openings larger than 1.50" are available.

Dotted lines indicate the Heavy Duty concept — available on all acute dies.

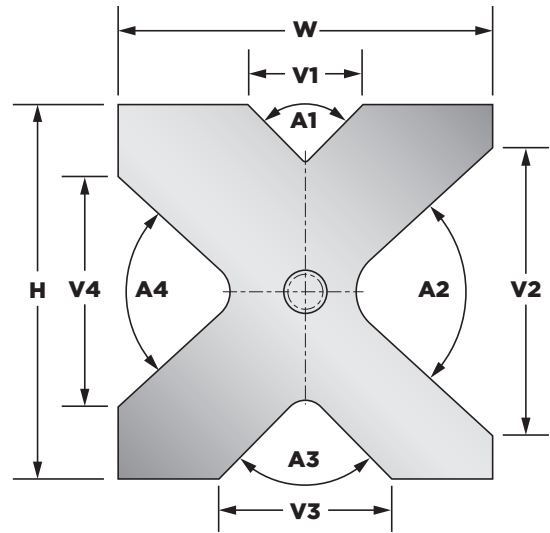
Outside widths shown are bar sizes prior to cleanup.

4-WAY DIES

For quick die changes where multiple bends are required. All dies are supplied with tapped holes on each end for lifting. **HOLDER REQUIRED** or alternative method of securing die should be considered.

IMPORTANT: When ordering, indicate if you are matching an existing 4-way die holder to ensure fitment.

Special angles and configurations are made to order. Provide us with your dimensions and we can make it.

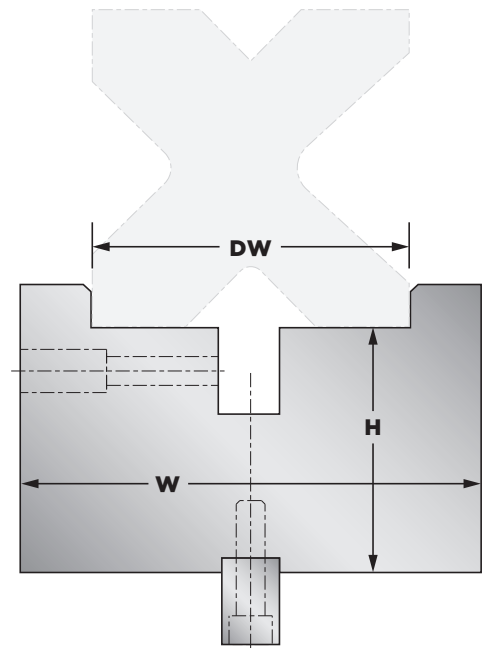


Part No.	Angles				V-Openings				H Height	W Width	Weight per foot lbs.
	A1	A2	A3	A4	V1	V2	V3	V4			
SERIES 754wdc											
#4A4	89°	85°	89°	89°	3/4"	1-1/2"	7/8"	1-1/8"	2-1/4"	2-1/4"	13
#4B4	89°	85°	89°	85°	7/8"	2"	1-1/8"	1-1/2"	2-3/4"	2-3/4"	19
#4C4	89°	85°	85°	85°	1"	2-1/2"	1-1/2"	2"	3-1/4"	3-1/4"	24
#4D4	89°	85°	85°	85°	1-1/8"	3"	1-1/2"	2"	3-5/8"	3-5/8"	29
#4E4	85°	85°	85°	85°	1-1/2"	4"	2"	3"	5-1/4"	5-1/4"	56

4-WAY DIE ADAPTERS

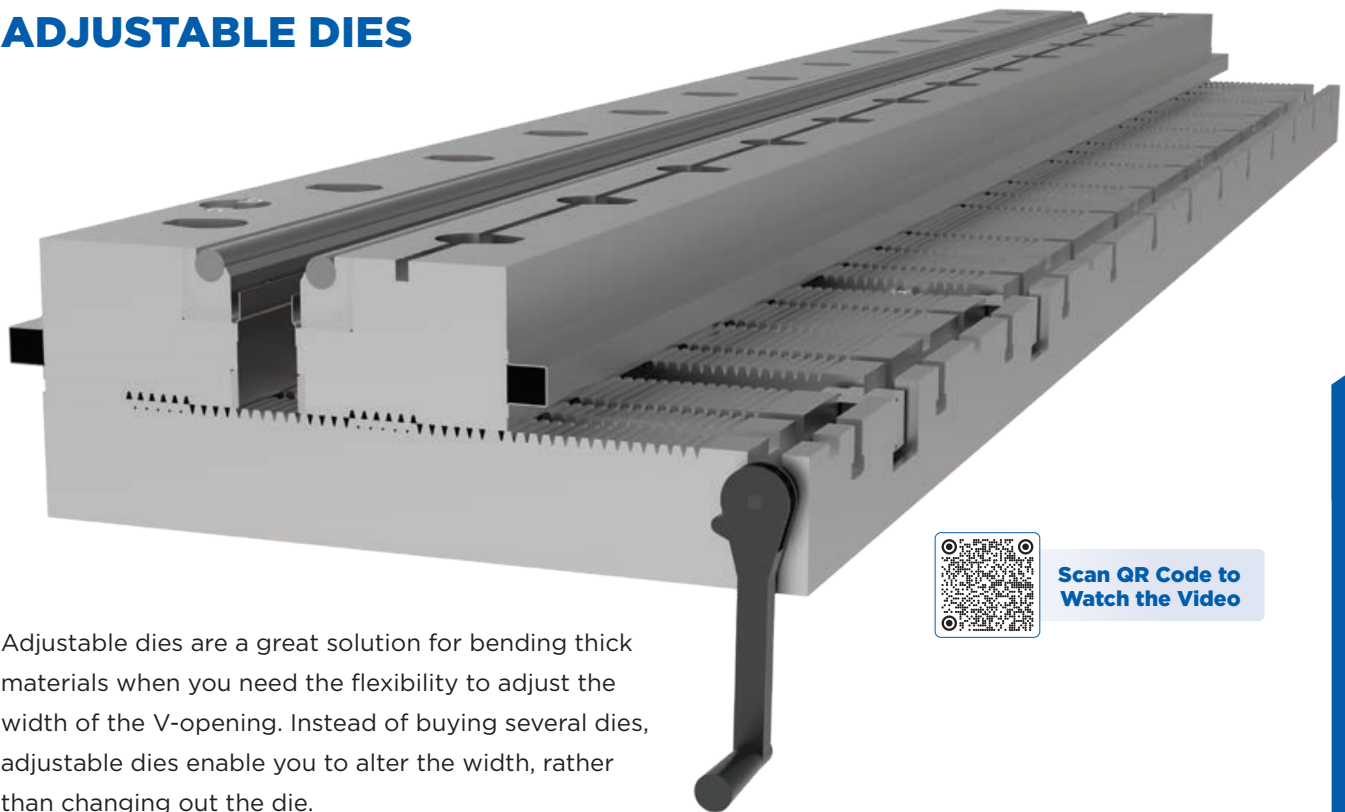
Part No.	H Height	W Width	DW Die Opening	Weight per foot
SERIES 754whc — ADAPTERS				
4A	2"	3-1/2"	2.28	35 lbs.
4B	2"	4"	2.78	40 lbs.
4C	2-1/2"	4-1/2"	3.28	50 lbs.
4D	2-1/2"	5"	3.65	50 lbs.
4E	2-1/2"	6-1/2"	5.28	70 lbs.

Screw holes in 4-way adapters are 3/8" 16 on 12" centers. Specify if die tang is required.



Outside widths shown are bar sizes prior to cleanup.

ADJUSTABLE DIES



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Adjustable dies are a great solution for bending thick materials when you need the flexibility to adjust the width of the V-opening. Instead of buying several dies, adjustable dies enable you to alter the width, rather than changing out the die.

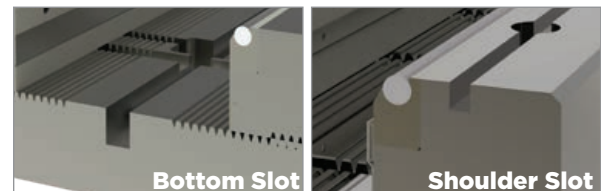
Adjustable Die Features

- Riding on spring-loaded ball bearings, openings are easily adjusted by one operator
- Available openings range from 1 to 26 inches and can be adjusted in 1-inch increments
- Capable of withstanding tonnage of up to 400 tons per foot, allowing easy thick material bending
- Induction hardened and hard chrome rollers help reduce required tonnage by as much as 20%
- Chrome rollers can be replaced at your facility

Adjustable Die Options

- Die assembly can be configured to remain on the press permanently and function as a standard die holder
- Cover bellows are available to keep the grooves that are used to adjust the dies free from dirt and dust
- Available clamping options for side blocks include manual and automated release and/or movement
- Available with Manual, Ball Screw, Hydraulic and CNC options

Die Holder Slots



Opening Adjustments



Shoulder Inserts



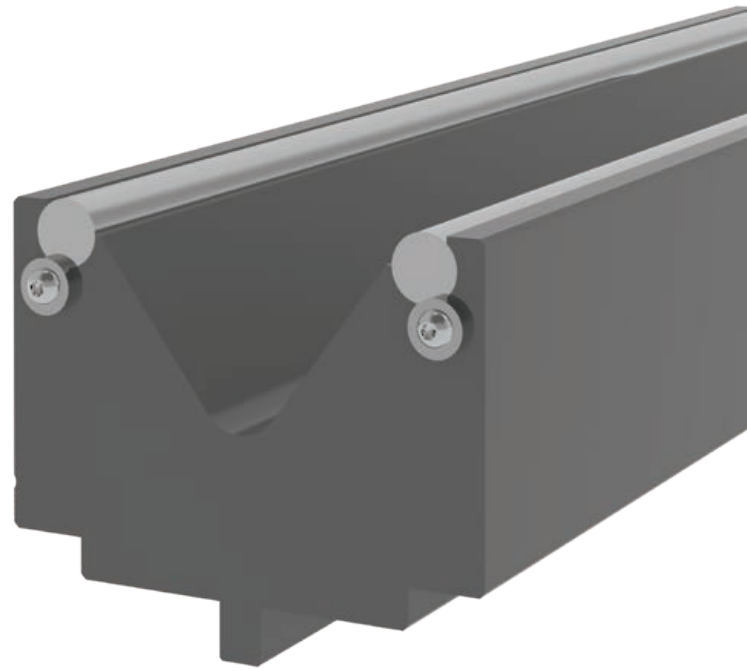
REPLACEABLE SHOULDER DIES

Dies that have a replaceable shoulder radius are ideal for extreme wear conditions like heavy plate and abrasive materials. Replacing the shoulder insert saves on replacement cost.

Since the radius is able to rotate during bending, friction and tonnage are reduced, resulting in reduced part marking and less tonnage on tooling and machinery.



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Thick Material Solutions



DOVETAIL HOLDER AND RADIUS

Lighten Your Load with Two-Piece Punches

Replaceable radius punches help limit tooling costs, reduce setup time and lighten tool changes. Tip inserts simply slide on and off the universal punch body, increasing the flexibility of each punch and minimizing heavy lifting for the operator.

Replaceable Radius Punch Highlights

- Setup is as simple as sliding the tip insert on and off the tool body
- No adjustment is required between punch radius changes
- Tip is lighter than a standard punch for easier tool changes
- Lighter tools reduces need for multiple operators
- Lighter tools creates a safer handling environment for operators
- Tool costs are minimized when purchasing one body with multiple tips
- Various angles and radii can be loaded into the same punch holder

Details

- Made to suit specific needs
- Designed to tackle light- or heavy-duty bending
- Ground and induction hardened for optimal life and performance
- Dovetail or T Style attachment feature



Dovetail

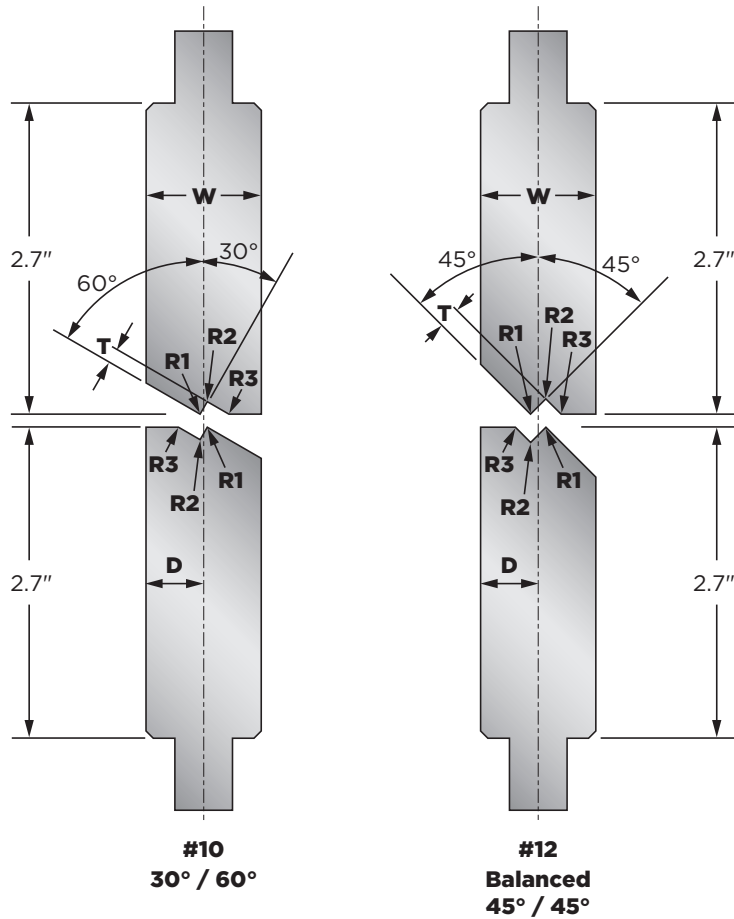
T Style



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OFFSET PUNCH & DIE SETS

For producing two 90° bends simultaneously.



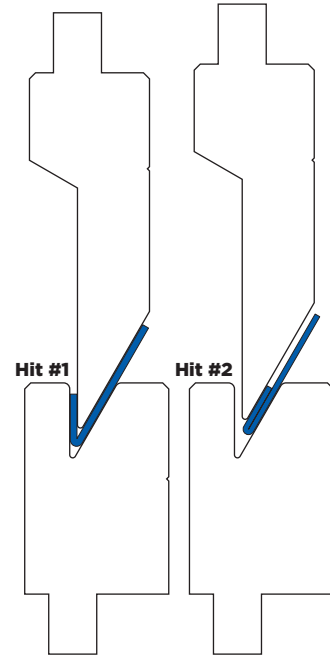
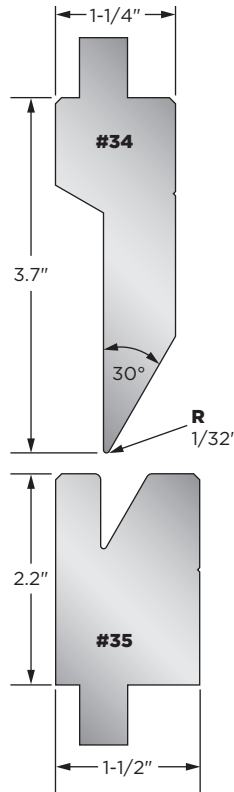
Set Part No.	Angle	T Offset inch [mm]	W Width inch [mm]	Effective V inch [mm]	R1/R2 Radius inch [mm]	R3 Shoulder Radius inch [mm]	D Centerline inch [mm]	Weight per foot lbs.
SERIES 731cc								
#10 3/16"	30°/60°	3/16 [4.8]	1.0 [25.4]	.133 [3.4]				
#12 1/4"	45°/45°	1/4 [6.4]	1.0 [25.4]	.354 [9]	1/64 [0.4]	1/64 [0.4]	1/2 [12.7]	20
#12 5/16"		5/16 [8]	1.0 [25.4]	.441 [11.2]				
#12 3/8"		3/8 [9.5]	1.25 [31.8]	.530 [13.5]				
#12 1/2"		1/2 [12.7]	1.25 [31.8]	.707 [18]			5/8 [15.9]	26
#12 5/8"		5/8 [15.9]	1.5 [38.1]	.884 [22.5]	1/32 [0.8]	1/32 [0.8]	3/4 [19.1]	32
#12 3/4"		3/4 [19.1]	2 [50.8]	1.061 [26.9]				
#12 7/8"		7/8 [22.2]	2 [50.8]	1.237 [31.4]			1.0 [25.4]	39
#12 1"		1 [25.4]	2 [50.8]	1.414 [35.9]				

Outside widths shown are bar sizes prior to cleanup.

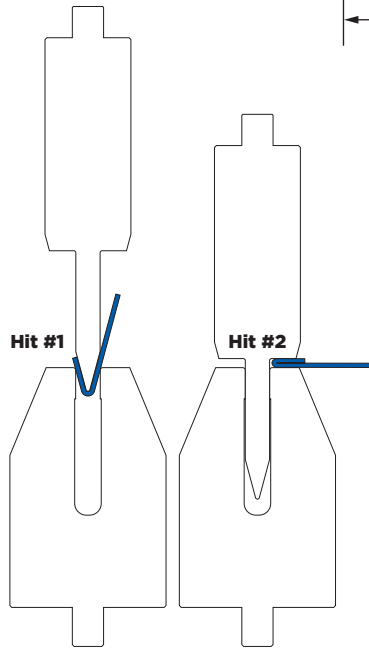
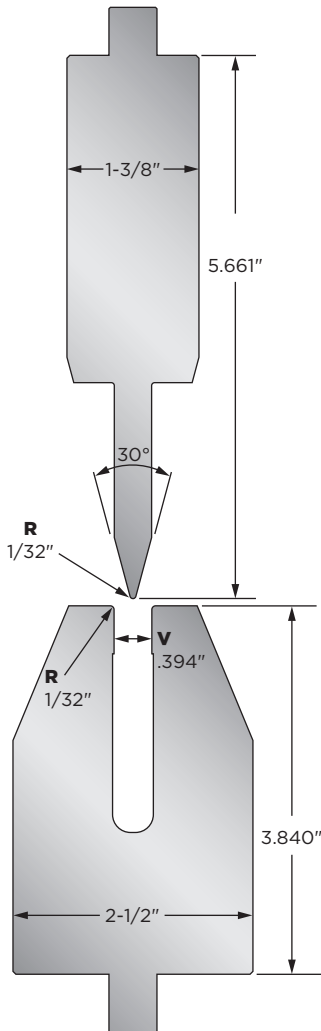
HEMMING PUNCH & DIE SETS

For bending and crimping the edge of a sheet 18 gauge or lighter. (For heavier material, contact our tooling technicians.) Two strokes produce a flattened hem.

HEMMING



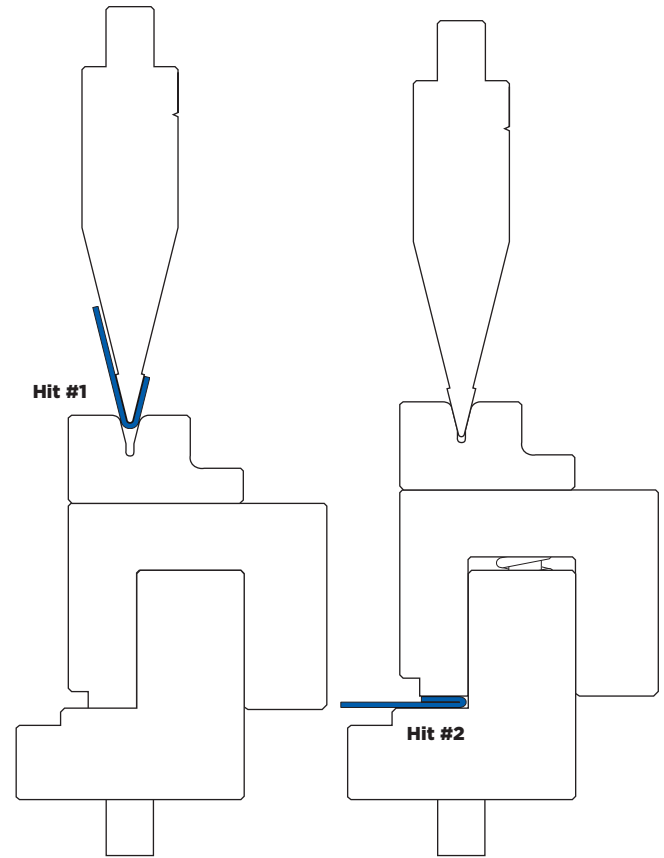
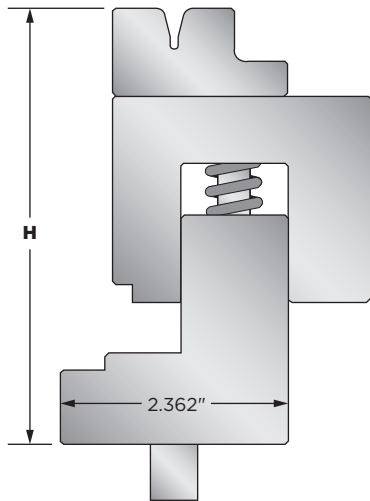
Note: Hit #2 does not penetrate as far as Hit #1 since there are two material thicknesses.



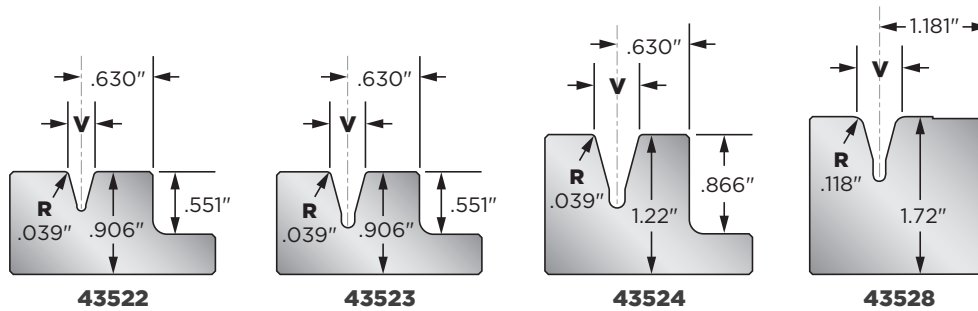
Set Part No.	Description	Tonnage Capacity per foot	Weight per foot lbs.
5.75" TWO STAGE HEMMING PUNCH & DIE SET			
51919	Punch	25	18
53594	Die	21	28

Outside widths shown are bar sizes prior to cleanup.

HEMMING AND REPLACEMENT V-BLOCKS



Part No.	V inch [mm]	H Height inch [mm]	Tonnage Capacity per foot	Weight per foot lbs.
TWO STAGE HEMMING DIE				
42601c	.236 [6.0]	4.587 [116.5]	20	31
42602c	.315 [8.0]	4.587 [116.5]		
42603c	.394 [10.0]	4.902 [124.5]	25	38
42608c	.394 [10.0]	5.402 [137.2]		



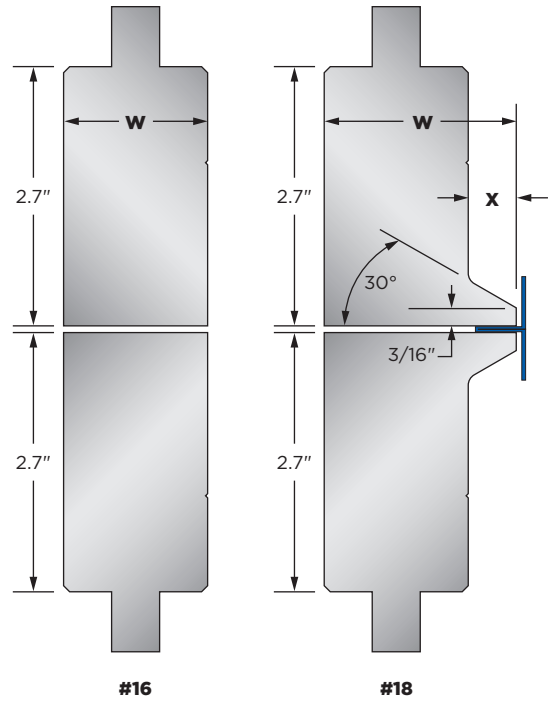
Part No.	V V-Opening inch [mm]	H Height inch [mm]	R Sh. Radius inch [mm]	Tonnage Capacity per foot	Weight per foot lbs.
HEMMING REPLACEMENT V-BLOCKS					
43522	.236 [6.0]	.906 [23.0]	.039 [1.0]	20	4.4
43523	.315 [6.0]				
43524	.394 [10.0]	1.22 [31.0]	.118 [3.0]	25	11
43528	.394 [10.0]	1.72 [43.7]			

HEMMING

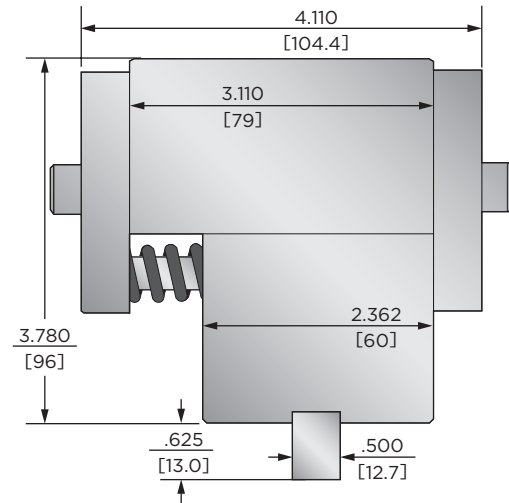
FLATTENING DIES

FLATTENING

Set Part No.	H Height inch [mm]	W Width inch [mm]	X inch [mm]	Weight per foot lbs.
SERIES 705cc				
#16 1-1/2"	2.7 [68.58]	1.5 [38.1]	—	29
#16 2"		2 [50.8]	—	39
#16 2-1/2"		2.5 [63.5]	—	51
#18 2"		1.875 [47.63]	1/2 [12.7]	29
#18 2-1/2"		2.375 [60.33]	3/4 [19.05]	27

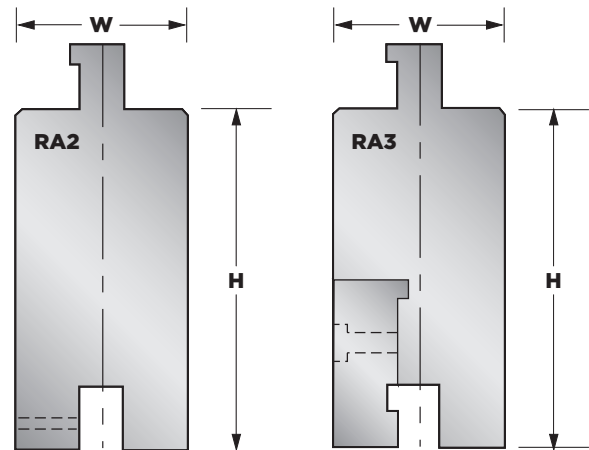
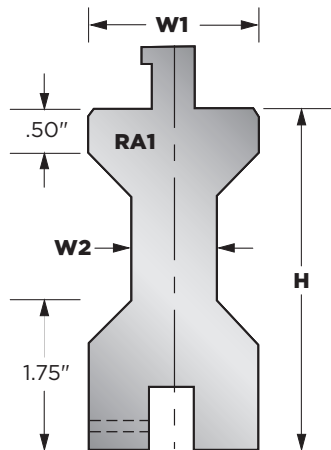


Part No.	H Height inch [mm]	Max. Ton ft. [m]	Weight per foot lbs.
THRUST ABSORBING FLATTENING DIE			
42311c	3.78 [96]	30 [100]	43.08



Outside widths shown are bar sizes prior to cleanup.

PUNCH HOLDERS



Part No.	Width		H Height		
	W1	W2			
RA1	1-1/2"	.62"	3-5/8"	4-1/8"	5-1/8"
	2"	1"			
	2-1/2"	1-1/4"			

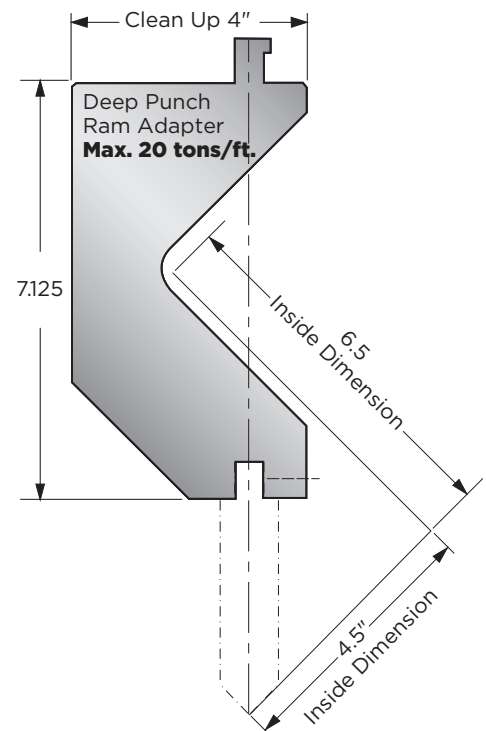
Part No.	W Width	H Height		
RA2	1-1/2"	3-5/8"	4-1/8"	5-1/8"
	2"			
	2-1/2"	4-1/8"	5-1/8"	
	3"			
RA3	2"	3-5/8"	4-1/8"	5-1/8"
	2-1/2"			
	3"	3-3/4"	4-1/8"	

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

Outside widths shown are bar sizes prior to cleanup.

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 tooling technicians for price and lead time.



EXPRESS CROWNING® SYSTEM



Scan QR Code for More Crowning

The Express Crowning® system is the precise and consistent option for controlling deflection in your press brake.

The Express Crowning system crowns the beam overall and in smaller, micro-crown adjustments for fine tuning. It provides a new bending surface for your brake and the ability to adjust the height so that your upper and lower beam are parallel.

Like all Wilson Tool products, the Express Crowning system is built to last. Its body is hardened to 28-32 HRC, which makes it substantially tougher than the competition.

The system offers two choices of control for die securing:

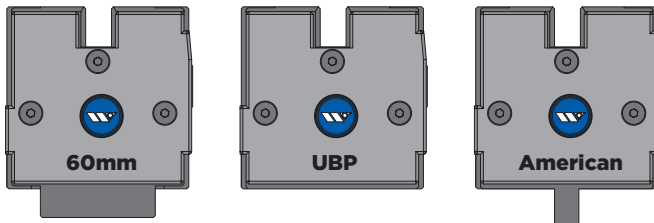
- Set screws every inch on center for manual tightening
- Hydraulic control with 8mm diameter pins every 0.837" [21.25mm]

And, two choices for crowning power:

- Easily removable **HAND CRANK** with digital display in imperial or metric
- **ELECTRIC MOTOR** to crown the beam using the machine's CNC control

Key Features

- OEM or aftermarket mounting
- Micro crowning every 200mm
- Adjustable 0-0.130" [0-3.3mm]



	LENGTH	PART NO.
M/H = ACTUATION M = Manual H = Hydraulic 90 = 90mm	2380mm / 94" / 7.8 ft.	AD M/H 2380-20 XXC XWIL
	2423mm / 95" / 7.9 ft.	AD M/H 2423-20 XXC XWIL
	2550mm / 100" / 8.4 ft.	AD M/H 2550-20 XXC XWIL
	2720mm / 107" / 8.9 ft.	AD M/H 2720-20 XXC XWIL
XX = MOUNT STYLE UB = UBP AM = American 60 = 60mm 90 = 90mm	3038mm / 120" / 10.0 ft.	AD M/H 3038-20 XXC XWIL
	3060mm / 120" / 10.0 ft.	AD M/H 3060-20 XXC XWIL
	3230mm / 127" / 10.6 ft.	AD M/H 3230-20 XXC XWIL
	3570mm / 141" / 11.7 ft.	AD M/H 3570-20 XXC XWIL
	3655mm / 144" / 12.0 ft.	AD M/H 3655-20 XXC XWIL
X = ADJUST L = Crowning Left R = Crowning Right	4080mm / 161" / 13.4 ft.	AD M/H 4080-20 XXC XWIL
	4250mm / 167" / 13.9 ft.	AD M/H 4250-20 XXC XWIL
	4590mm / 181" / 15.1 ft.	AD M/H 4590-20 XXC XWIL

Additional lengths available upon request. Lengths shown indicate the actual clamping surface. Add the length of the end cap to get the overall length.



AVAILABLE FOR HEAVY DUTY APPLICATIONS!

Actuation Options

Hand crank drive, electric motor, mount kit sold separately from beam.



Hand Crank Drive

PART NO.
987341

Electric Drive

- Power cord included
- Specify voltage

VOLTAGE	PART NO.
3-PHASE 60HZ	
230V	CNC-323060
460V	CNC-346060
3-PHASE 50HZ	
230V	CNC-323050
400V	CNC-340050

SPECIAL TOOLING



EUROPEAN



WT-STYLE



AMERICAN



RFA-STYLE

CHALLENGE OUR “NEVER SAY NO” ATTITUDE

We regularly help customers with their most challenging applications. Our innovative solutions simplify complex bends and make the impossible possible. We are defined by our “never say no” attitude. Bring us your most complex problem and we will work with you until we’ve found an effective solution.

Quality Materials — Quality Control

We combine premium materials with specialized manufacturing systems to produce extraordinary products that outlast the competition.

Quick Quotes — Short Lead Times

With the fastest lead times in the industry, our tool might ship before the competition even provides a quote.

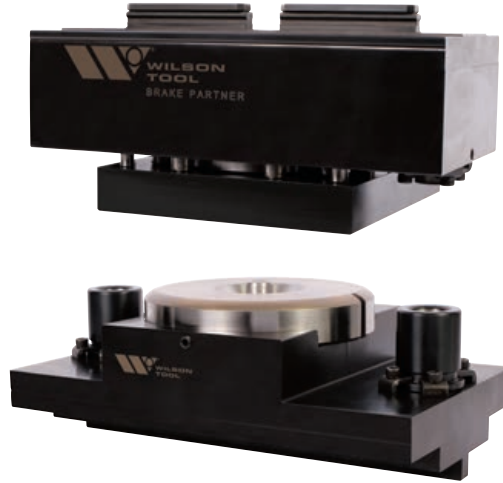


BRAKE PARTNER®

Make Punch Press Forms in the Press Brake

For fabricators who have migrated away from punch presses to laser cutting machines, or for those whose punch presses are running at full capacity, Brake Partner® from Wilson Tool International is an especially helpful solution.

Brake Partner, manufactured to fit in virtually any press brake, features a pressure-pad system which provides blank-holding and stripping, and can be used with or without guide posts, depending on the application.



Enjoy These Cost Saving Benefits

- Reduce press brake special tooling costs
- Punch press tooling has shorter lead times
- Put your existing press brakes to work on applications that were previously impossible on a punching machine
- Reduce outsourcing of punching applications
- Streamline equipment usage and create more flexibility in your shop

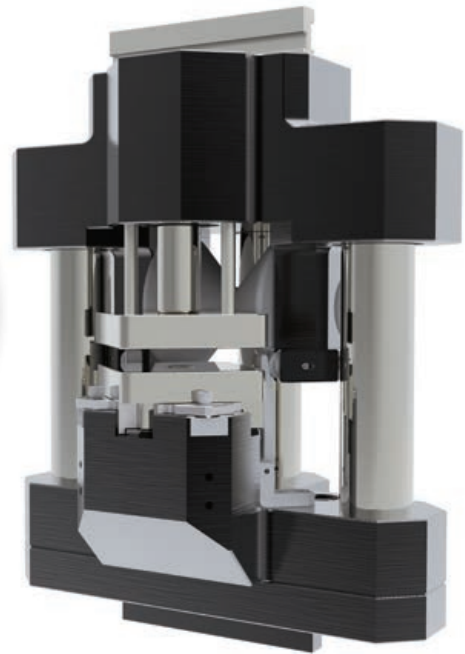
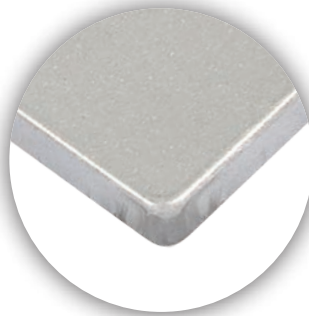


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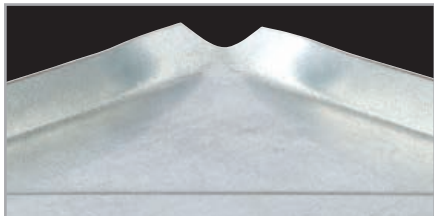
CORNER FORMER

To make a four-sided tray or door, the sides would traditionally be folded, the corners welded and the joint ground, to produce an acceptable finish. This process is time consuming, costly and requires a certain skill set.

The Corner Former from Wilson Tool International allows you to use your existing press brake to bend up the corners, form the corners and then crop the edges to leave a clean, finished look without the need for welding, grinding and finishing.

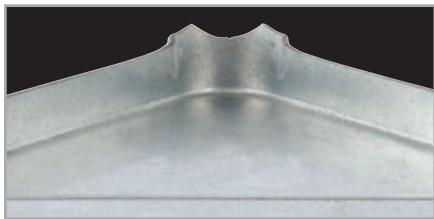


3 SIMPLE STEPS TO A FINISHED CORNER



Step 1: Bend with Flare

All four corners are bent like any other part except your standard die will have an engineered relief to achieve an intentionally flared bend at the ends.



Step 2: Corner Former

After the engineered flare, the part is moved to the corner forming step to roll the edge. You now have a complete corner with extra material that needs to be trimmed.



Step 3: Corner Cropper/Trim

In a quick and simple one-hit action, the corner cropper cuts the extra material flush to the edges of the tray or door. You have now made your part in one handling with little or no additional post processing needed.



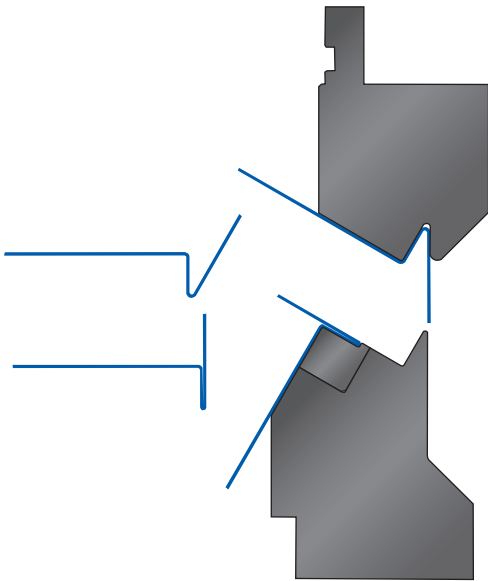
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Scan QR Code to See
How Much You Can Save

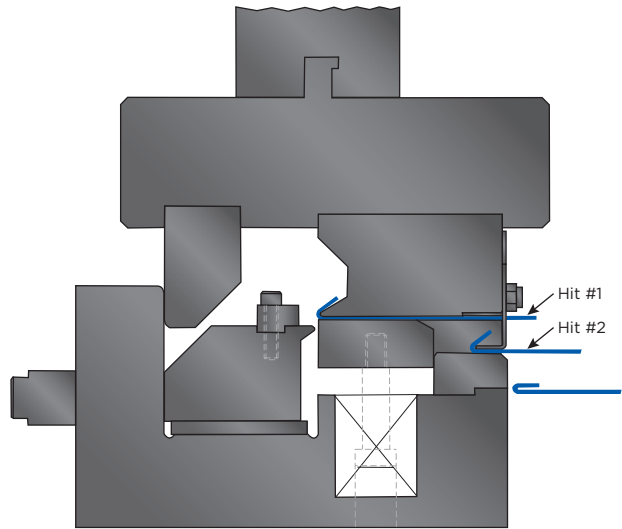


CUSTOM HEMMING

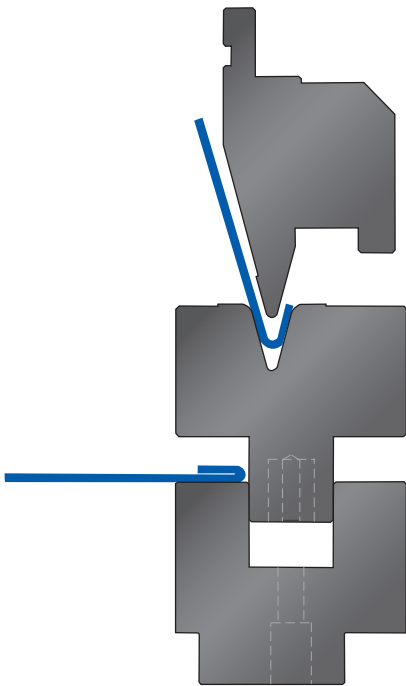


AH1 — ANGLE HEM

Typically used to form seams in excess of 1/2 inch.

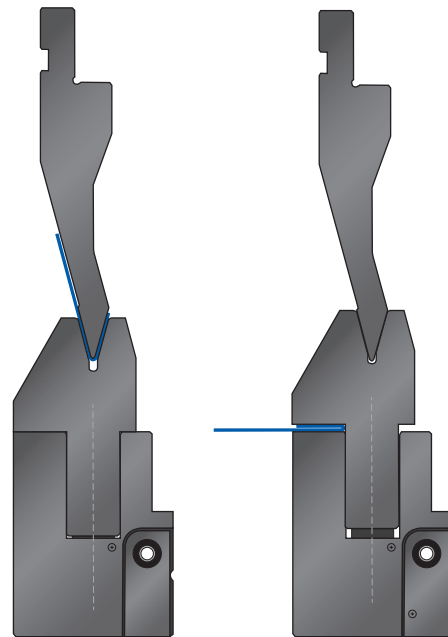


FSH1 — FLAT SHEET HEM



HDH1 — HEAVY DUTY HEM

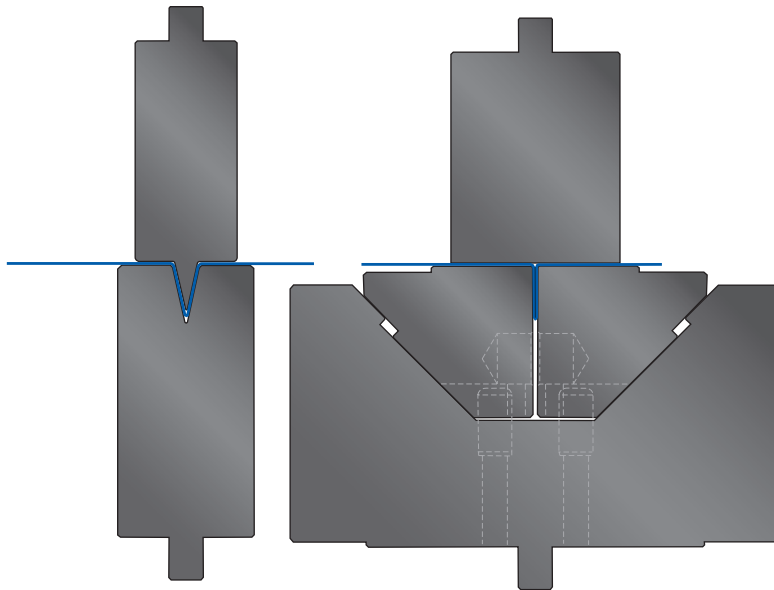
Heavy duty hemming for thick gauge applications.



PH1 — PNEUMATIC HEM

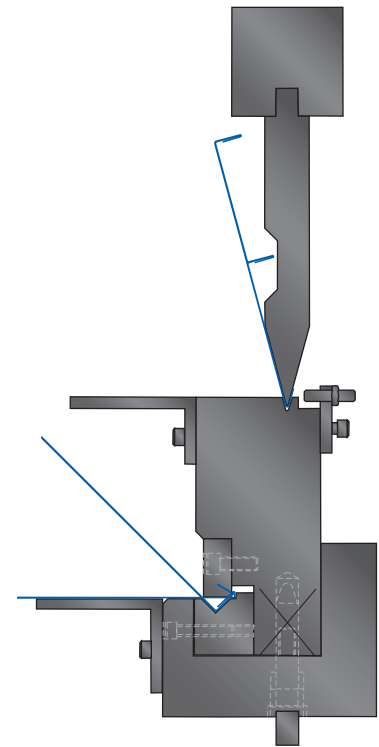
This tool set introduces pneumatic cylinders to rapidly open and close the pre-form insert. This set removes the inconsistency associated with pre-forming or acute bending on a spring actuated insert.

CUSTOM HEMMING

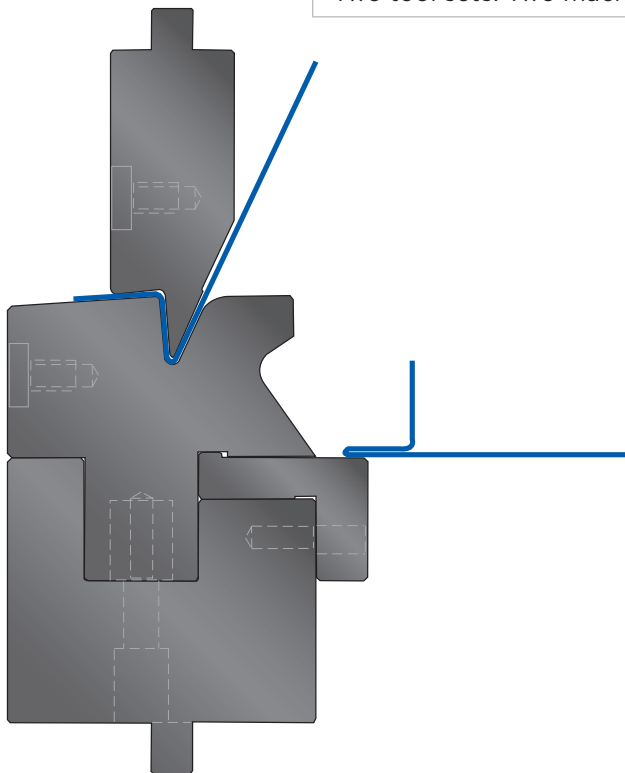


SH1 – SEAM HEM

Two tool sets. Two machine strokes



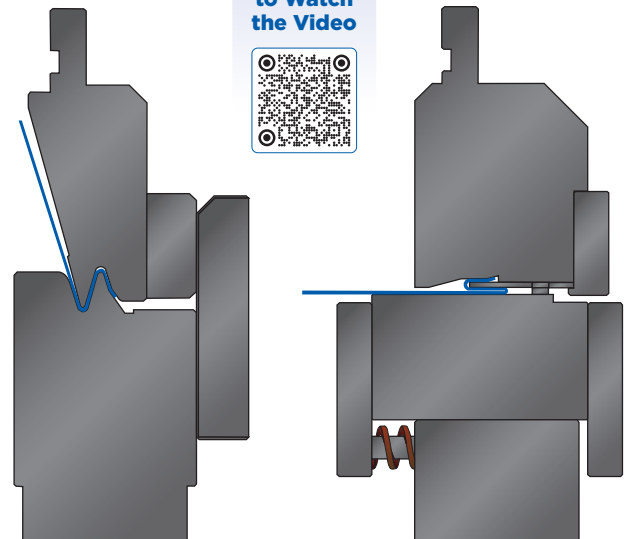
SSH2 – STANDING SEAM HEM



SSH1 – STANDING SEAM HEM

Used to form a standing seam in two strokes. The first stroke forms an acute angle offset, the second stroke closes the seam.

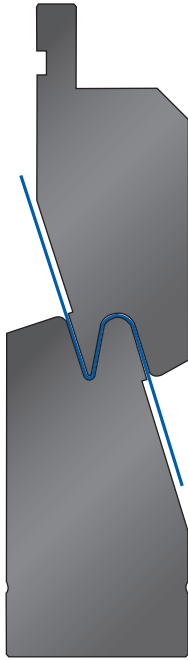
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ZH1 – Z HEM

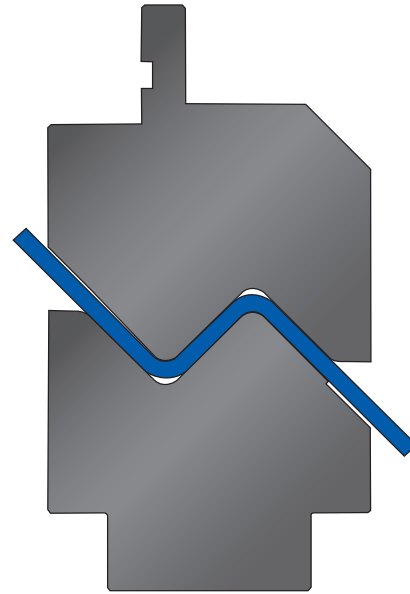
Creates a Z-hem or a Clip hem. Shim can be built in to maintain a gap in the hem. Two tool sets. Two machine strokes.

OFFSET TOOLS



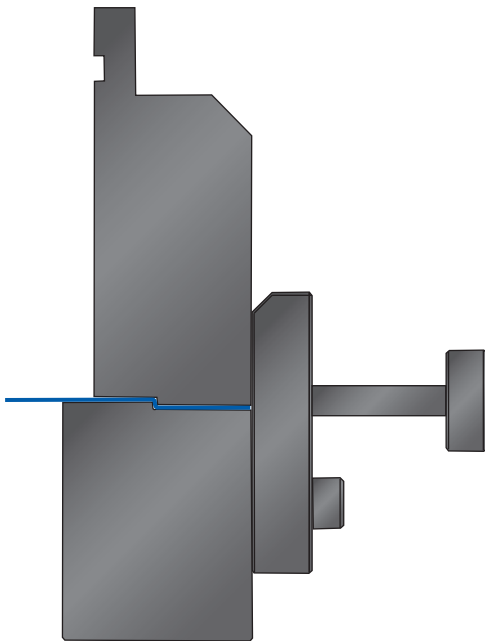
AO1 – ANGLED OFFSET

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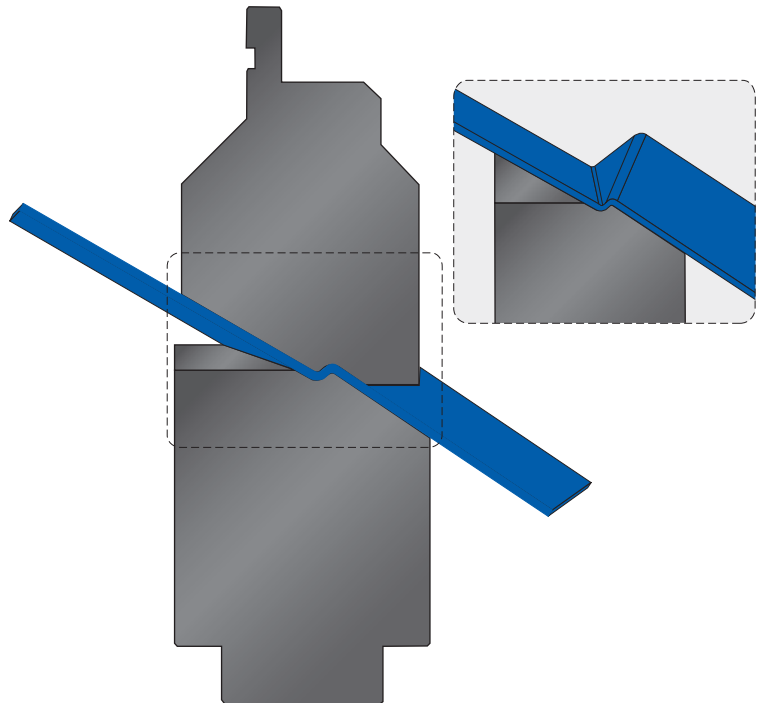
LO1 – LARGE OFFSET

Used for heavy gauge,
large offset bending.



HO1 – HORIZONTAL OFFSET

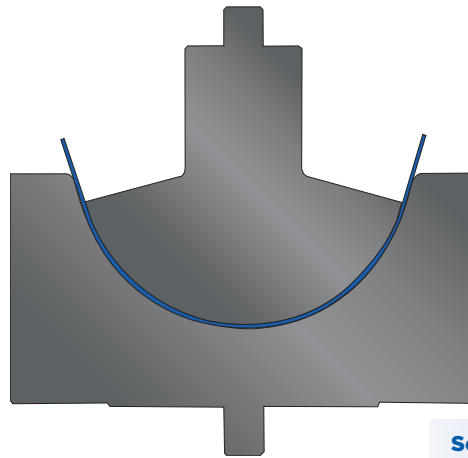
For offsets that are approximately
one material thickness. Prevents
material whip up. Thrust plates and
adjustable back gauging are provided.



NPO1 – NON PARALLEL OFFSET

For offsets that have non-parallel flanges. Inset shows
punch hidden for a clear view of the formed sheet.

LARGE RADII

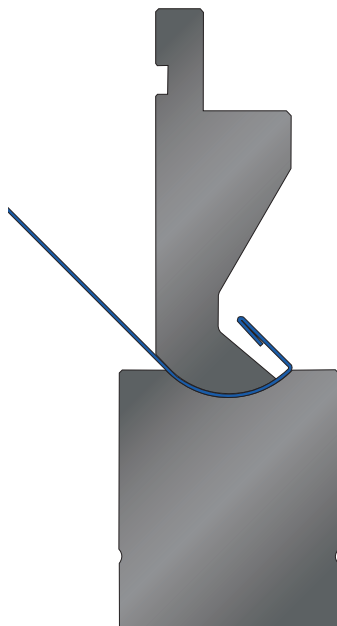


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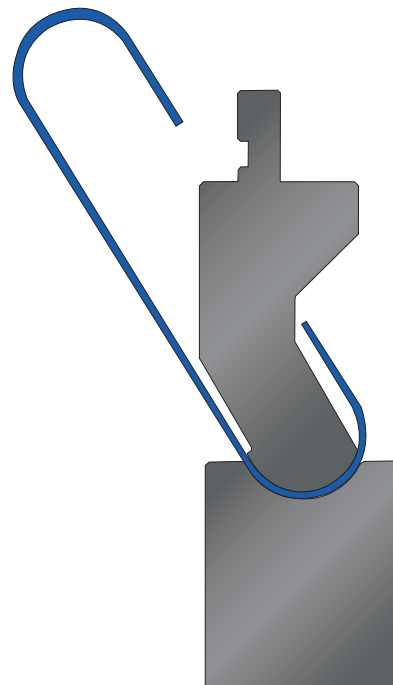
LR1 – LARGE RADIUS

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

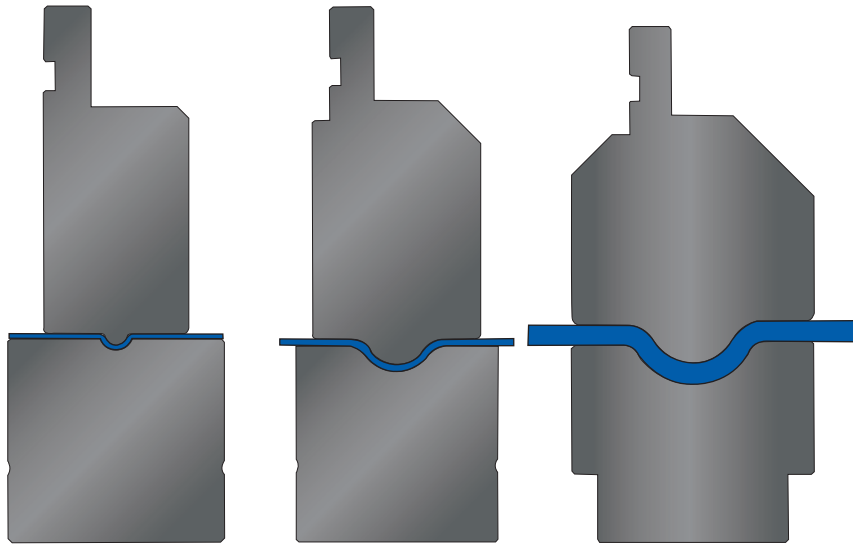
Used when a full radius is required before the flange. The solution may require multiple strokes.



LR3 – MULTI-HIT RADIUS

Used when the return flange starts at the radius end. The solution may require multiple strokes.

STRENGTHENING RIB

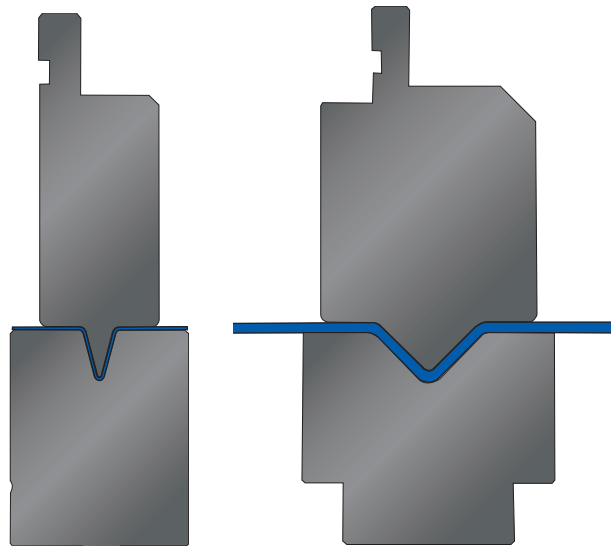


SR1 – STRENGTHENING RIB

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

SPECIALS

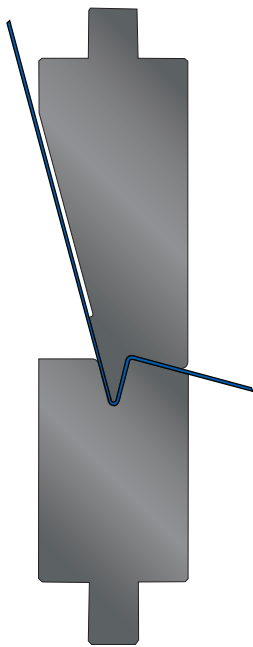
V-RIB



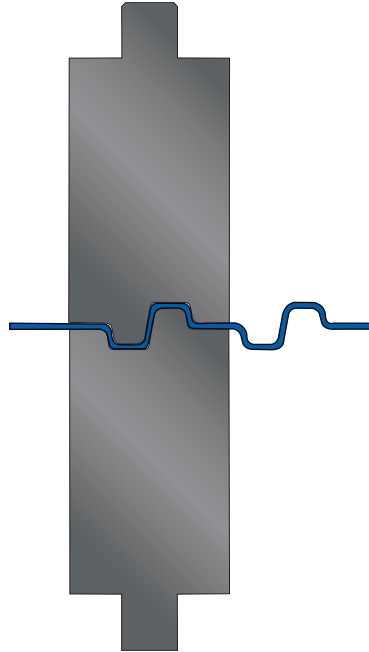
VR1 – V RIB

Produce a V rib in one stroke. Spring back allowance is built in.

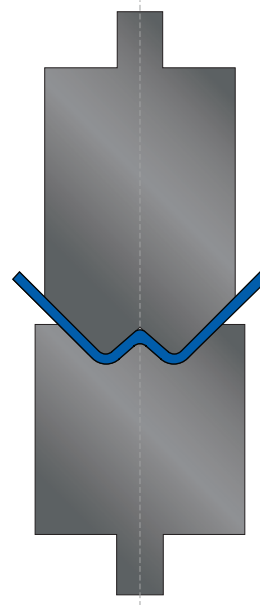
FORMING



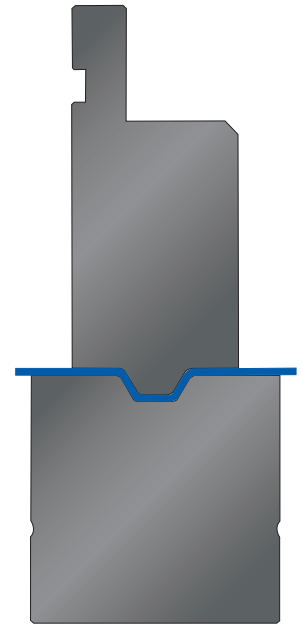
FM1 — FORMING



FM2 — FORMING



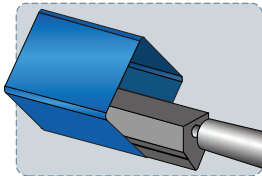
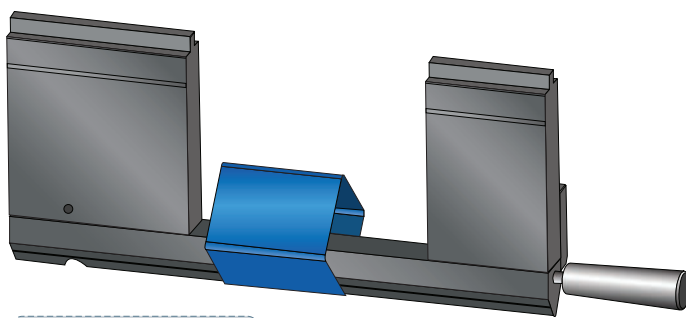
FM3 — FORMING



OH1 — OPEN HAT

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

SPECIALS

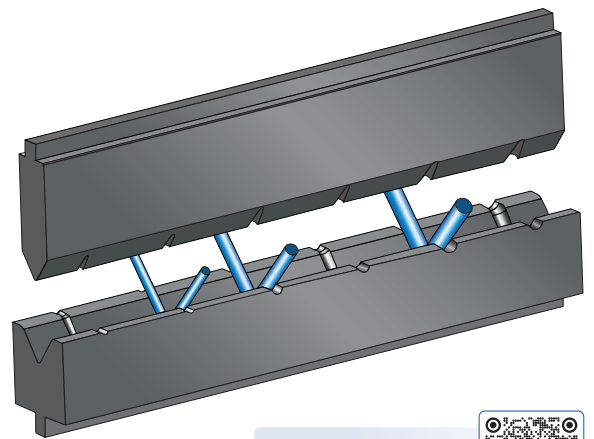


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W1 — WINDOW

Used when minimum return flange clearance is required.



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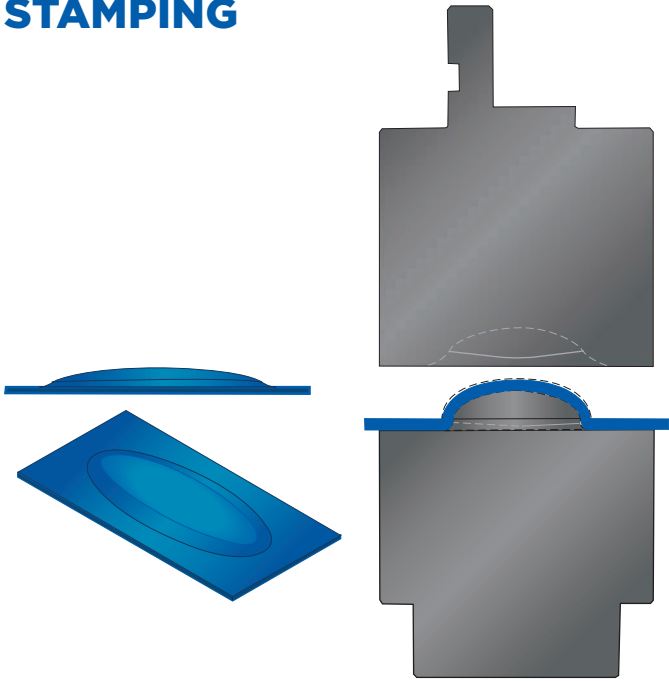


RB1 — ROD BENDING

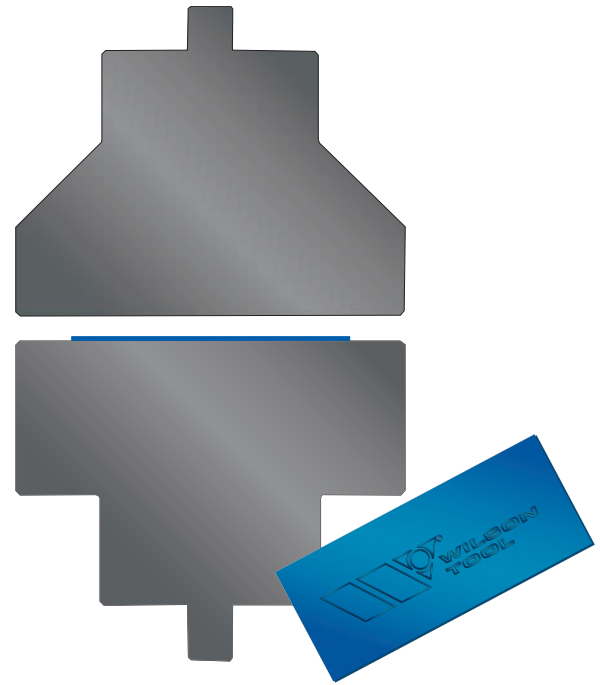
Provides nesting for the rod during the forming process.

STAMPING

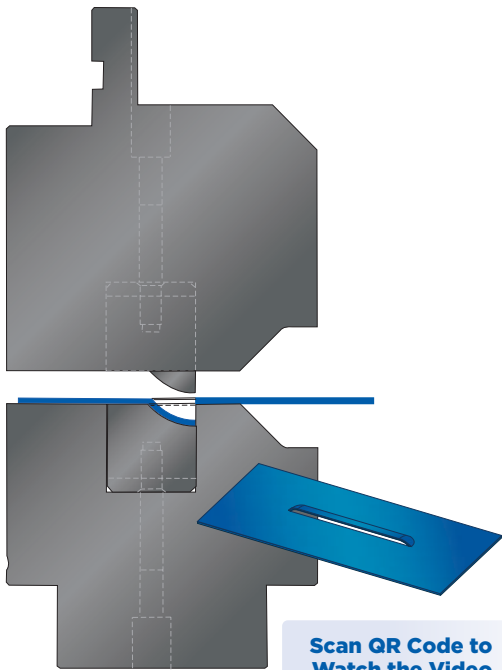
SPECIALS



EM1 – EMBOSS
A variety of raised emboss and chisel point emboss sets are available.

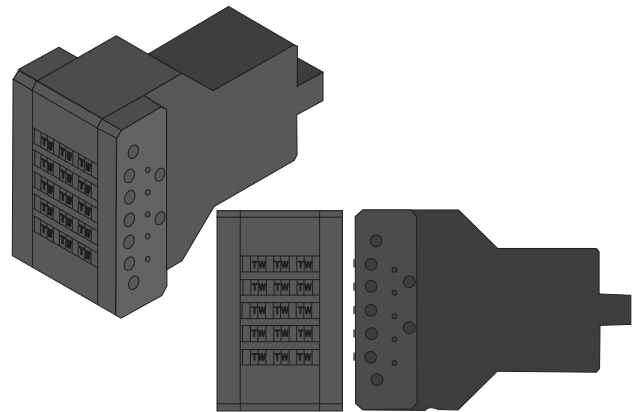


LG1 – LOGO



LL1 – LOUVER
Multiple louver configurations are available. For louver forming, sheet must be pre-slit.

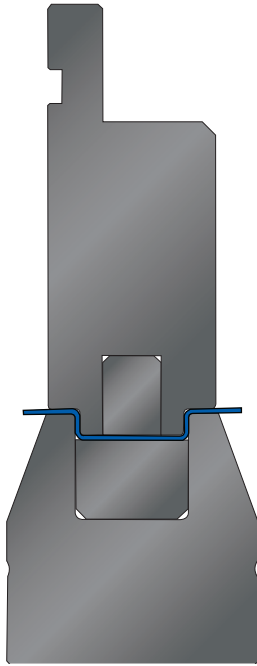
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LS1 – LETTER STAMP
Provides chisel point embossing with interchangeable characters. Single row or multi-row available.

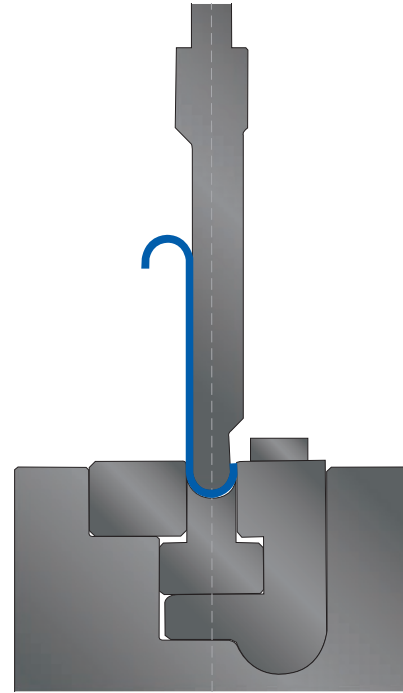
Part No.	Description	Size
5LSP25 / 5LSP25G	Punch Character Holder	3.75" Staged
50049SD	Flattening Block Die	—
6898	Character	3/32"
6896	Character	1/8"

MECHANICAL



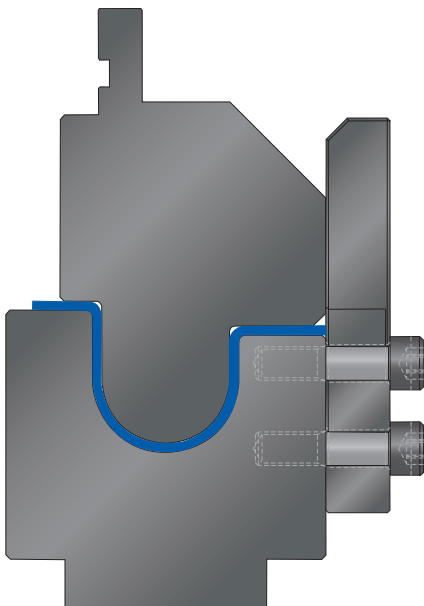
HT1 – HAT CHANNEL

Provides straight wall or angled wall hat channel bending in one stroke. Spring back allowance built in.



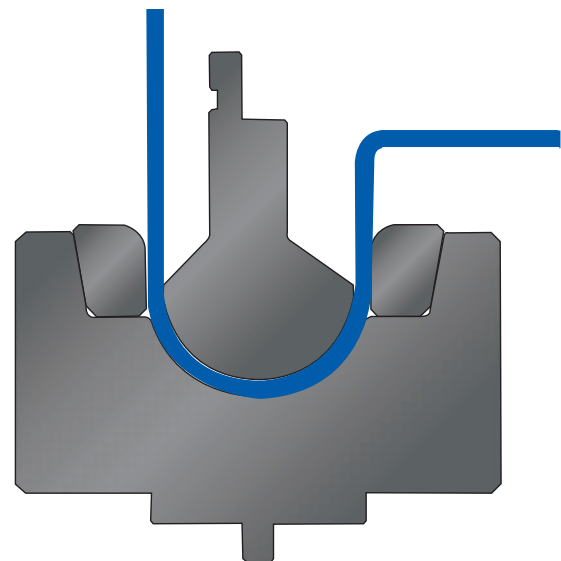
UC1 – U CHANNEL

Recommended for applications where considerable spring back is encountered. Secondary flattening operations may be required.



UC2 – U CHANNEL

Recommended for applications where considerable spring back is encountered. Secondary flattening operations may be required.

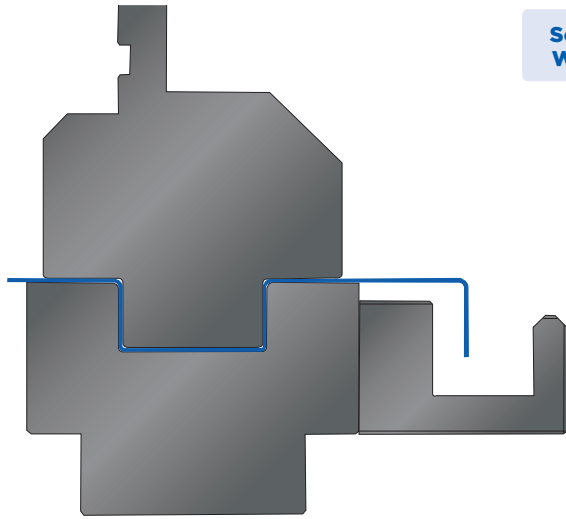


UC3 – U CHANNEL

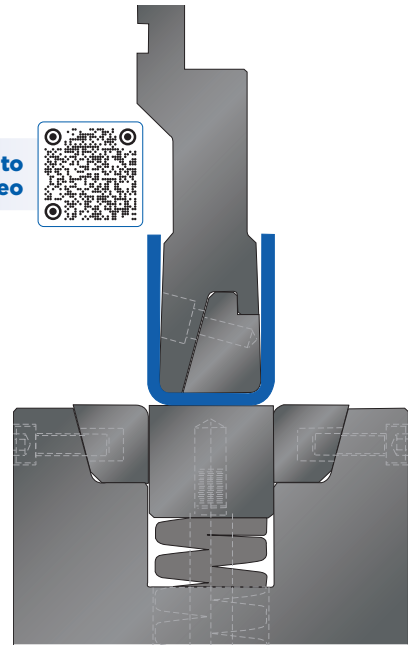
Recommended for applications where considerable spring back is encountered. Secondary flattening operations may be required.

MECHANICAL

SPECIALS

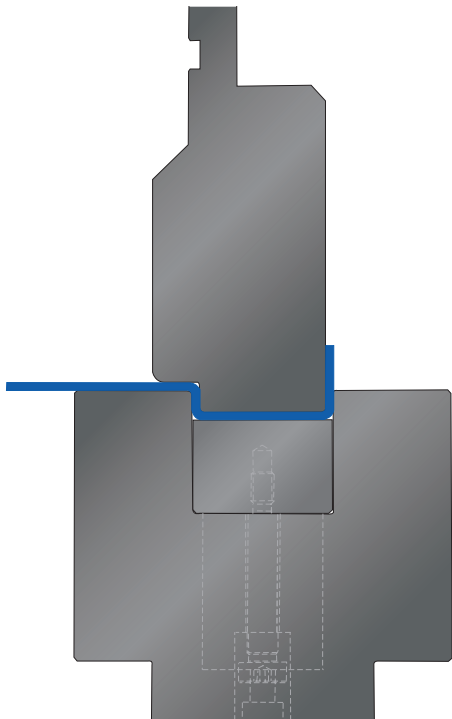


C1 – CHANNEL
For deep channels when the channel bottom needs to remain flat.

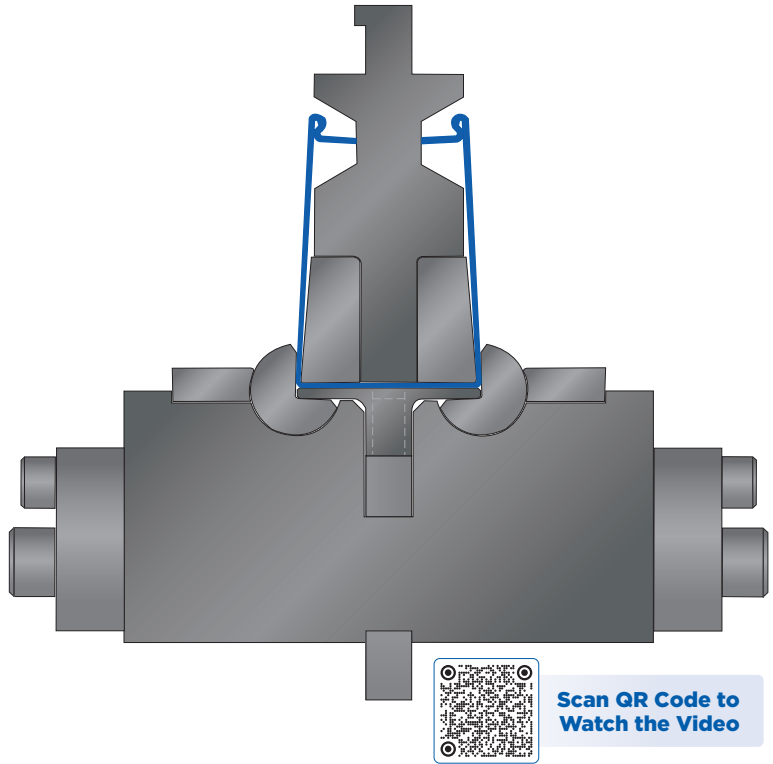


C2 – CHANNEL
For deep channels when the channel bottom needs to remain flat.

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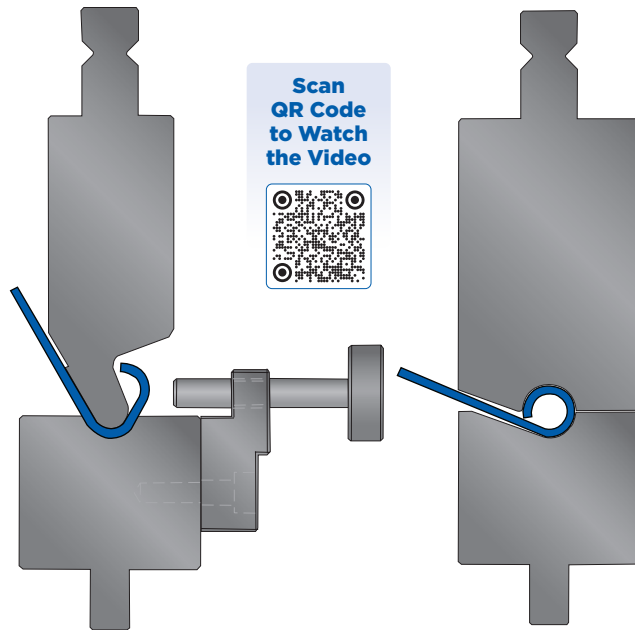
C3 – CHANNEL
For deep channels when the channel bottom needs to remain flat.



C4 – ROTARY BEND CHANNEL
For deep channels when the channel bottom needs to remain flat.

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MECHANICAL

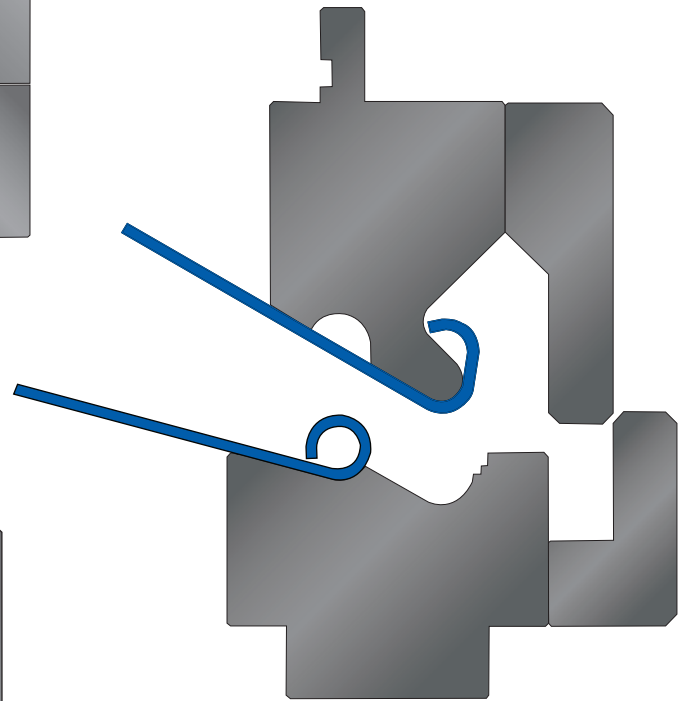


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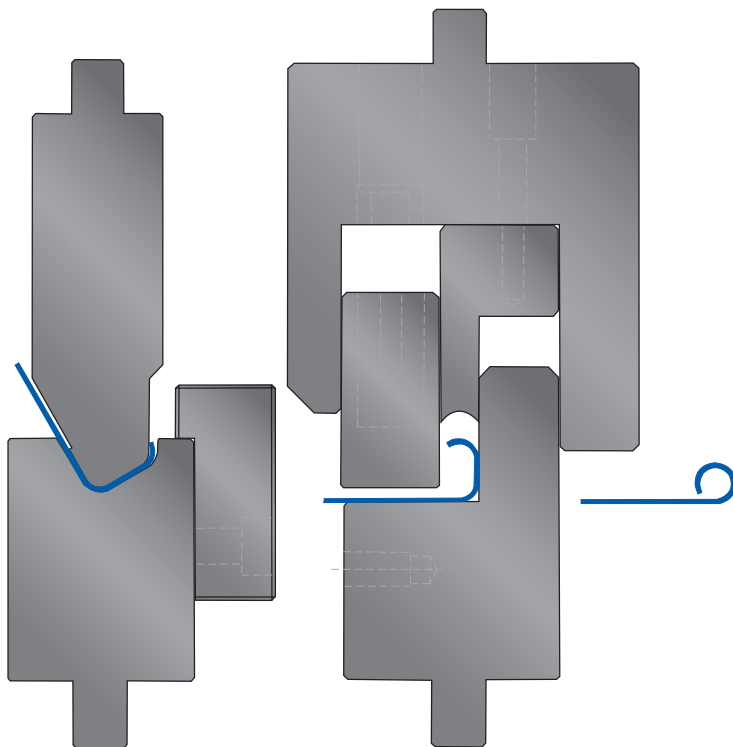
CL1 – CURL TOOL SET

Two tool sets, three machine strokes.



CL2 – CURL TOOL SET

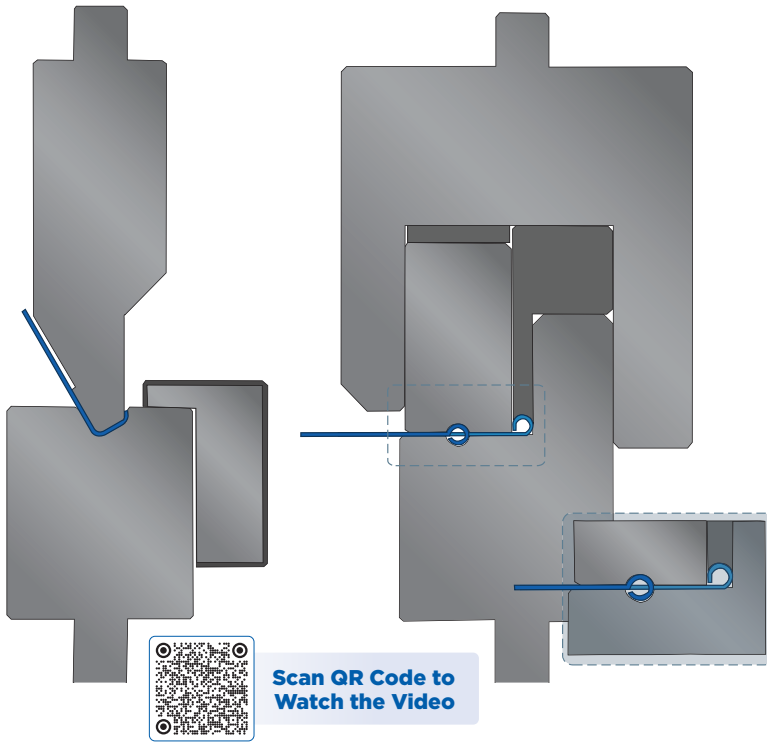
Typically used for thick materials
and large diameter curls.
One tool set, three machine strokes.



CL3 – CURL

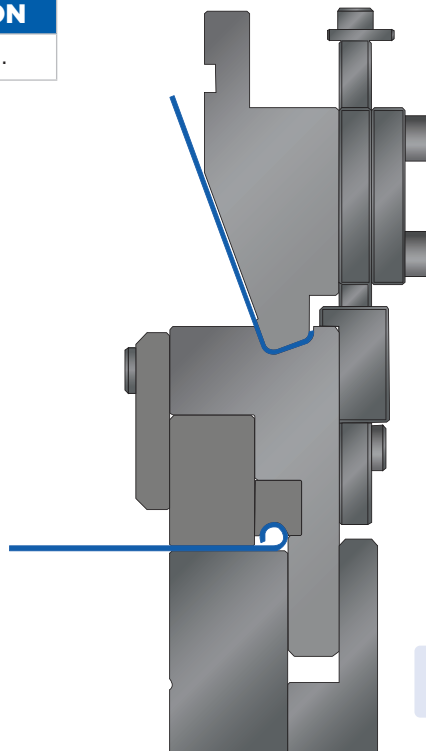
Used for hinges and corner beading.
Two tool sets, two machine strokes.

MECHANICAL



CL4 – CENTER CURL APPLICATION

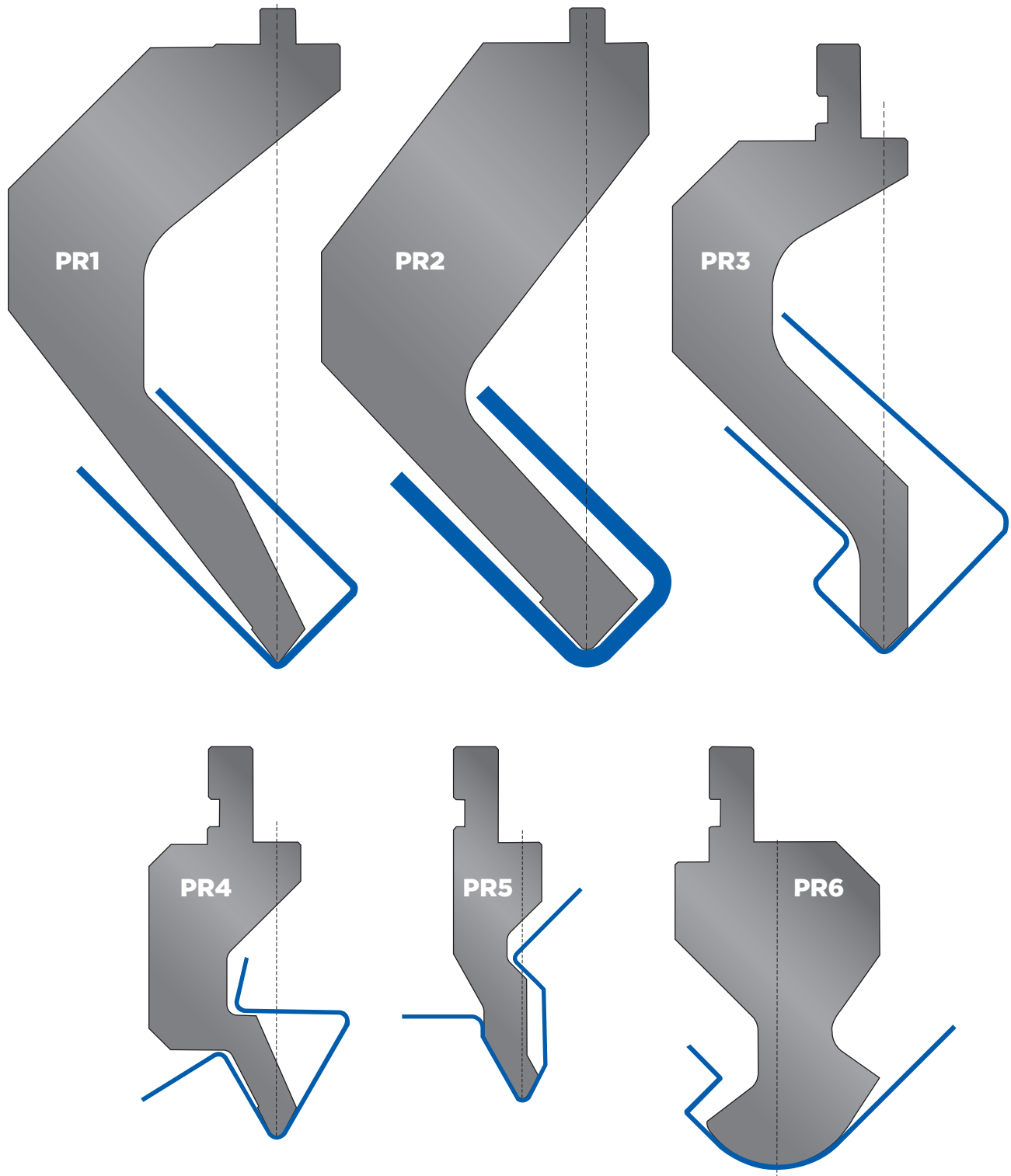
Two tool sets, three machine strokes.



CL5 – DOUBLE DECKER TOOL SET

Used for hinges and corner beading.
One tool set, two machine strokes.

SPECIAL SHAPE PUNCHES



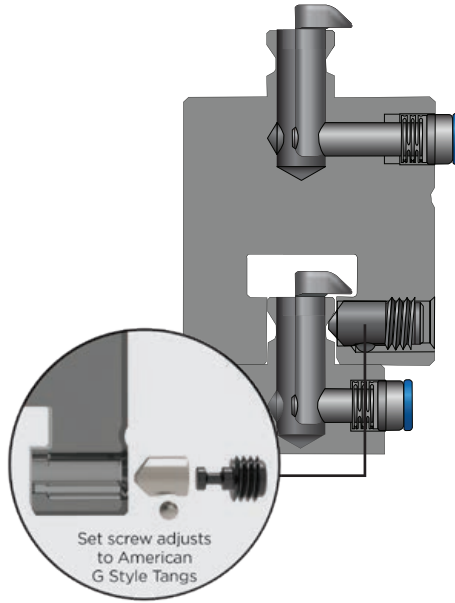
SPECIALS

PUNCH HOLDERS

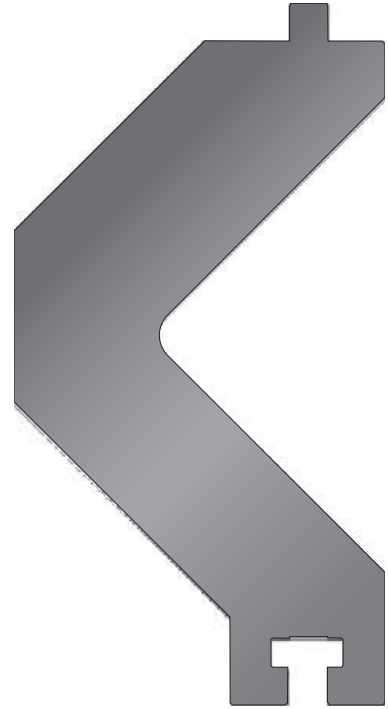
SPECIALS



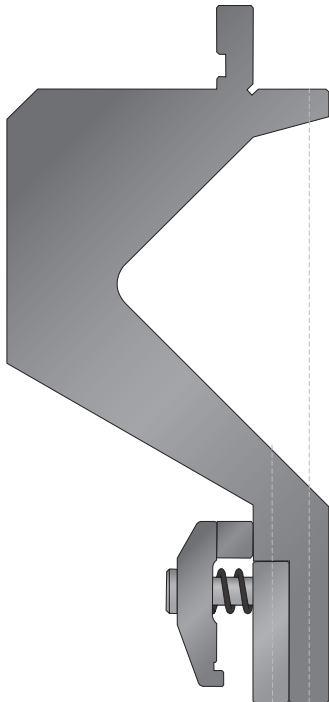
WT – AMERICAN
With Set Screws



AMERICAN SELF-SEAT HOLDER
WT to American with Clamp Plate



AMERICAN DEEP GOOSENECK HOLDER

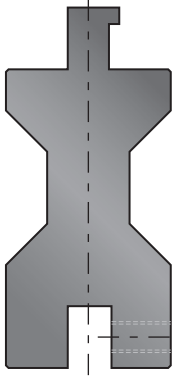


EURO Z1 OR Z2 CLAMPING
Part No. 43002

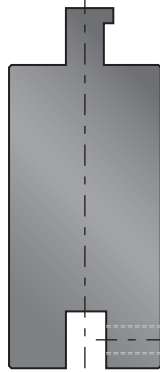
PUNCH HOLDERS

Stack punch holders to make a taller punch to bend tall side flanges or to replace worn OEM punch holders that need replacement. These holders can be made in small sections or one piece to fit the length of your brake.

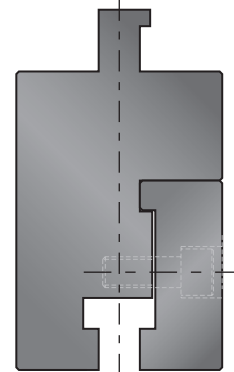
PUNCH HOLDERS



RA1 — DOG BONE



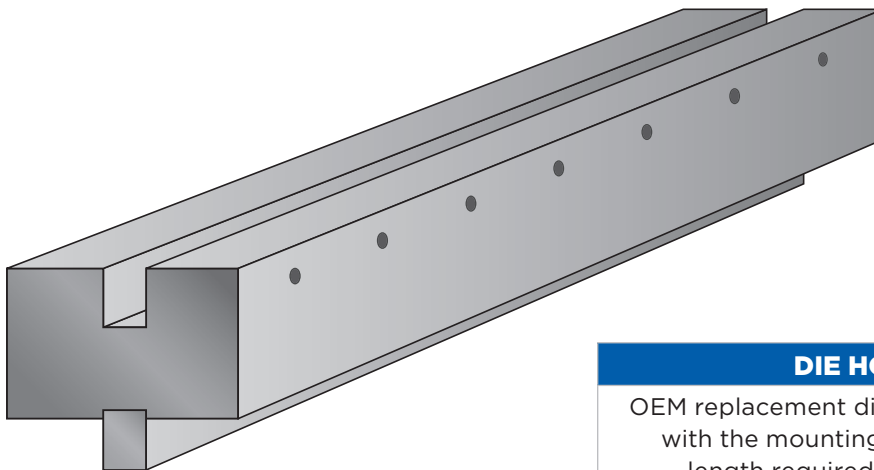
RA2 — SET SCREW



RA3 — CLAMP PLATE

Holders are commonly made to replace any original OEM punch and/or die holders or to accommodate part configuration. These designs can be one solid length or sections that are easier to handle.

DIE HOLDERS

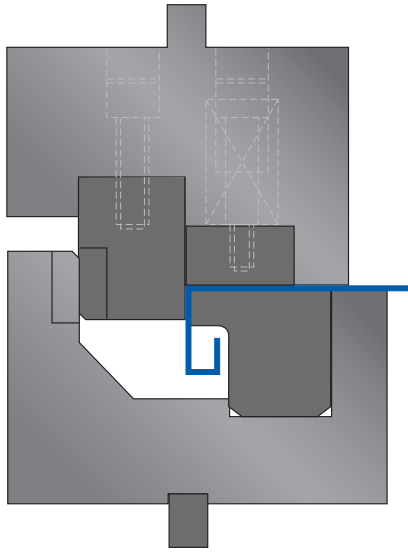


DIE HOLDERS

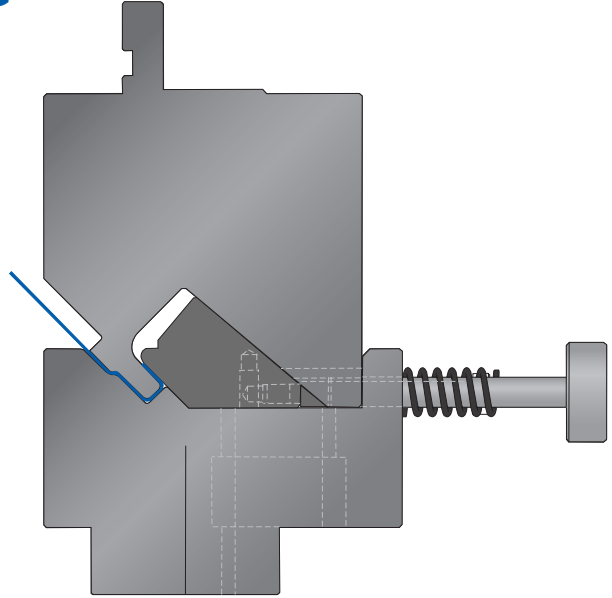
OEM replacement die holders are available with the mounting features and in the length required by your machine.

Die holders can be made in small sections or one piece to fit the length of your machine.

WIPING AND ROTARY BENDING



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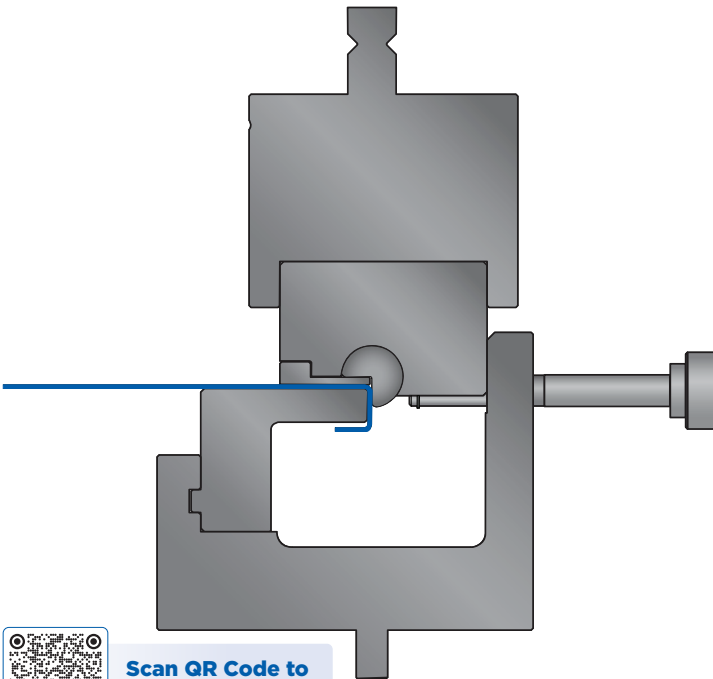
WD1 – WIPE DOWN

Holds the sheet flat while wiping the flange down. Ideal for large panels and high production.

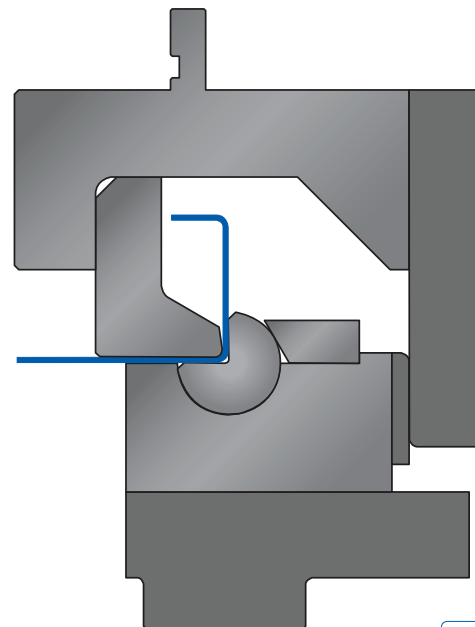
WO1 – WIPING FORM

Holds the sheet flat while wiping the flange down. Ideal for large panels and high production.

SPECIALS



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RTD – FORM DOWN

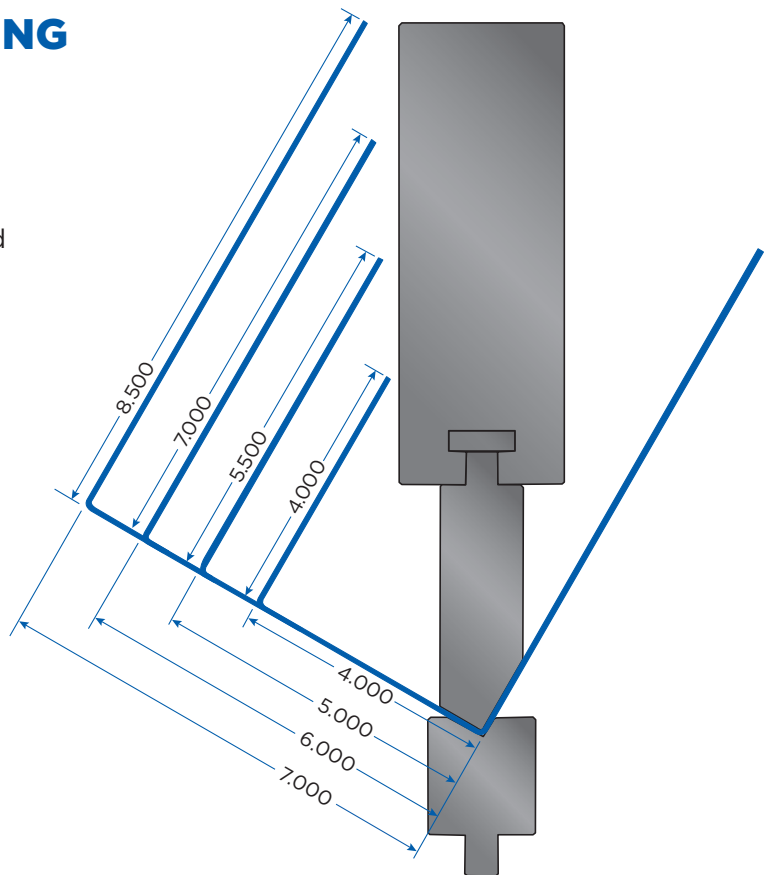
RTU – FORM UP

ROTARY FLANGE FORMING

Holds sheet flat while forming. Overbend allowance is built in to compensate for material springback. Ideal for large panels and high production.

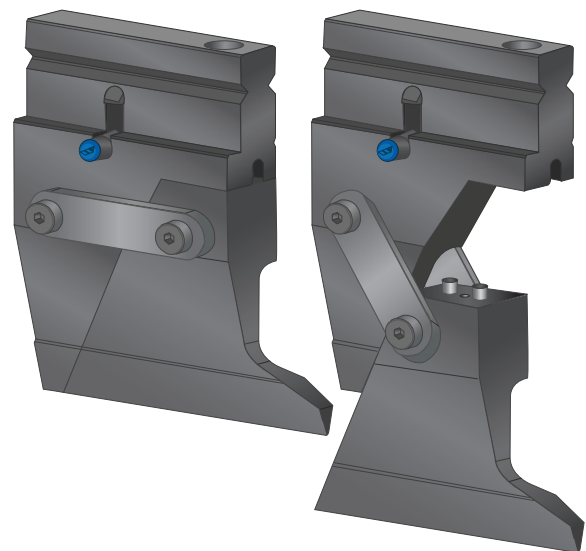
30/60 DEEP BOX BENDING

When forming a 4-sided box, the punch must be sufficient height to prevent the pre-formed side from striking the upper beam. This is a thrusting application and not suitable for all press brakes.



SWING EAR SECTIONS

- Box bending with return flanges.
- Standard bend length 150mm each ear on all punch profiles. 100mm length available on select profiles.
- Ear(s) recess/fall in left to right .50 - .75", not to be confused with vertical movement. There will be approximately 1.0 - 1.5" of relief to rotate and drop the finished part.
- Punch profile will match the standard profile only in height, angle and radius. Width will be wider where hinged.



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Left and right ear sections shown in illustration.

UNITIZED TOOLING

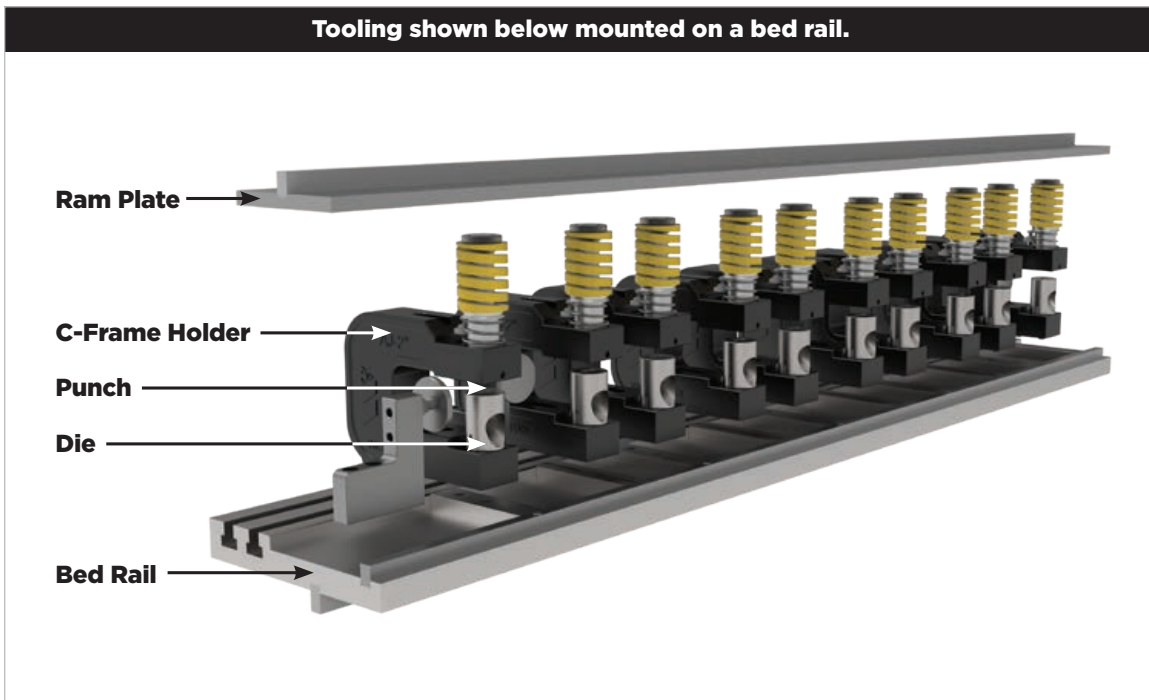
Unitized tooling offers flexibility for various applications, including press brakes, Multicyl setups, and presses. For press brakes, simply attach the units to a bed rail or use a job-specific template. These templates function as a plug-and-play system: attach the template to the machine, secure it and begin punching parts. Once finished, remove the entire plate, including the mounted units. To reduce weight, the plates can be segmented.

Bed rails with adjustable spacers allow you to easily reposition units to accommodate various specifications. Sliding on the face of the bed rails, combined with universal stops on the sides and back, ensure accurate and consistent placement of extruded or flat sheets. This flexibility enables repeatable production processes.



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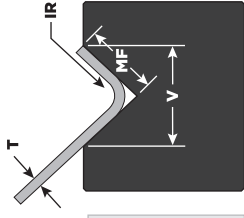
Tooling shown below mounted on a bed rail.



AIR BENDING FORCE CHART IMPERIAL V-OPENINGS & IMPERIAL TONNAGE

NOTE: Formulas and chart are for reference only.

T = Material Thickness; V = V-Opening; MF = Minimum Flange Length; IR = Inside Radius



STANDARD FORMULAS FOR SELECTING A V-OPENING

Material Thickness: $.105''$ or Less = $T \times 6$
 $.120'' - .313'' = T \times 8$
 $.375'' - .500'' = T \times 10$
 $.625''$ & Thicker = $T \times 12$

GAGE	DEC. inch [mm]	TONS PER FOOT																	
		V (in.)	0.250	0.313	0.375	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.500	2.000	2.500	3.000	3.500	4.000	5.000
MF		0.180	0.225	0.270	0.360	0.450	0.540	0.630	0.720	0.810	0.900	1.080	1.440	1.800	2.159	2.519	2.879	3.599	
IR		0.042	0.052	0.063	0.084	0.104	0.125	0.146	0.167	0.188	0.209	0.251	0.334	0.418	0.501	0.585	0.668	0.835	
20	0.036 [0.9]	2.9	2.2	1.7	1.2	1.0													
18	0.048 [1.2]	7.0	4.0	2.9	2.2	1.6	1.3												
16	0.060 [1.5]		7.8	5.6	3.6	2.7	2.2	1.7											
14	0.075 [1.9]			11.7	6.0	4.5	3.4	3.0	2.5	2.1									
13	0.090 [2.3]				12.2	6.8	5.4	4.3	3.7	3.3	2.9								
12	0.105 [2.7]					10.1	7.4	6.3	5.4	4.4	4.0	3.2							
11	0.120 [3]						10.5	8.8	7.2	6.2	5.4	4.3	3.2						
10	0.135 [3.4]							11.3	9.6	8.4	7.0	5.6	4.1						
9	0.150 [3.8]								13.1	11.9	9.0	6.7	5.2	3.5					
7	0.188 [4.8]									16.4	14.0	11.2	7.6	5.8	4.5				
1/4"	0.250 [6.35]										28.8	22.0	15.3	11.5	9.1	7.5	6.2		
5/16"	0.312 [8]											38.0	26.0	19.2	16.0	12.5	10.6	7.6	
3/8"	0.375 [9.5]												41.0	29.9	24.0	19.4	16.0	12.3	
7/16"	0.438 [11.1]													45.2	35.0	28.0	24.0	17.0	
1/2"	0.500 [12.7]														47.9	39.0	33.1	24.0	
5/8"	0.625 [16]															69.5	58.0	42.2	
3/4"	0.750 [19]																92.0	69.0	
7/8"	0.875 [22]																	104.0	
1"	1.000 [25.4]																		

Larger v-openings generate less tonnage.

Smaller v-openings generate increased tonnage and are NOT recommended.

Tonnage Estimation Based on Material Type
Soft Aluminum, Brass, Copper = Tons x 0.35
Half Hard Aluminum = Tons x 0.5
Hard/Heat Treated AL, Mild Steel = Tons x 1.0
Half Hard Brass, Copper = Tons x 1.1
Stainless Steel = Tons x 1.5
High Strength Steel = Tons x 2.75

Scan QR Code to Watch the Video
















NOTE: The chart above is based on mild steel (tensile strength of 60,000 PSI) formed to an included angle of 88°. See chart to the right for other materials. Forming to other angles will change the Minimum Flange (MF), Inside Radius (IR) and tonnage.

TONNAGE ESTIMATES

Making Multiple Bends Formula on a Press Brake

For shape as shown, in mild steel with radii equal to 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
	MATERIAL THICK OFFSET	300	600
	CHANNEL	300	600
	VEE RIB	200	600
	W DIE	300	600
	OPEN HAT CHANNEL	300	450
	SQUARE HAT CHANNEL	–	600
	PREFORM CURL	–	300
	PREFORM CURL	–	200
	CLOSED CURL	–	300
	RADIUS	–	180/300
	(AIR) TEAR DROP	–	200
	CRUSHED HEM	–	400
SHAPE CONSIDERATIONS		Large Radii Angle Variation Concave/Convex sides	Material Thick Radii Min. Angle Variation Maintain Flatness

REFERENCE

Tonnage Estimation Based on Material Type	Soft Aluminum, Brass, Copper = Tons x 0.35
	Half Hard Aluminum = Tons x 0.5
	Hard/Heat Treated AL, Mild Steel = Tons x 1.0
	Half Hard Brass, Copper = Tons x 1.1
	Stainless Steel = Tons x 1.5
	High Strength Steel = Tons x 2.75

PRESS BRAKE SPECIALS CHECKLIST

Company:	
Contact:	
Phone:	Sales Engineer:
Quote #:	Sales Desk Contact:

MACHINE SPECIFICATIONS

BRAKE MAKE/MODEL		TONNAGE	
OVERALL LENGTH		APPROX. AGE	
STROKE	<i>Open Height</i>		<i>Closed Height</i>

TOOLING AND APPLICATION

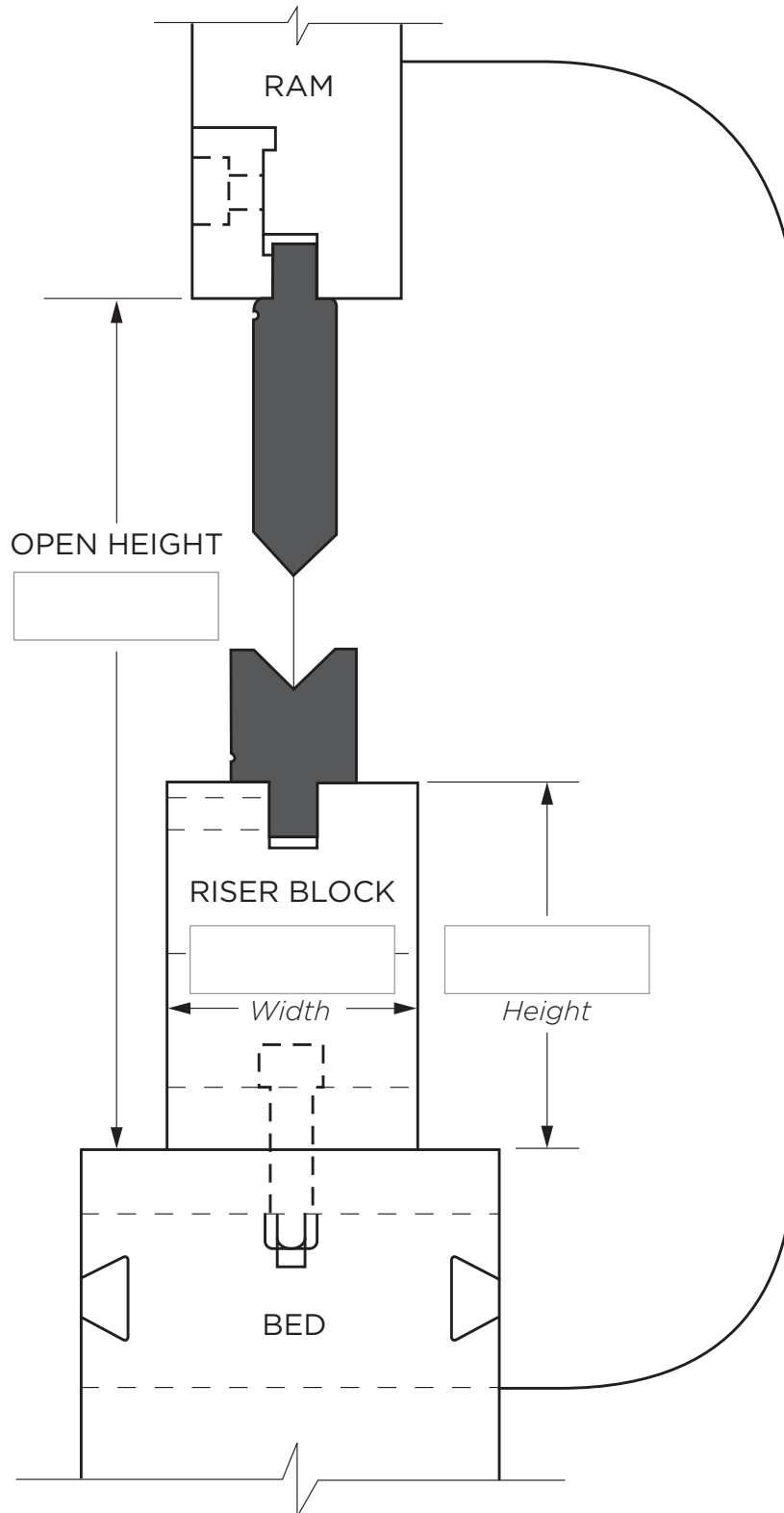
TOOLING TYPE	<input type="checkbox"/> American <input type="checkbox"/> European <input type="checkbox"/> WT <input type="checkbox"/> Bystronic <input type="checkbox"/> Other			
LENGTH OF BEND				
MATERIAL TYPE		THICKNESS		
Is customer currently performing this bend? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, specify if this is a <input type="checkbox"/> Wilson Tool Repeat <input type="checkbox"/> Replicate Customer Tool <input type="checkbox"/> Redesign				
Explain:				

TOLERANCE BLOCK

PART RADII TOLERANCE	<i>Tolerances tighter than $\pm 5\%$ may affect price/lead time</i>
PART BEND ANGLE TOLERANCE	<i>Tolerances tighter than $\pm 3\%$ may affect price/lead time.</i>
ESTIMATED ANNUAL USAGE	

REFERENCE

TYPICAL PRESS SETUP



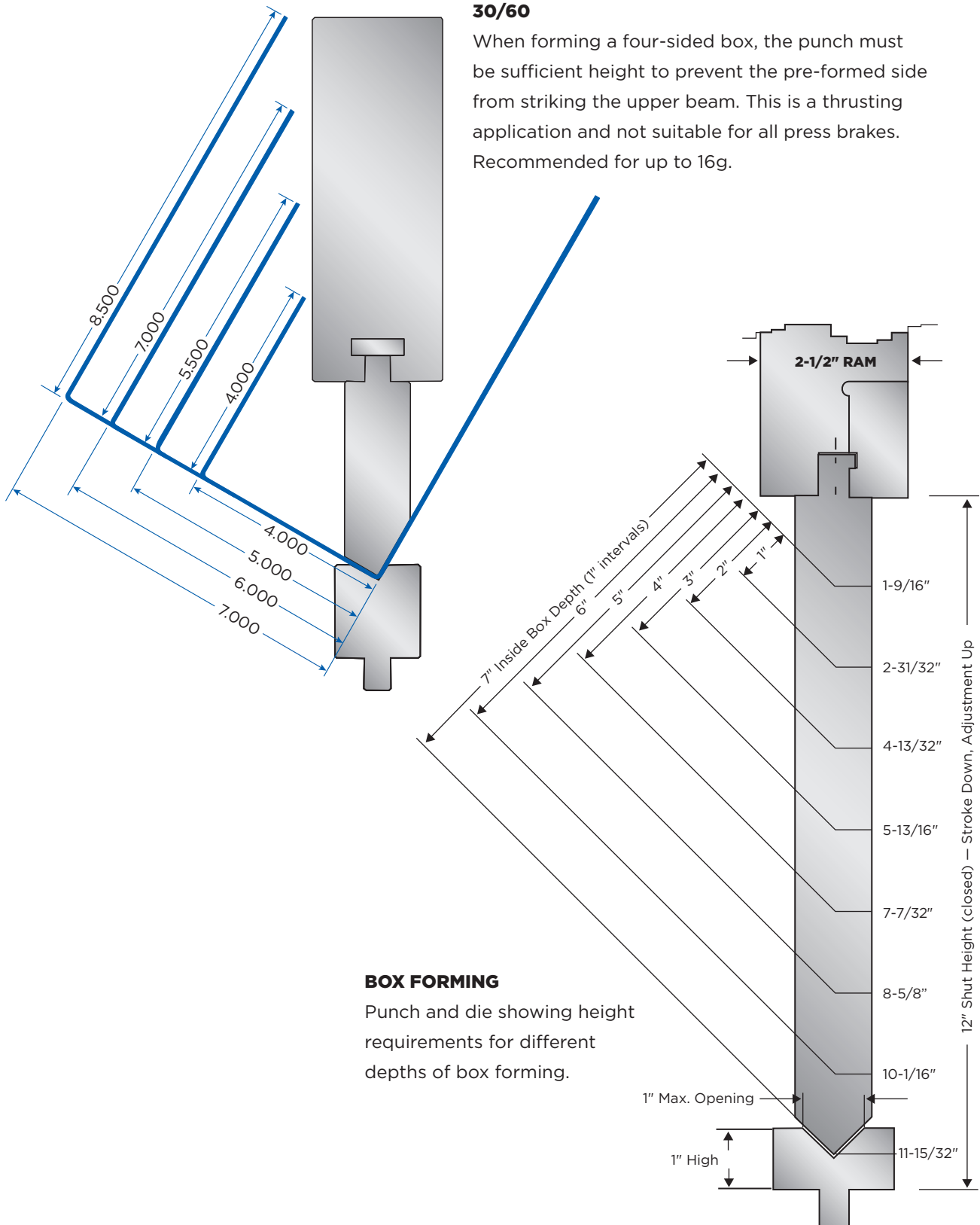
REFERENCE

30/60 PUNCH PROFILE REFERENCE CHARTS

REFERENCE

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. This is a thrusting application and not suitable for all press brakes. Recommended for up to 16g.



TOOL STORAGE

XTREME STORAGE CABINET



- Vertical configuration for drawer access from either side
- High-capacity drawers have a keyed lock and open smoothly with rolling casters
- Vertically adjustable trays maximize space for the height of tooling
- Adjustable tray inserts accommodate up to two rows of various tooling profiles. Removable center channel for larger tooling.
- Drawer trays hold punches in tip-up position
- Shallow top tray in each drawer for storing small items/hand tools
- Relatively small footprint allows for placement close to the machine

CUSTOM COLOR OPTIONS

051 Everest Blue	052 Classic Blue	055 Avalanche Blue	057 Midnight Blue	560 Glossy Sapphire Blue	041 Beige	061 Frost White	071 Light Gray	745 Modern Gray	072 Charcoal Gray
1025 Glossy EverGreen	208 Glossy Yellow	085 Sienna Orange	081 Flame Red	806 Glossy Carmine Red	815 Glossy Cranberry Red	091 Black	902 Glossy Black	741 Glossy Carbon Black	616 White

**Colors may differ slightly from those shown. Allow 15 working days lead time for custom colors.*



Catalog Numbers

Xtreme Storage Cabinet Detail	5103A	5104A	5105A	5106A
Number of Drawers	3	4	5	6
Cabinet Height (outside dim.)	62" [1575mm]	62" [1575mm]	62" [1575mm]	62" [1575mm]
Width (left to right - outside dim.)	23" [585mm]	30" [762mm]	37" [940mm]	44" [1118mm]
Depth / Tool Space (front to back - inside dim.)	44" [1118mm]	44" [1118mm]	44" [1118mm]	44" [1118mm]
Number of Tool Trays	12	16	20	24
Total Length* of Tooling (1 tool/tray - inside dim.)	40' [12.1m]	53' [16.1m]	66.5' [20.2m]	80' [24.3m]
Total Length* of Tooling (2 tools/tray - inside dim.)	80' [24.3m]	106' [32.3m]	133' [40.5m]	160' [48.7m]

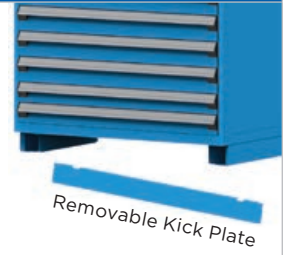
*Total length does not include available storage in the top trays.

ACCESSORIES

TOOL STORAGE

PRESS BRAKE TOOL STORAGE

- Solid steel construction
- Rated capacity of 3,600 lbs.
- Total weight capacity: 440 lbs. per drawer
- One-drawer-at-a-time integrated locking
- Retainer top with rubber mat
- Stationary cabinets have a removable kick-plate for fork lift transportation
- Mobile base option with side handle has heavy-duty casters and extended wheel base to prevent tipping
- Cabinets ship via freight truck



Tip-up Cabinet for American-Style Punches

- 6 drawers with upright storage for punches held in steel U-channels

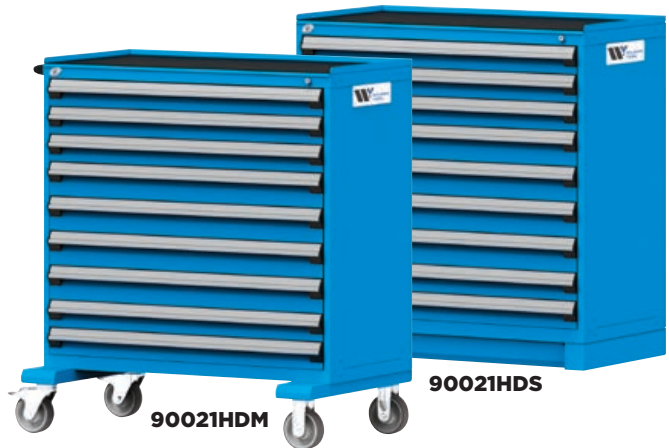
Part No.	W x D x H	Drawer Sizes
90020S	48" x 24" x 43"	2-1.75" [44.4mm]
90020	48" x 24" x 47.5"	1-2.75" [69.9mm] 3-6.75" [171.4mm]



Lay-Down Cabinet for Press Brake Tooling

- 9 drawers for punches and dies lined with blue, industrial-strength, closed cell foam
- Lay down design displays laser markings and makes for easy identification of tools
- Heavy-duty construction with reinforced drawers for industry leading twist strength

Part No.	W x D x H	Drawer Sizes
90021HDS	48" x 27" x 49"	5-2.25" [57.1mm]
90021HDM	48" x 27" x 53.5"	4-3.25" [82.5mm]



CUSTOM COLOR OPTIONS

051 Everest Blue	052 Classic Blue	055 Avalanche Blue	057 Midnight Blue	560 Glossy Sapphire Blue	041 Beige	061 Frost White	071 Light Gray	745 Modern Gray	072 Charcoal Gray
1025 Glossy EverGreen	208 Glossy Yellow	085 Sienna Orange	081 Flame Red	806 Glossy Carmine Red	815 Glossy Cranberry Red	091 Black	902 Glossy Black	741 Glossy Carbon Black	616 White

Colors may differ slightly from those shown.

MEASURING TOOLS

DIGITAL ANGLE CUBE



The compact size of the Digital Cube allows you to quickly read bend angles of work material. Real time display of angle comparison. Magnets on three sides. Self-rotating display for 180° readings.

HAND TOOLS

METRIC HEX KEY WRENCH SET



Metric 9 piece long arm set.
Contains: 1.5 x 77, 2 x 83,
2.5 x 90, 3 x 98, 4 x 106, 5 x 118,
6 x 137, 8 x 156, 10 x 170

SOFT FACE HAMMER



Polyurethane dead-blow hammer.
Steel pellets inside hammer head
impact a split second after the
hammer face, reducing rebound.

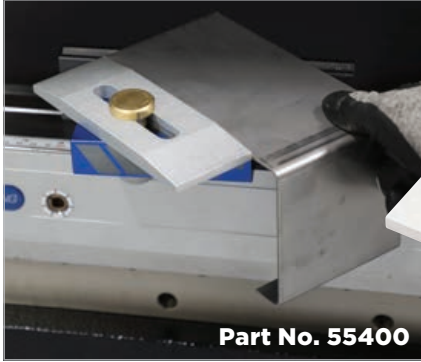
MAGNET SQUARE



ON/OFF work holding magnet.
150 lb. [70 kg] of hold force.
Size: [30] Square

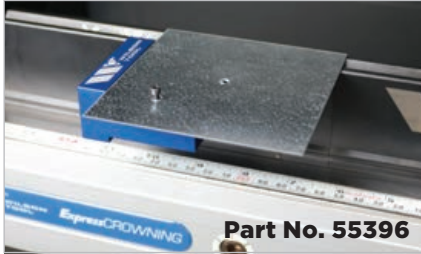
GAUGING TOOLS

DIAL ADJUSTABLE SQUARING ARM



Infinite angle squaring arm with tool-free adjustment can be used as a left or right hand gauge. Significant magnetic holding power keeps the unit in place. Small enough to be out of the way, yet big enough to provide a sizable surface to rest the material being bent.

MAGNETIC SQUARING BLOCK



Versatile, durable, 90° squaring block for left or right support and gauging. Strong magnets hold the lightweight tool in place while allowing for easy repositioning.

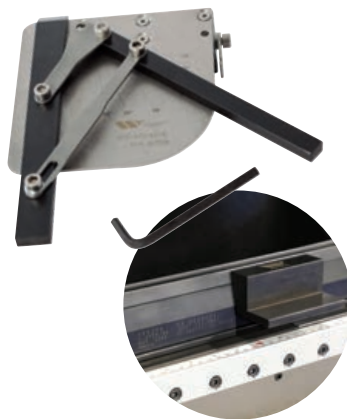
MAGNETIC GAUGE



Use for back gauging, gauging outside the frame of the brake, front gauging, or when the part doesn't quite work with part configuration.

Part No.	Description
988741	Blue Threaded Cap

MAGNETIC SQUARING ARM



Increase bending accuracy with this simple hand tool. Suitable for any press brake die with a flat surface for easy attachment. Adjustable from 0° or 90° and is available in a left-handed or right-handed version.

Part No.	Description
42750L	Magnetic Squaring Arm LEFT
42750R	Magnetic Squaring Arm RIGHT
42750A	30° Die Adapter

MARK-FREE BENDING

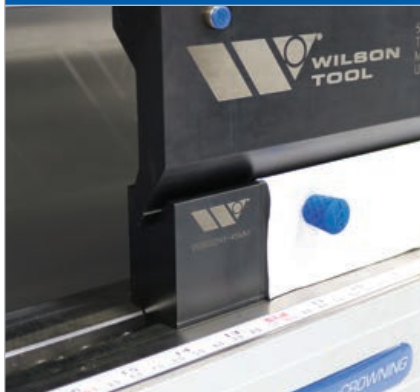
URETHANE ROLLS — 6 in. x 100 ft.



Part No.	Thickness	Durometer	Description
42530	.015" [.4mm]	85A (Milky White)	<ul style="list-style-type: none"> • More elastic than blue • Well suited for deeper draw applications • Will not last as long as blue for 90° bends
42531	.030" [.8mm]		
42532	.022" [.56mm]	95A (Blue)	<ul style="list-style-type: none"> • A more ridged solution • Lasts considerably longer than the white options in many applications • Harder and less elastic than blue • Not suited for deeper draw applications

Note: This is not a good time to cheat the V-opening and make it smaller. Keep in mind you are filling the V-opening with two thicknesses of urethane so it would be safer to oversize the V-opening a bit. The larger the shoulder radius, the larger the V-opening relative to the material type and thickness, the longer the life will be realized.

PROTECTIVE FABRIC DRAPE



Forms a protective barrier between the sheet metal and the die shoulders during the bending process.
Lasts 5-8 times longer than a urethane drape.

Part No.	Description
55335	12.5m [41'] length x 120mm [4.7"] width
55337	12.5m [41'] length x 240mm [9.5"] width
988156	3/8" x 1/2" Cylinder Magnet w/Blue Grip Cover

DRAPE HOLDER



Part No. 55338



Magnetic body provides quick, secure attachment to any press brake die or die holder. Hex head bolts allow for front-to-back adjustment of material placement and easy material swaps. Low-profile design helps avoid bulky rolls getting in the operator's way.

THE DIVISIONS OF WILSON TOOL INTERNATIONAL

BENDING

Wilson Tool's Bending division delivers the most complete line of tooling and clamping solutions available anywhere.

Whether you use American, European, WT, Bystronic or LVD-style precision or conventional tooling, Wilson Tool has a solution for you. Our clamping options cover these styles as well. With hydraulic push button, quick release mechanical or standard manual clamps, we have a clamping solution for any style of machine or budget. And our custom tooling manufacturing capabilities are the envy of the industry with innovative solutions for complex bending challenges. With manufacturing facilities located in the USA and Canada, our delivery times to North American fabricators are the fastest in the industry.



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Innovative products such as our HP Accu-Lock® Retainer Inserts and extensive coating options, combined with our world-class customer service, have enabled us to quickly grow into a world-class provider. With a direct sales force throughout North America, we deliver products straight from the factory to you, enabling the fastest deliveries in the industry. Our custom tooling expertise is second to none with many customers coming to us for their most difficult stamping challenges.

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ACCESSORIES



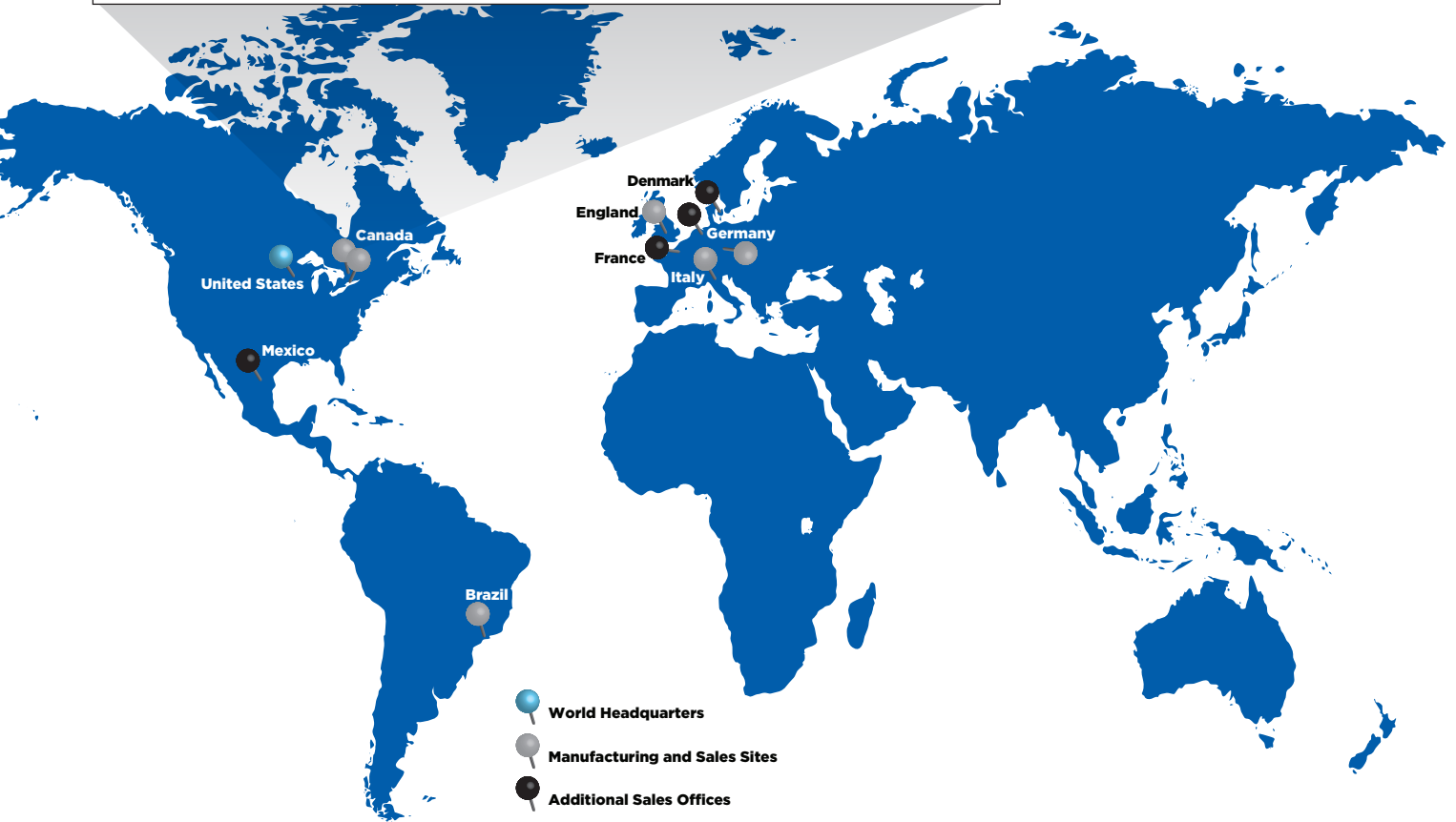
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Our American Planed tooling is manufactured out of our Ontario, Canada plant.



B360C 2.2026