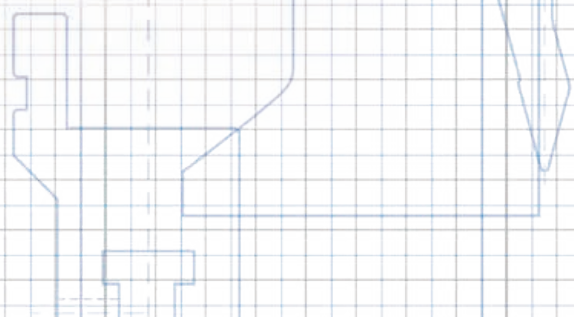


WT-STYLE TOOLING SOLUTIONS

Standards, Specials & Accessories



THE WILSON TOOL DIFFERENCE



COMPANY OVERVIEW

From humble beginnings in a small manufacturing facility in St. Paul, Minnesota, Wilson Tool International has added innovation, tooling divisions, manufacturing facilities and sales channels around the world to better serve thousands of global customers. Throughout our expansion, our mission has never wavered — we continue to offer products and services that help you, our customers, to be more successful.

Innovation is key at Wilson Tool International. It's true what they say: no two jobs are the same. In manufacturing, change is the only constant. So working with a press brake tooling supplier that's flexible, nimble and knowledgeable is important.

Wilson Tool International continues to invest in your success. We now have more than 50 sales engineers in North America available to answer questions and suggest innovative solutions to save you time and money.

And be assured, with every order, you'll always get our quality guarantee: *Your success is our priority. If you're ever unsatisfied with a Wilson Tool International product, we'll do everything we can to make it right and keep you up and running.*

From all of us at Wilson Tool International, thank you for the trust you have placed in us to provide you with the products and services that support your business. We look forward to our partnership in the future.

Sincerely,
Brian Robinson
CEO of Wilson Tool Enterprises

PUNCHING

Wilson Tool's Punching division continues to drive the industry with new levels of quality, delivery, service and innovation.

From the early days of Series 80 tooling to the Wilson Wheel® to innovative EXP® technology, our punching division has been the industry-leading innovation driver. When combined with the most experienced customer support professionals in the industry, Wilson Tool continues to raise the bar on performance and innovation. Thick turret, TRUMPF-style, Salvagnini-style, or any other style of punch press you may be using, Wilson Tool offers the most complete line of tooling solutions available today.



TRUMPF is a trademark of TRUMPF GmbH + Co. KG.

TABLETING

Wilson Tool's Tableting division delivers standard and custom tooling for superior production capability by utilizing the latest innovations in tableting science.

Wilson Tool's punches and dies for the pharmaceutical, nutraceutical, confectionery and related industries provide the best tooling per application. We collaborate with you to create the punch and die most suited to meet the specific needs of your tableting application.



BENDING

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

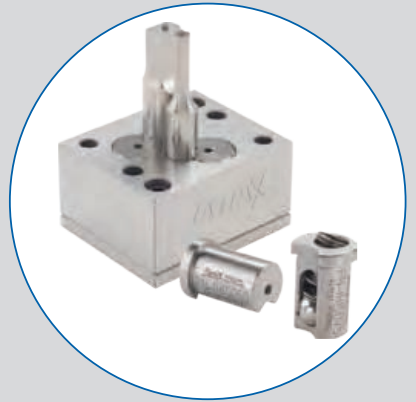
Whether you use American, European, WT-style or LVD-style precision tooling or conventional style tooling, Wilson Tool has a solution for you. Our clamping options cover these styles as well. With hydraulic push button options, quick release mechanical options, or standard manual clamps, Wilson Tool has a clamping solution for any style of machine or budget. And our custom tooling manufacturing capabilities have quickly become the envy of the industry with innovative solutions for very 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.



STAMPING

Wilson Tool's Stamping division (aka Impax Tooling Solutions®) offers high quality punch and die components for the stamping industry.

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.



ACCESSORIES

Whether you need tooling storage systems, grinders, urethane rolls, hand tools or other types of related supplies, our accessory products offer a wide range of solutions to help you be more productive, organized and efficient.



PUNCH 8

- 8 Series 600, Swan-Neck, 86°
- 8 Series 605, Swan-Neck, 80°
- 8 Series 601, Goose-Neck, 86°
- 9 Series 602, Acute with Relief, 28°
- 9 Series 603, Hemming, 28°
- 9 Series 604, Pointed, 60°
- 9 Series 604c, Bottoming, 90°
- 10 163mm Tall Punch
- 10 200mm Tall Punch
- 11 Series 610, Swan-Neck, 86°
- 11 Series 611, Goose-Neck, 86°
- 11 Series 612, Acute with Relief, 28°
- 12 Series 613, Hemming, 28°
- 12 Series 614, Pointed, 60°

DIE 13

- 13 Series 650/651/652, 3.937" [100mm] Tall, 30°
- 13 Series 650, 3.937" [100mm] Tall, 84°/86°
- 14 Series 650, 3.937" [100mm] Tall, 80°
- 14 Series 650, 4.724" [120mm] Tall, 80°
- 14 Series 651, 3.937" [100mm] Tall, 84°/86°
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- 28 603 28° Hemming Punch
- 29 604 60° Pointed/Bottoming Punch
- 30 920 Large Tip 86° 163mm Tall Punch
- 31 920 86° 163mm Tall Punch
- 32 921 80° 163mm Tall Punch
- 33 921 28° 163mm Tall Punch
- 34 924 60° 163mm Tall Punch
- 35 610 86° Swan Neck Punch
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Prices and product availability are subject to change without notice.

WT PRECISION PRESS BRAKE TOOLING

PRECISION MANUFACTURED FOR CONSISTENT RESULTS.

WT Precision press brake tooling is precision manufactured to a tolerance of $\pm .0004"$ (.01mm) on all critical dimensions. Lengths of 19.69" [500mm] solid and sectionalized sets with various pieces can be mixed and matched for consistent bending quality throughout multiple jobs.

- Tools can be loaded by a single operator.
- Easy to store. Cabinets available.
- Sectionalized tools come in twelve pieces.
- Sectionalized punches include two ear pieces (horns).
- Heat treat options include Nitrex® and laser hardening
- Nitrex® [HRC-70] is standard on dies.

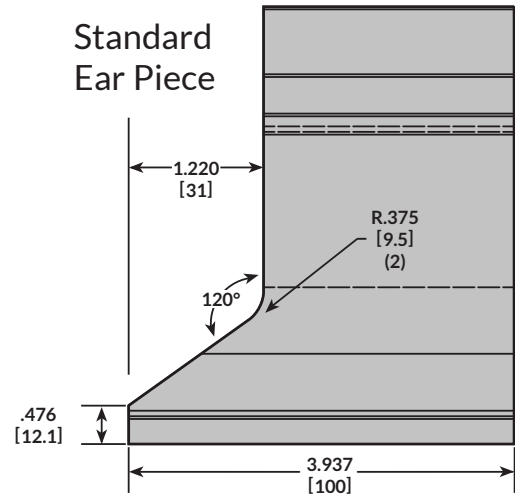
STANDARD LENGTHS:

- 200 = 7.87" [200mm]
- 500 = 19.7" [500mm]
- Sectionalized (X) = 41.3" [1050mm]
- Sectionalized (X1) = 19.7" [500mm]
- Sectionalized (X2) = 21.65" [550mm]

SECTIONALIZED LENGTHS:

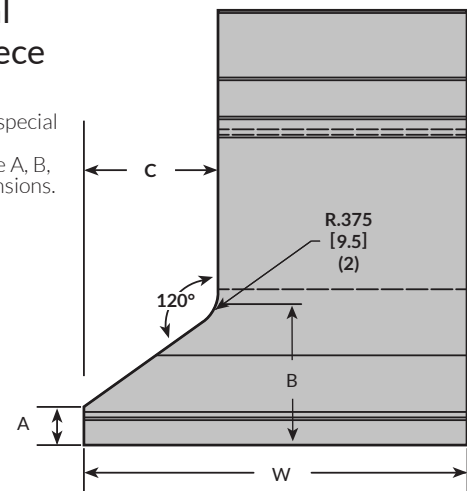
X1 Set	.98" [25mm]	Qty. 2
	1.18" [30mm]	
	1.37" [35mm]	
	1.57" [40mm]	
	1.77" [45mm]	
	3.93" [100mm]	
Left	3.93" [100mm]	
	3.93" [100mm]	
	3.93" [100mm]	
Right	1.96" [50mm]	
	7.87" [200mm]	
	11.81" [300mm]	

Standard Ear Piece

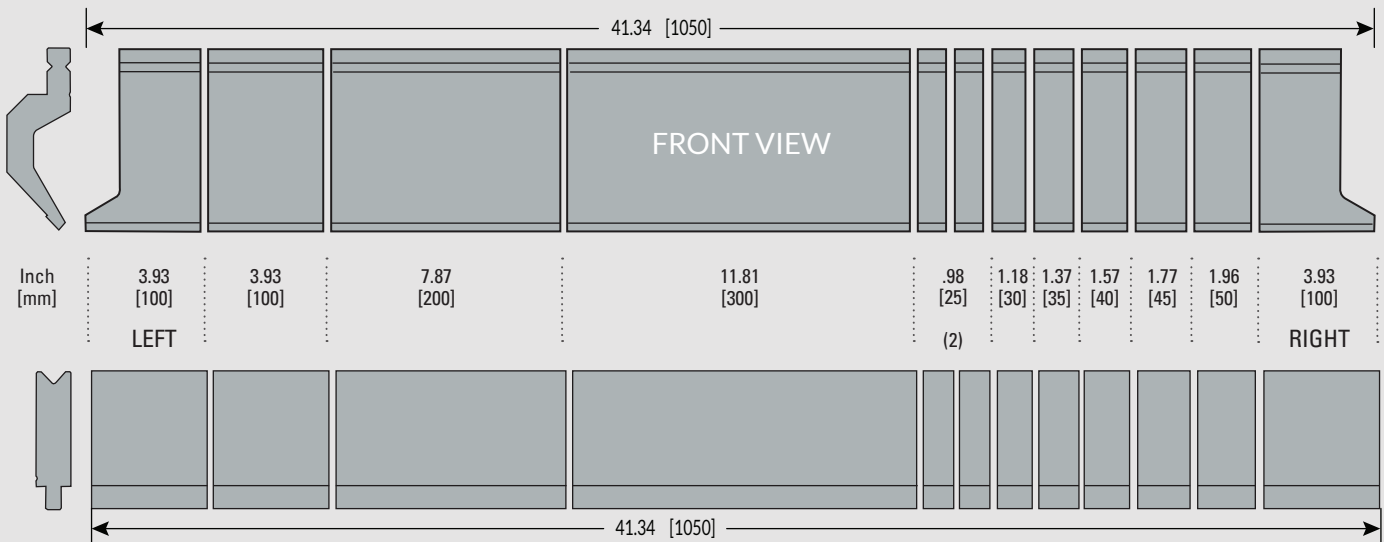


Special Ear Piece

To order a special ear section indicate the A, B, C, W dimensions.



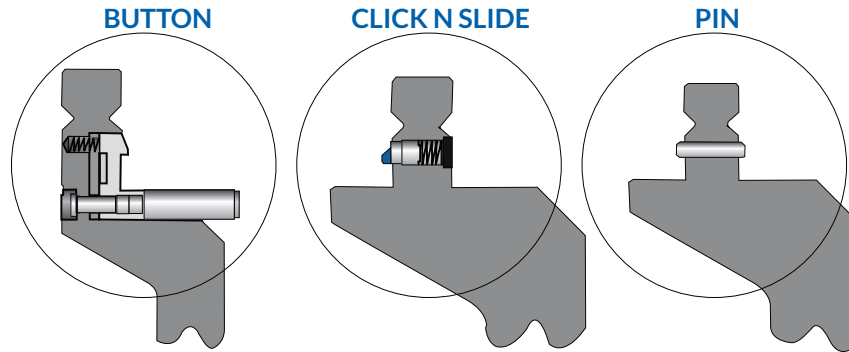
SECTIONALIZED PUNCH AND DIE LENGTHS



WT PRECISION PRESS BRAKE TOOLING

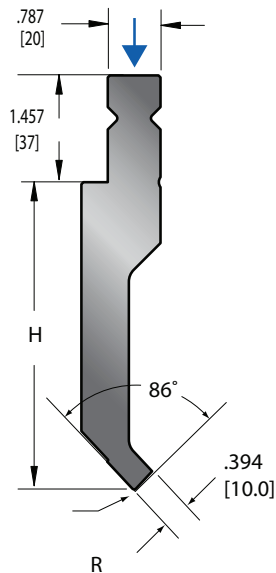
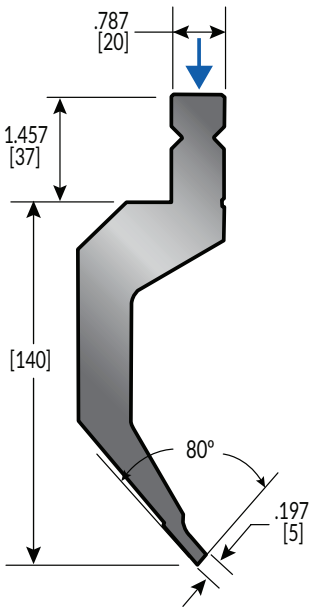
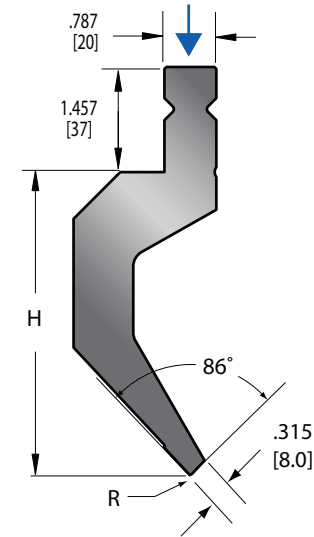
PUSH BUTTON TECHNOLOGY

Load and unload tools instantly with Wilson Tool International's unique click-in feature. Wilson Tool's patented push button technology eliminates the need for special clamps, holders or dedicated upper beams, significantly reducing costly downtime.



	PROFILE	500	X1	X2
120 / 140mm	600 Series	CS	B4	B4
	601 Series	B2	B2	B2
	602 Series	B1	B1	B1
	603 Series	CS	B3	B3
	604 Series	B1	B1	B1
220 / 240mm	605 Series	P	B5	CS/B5
	610 Series	P	B5	CS/B5
	611 Series	P	B3	CS/B3
	612 Series	P	B3	CS/B3
	613 Series	P	B3	CS/B3
163mm	614 Series	P	B3	CS/B3
	92080060	P	B4	CS/B4
	92086010	CS	B2	B2
	92180010	CS	B2	B2
	92228010	B1	B1	B1
92460030	CS	B1	B1	

BUTTON Extension		[Vertically load and unload]	
CODE	CAT. NO.	DESCRIPTION	
B1	980938	WT G3 safety button flush extension	
B2	980939	WT G3 safety button extension 15mm	
B3	980940	WT G3 safety button extension 25mm	
B4	980941	WT G3 safety button extension 39mm	
B5	980942	WT G3 Safety button extension 50mm	
<i>* Plus one of each of the following components:</i>			
	980157	Spring Ø.180 x .022 x .560 long	
	50079	Push button logo plug, small	
	980130	WT safety tang	
	980943	WT safety tang shoulder bolt	
CLICK N SLIDE		[Vertically load, slide out]	
CS	60001	WT punch safety button spring pin	
	60002	WT punch safety button backer plate	
	8197	Retaining ring for B & C STN. HP spring nut	
	972200	T punch .300 x .375 long spring	
PIN		[Slide in, slide out]	
P	43741	Dowel pin Ø5mm x .25mm long	



SERIES 600		86° SWAN-NECK PUNCH			120MM TALL					
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	200 7.87 [200]	500 19.7 [500]	Sectionalized				
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]		
				Button Options:			B4	CS	B4	B4
60086010	.039 [1.0]	4.724 [120.0]	850							
60086005	M .020 [0.5]	4.717 [119.8]	850							
60086016	M .063 [1.6]	4.693 [119.2]	850							
60086020	M .079 [2.0]	4.693 [119.2]	850							
60086023	M .091 [2.3]	4.685 [119.0]	850							
60086025	M .098 [2.5]	4.685 [119.0]	850							
60086030	M .118 [3.0]	4.673 [118.7]	850							
60086032	M .126 [3.2]	4.669 [118.6]	850							
60086040	M .157 [4.0]	4.657 [118.3]	850							

Reference # OW200k

- Max Ton = 26 ft [87m]
- Tooling for special application available upon request.
- 2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.

SERIES 605		80° SWAN-NECK PUNCH WITH THIN TIP			140MM TALL					
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	Max Ton feet [meter]	500 19.7 [500]	Sectionalized				
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]		
				Button Options:			P	CS/B5	B5	CS/B5
60580005	.020 [0.5]	5.512 [140]	400	12/40						

Reference # OW280k

Tooling for special application available upon request.

2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.

SERIES 601		86° GOOSE-NECK PUNCH			120 MM TALL					
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	Max Ton feet [meter]	500 19.7 [500]	Sectionalized				
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]		
				Button Options:			B2	B2	B2	B2
60186010	.039 [1.0]	4.724 [120.0]	900	28 [92]						
60186005	M .020 [0.5]	4.717 [119.8]	900	28 [92]						
60186016	M .063 [1.6]	4.701 [119.4]	900	28 [92]						
60186020	M .079 [2.0]	4.693 [119.2]	900	28 [92]						
60186023	M .091 [2.3]	4.685 [119.0]	900	28 [92]						
60186025	M .098 [2.5]	4.685 [119.0]	900	28 [92]						
60186030	M .118 [3.0]	4.677 [118.8]	900	28 [92]						
60186032	M .126 [3.2]	4.669 [118.6]	900	28 [92]						
60186040	M .157 [4.0]	4.654 [118.2]	900	28 [92]						

Reference # OW201k

Tooling for special application available upon request.

2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.

M Made To Order

↓ Indicates how tonnage is applied to punches

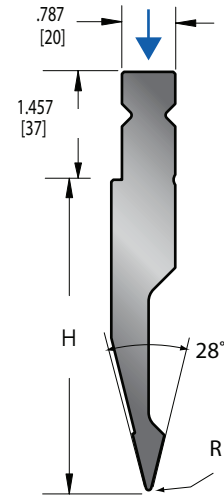
SERIES 602, 603, 604



PUNCH

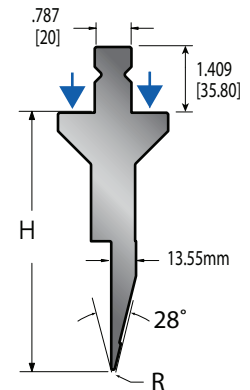
SERIES 602		28° ACUTE WITH RELIEF PUNCH				120MM TALL			
CAT. NO	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	Max Ton feet [meter]	500 19.7 [500]	Sectionalized			
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]	
<i>Button Options:</i>					B1	B1	B1	B1	
60228010	.039 [1.0]	4.724 [120.0]	1000	31 [102]					
60228005	M .020 [0.5]	4.717 [119.8]	1000	31 [102]					
60228016	M .063 [1.6]	4.614 [117.2]	1000	31 [102]					
60228020	M .079 [2.0]	4.567 [116.0]	1000	31 [102]					
60228023	M .091 [2.3]	4.531 [115.1]	1000	31 [102]					
60228025	M .098 [2.5]	4.504 [114.4]	1000	31 [102]					
60228030	M .118 [3.0]	4.441 [112.8]	1000	31 [102]					
60228032	M .126 [3.2]	4.437 [112.7]	1000	31 [102]					
60228040	M .157 [4.0]	4.323 [109.8]	1000	31 [102]					

Reference # OW202k
Tooling for special application available upon request.
2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.



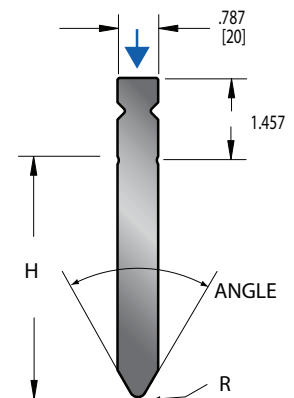
SERIES 603		28° HEMMING PUNCH				140MM TALL			
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	200 7.87 [200]	500 19.7 [500]	Sectionalized			
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]	
<i>Button Options:</i>					B3	CS	B3	B3	B3
60328010	.039 [1.0]	5.512 [140]	650						
60328005	M .020 [0.5]	5.504 [139.8]	650						

Reference # OW210k
• Max Ton = 20 ft [66m]
Tooling for special application available upon request.
2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.



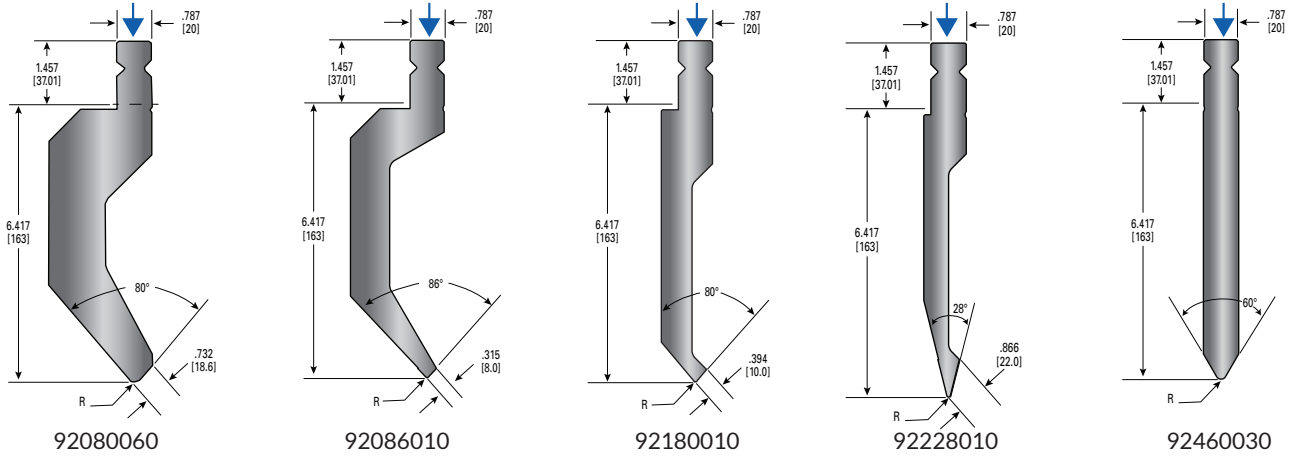
SERIES 604		60° POINTED				120MM TALL			
CAT. NO	R Tip Radius inch [mm]	A Angle	H Height inch [mm]	kN/m	Max Ton feet [meter]	500 19.7 [500]	Sectionalized		
							X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
<i>Button Options:</i>					B1	B1	B1	B1	
60460040	.157 [4.0]	60	4.724 [120.0]	1600	49 [163]				
60460020	M .079 [2.0]	60	4.717 [119.8]	1600	49 [163]				
60460025	M .098 [2.5]	60	4.717 [119.8]	1600	49 [163]				
60460030	M .118 [3.0]	60	4.717 [119.8]	1600	49 [163]				
60460047	M .185 [4.7]	60	4.689 [119.1]	1600	49 [163]				
60460050	M .197 [5.0]	60	4.677 [118.8]	1600	49 [163]				
60460060	M .236 [6.0]	60	4.630 [117.6]	1600	49 [163]				

Reference # OW203k
Tooling for special application available upon request.
2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.



M Made To Order

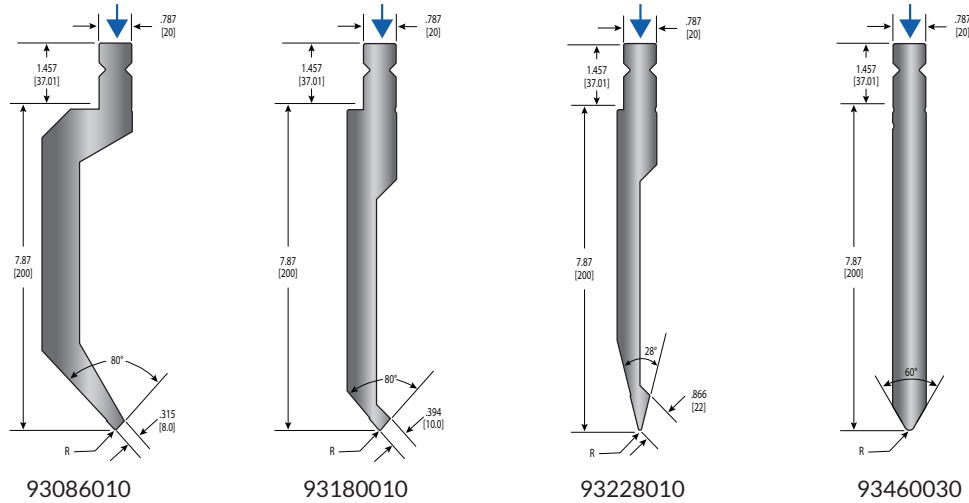
↓ Indicates how tonnage is applied to punches



163MM TALL PUNCHES

CAT. NO.	REF. NO.	R Tip Radius inch [mm]	A Angle	H Height inch [mm]	kN/m	Max Ton feet [meter]	200 7.87 [200]	500 19.7 [500]	Sectionalized		
									X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
<i>Button Options in blue below:</i>											
92080060	BIU-025	.236 [6]	80	6.417 [163.0]	1270	39 [130]	B4	P	CS/B4	B4	CS/B4
92086010	BIU-023	.039 [1]	86		640	20 [65]	B2	CS	B2	B2	B2
92180010	M BIU-022	.039 [1]	80		780	24 [80]	B2	CS	B2	B2	B2
92228010	BIU-021	.039 [1]	28		690	21 [70]	—	B1	B1	B1	B1
92460030	BIU-024	.118 [3]	60		1570	48 [160]	B1	CS	B1	B1	B1

200MM TALL PUNCH



200MM TALL PUNCHES

CAT. NO.	REF. NO.	R Tip Radius inch [mm]	A Angle	H Height inch [mm]	kN/m	Max Ton feet [meter]	200 7.87 [200]	500 19.7 [500]	Sectionalized		
									X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
<i>Button Options in blue below:</i>											
93086010	M BIU-033	.039 [1]	86	7.874 [200]	490	15 [50]	B4	CS	B4	B4	B4
93180010	M BIU-032	.039 [1]	80	7.874 [200]	780	24 [80]	B2	CS	B2	B2	B2
93228010	M BIU-031	.039 [1]	28	7.874 [200]	590	18 [60]	B1	P	B1	B1	B1
93460030	M BIU-034	.118 [3]	60	7.874 [200]	1570	48 [160]	B1	CS	B1	B1	B1

M Made To Order

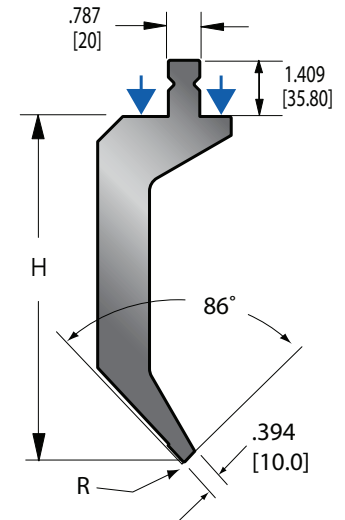
↓ Indicates how tonnage is applied to punches

SERIES 610			86° SWAN-NECK PUNCH			220MM TALL				
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	200 7.87 [200]	500 19.7 [500]	Sectionalized				
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]		
<i>Button Options:</i>						B5	P	CS/B5	B5	CS/B5
61086010	.039 [1.0]	8.661 [220.0]								
61086005	M .020 [0.5]	8.654 [219.8]								
61086016	M .063 [1.6]	8.630 [219.2]								
61086020	M .079 [2.0]	8.630 [219.2]								
61086023	M .091 [2.3]	8.622 [219.0]	850							
61086025	M .098 [2.5]	8.610 [218.7]								
61086030	M .118 [3.0]	8.602 [218.5]								
61086032	M .126 [3.2]	8.602 [218.5]								
61086040	M .157 [4.0]	8.594 [218.3]								

Reference # OW200s

- Max Ton = 26 ft [87m]

Tooling for special application available upon request.
2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.

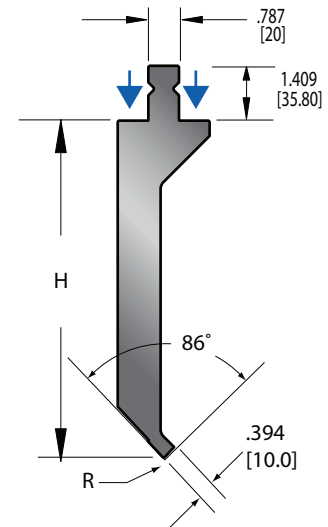


SERIES 611			86° GOOSE-NECK PUNCH			220MM TALL				
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	200 7.87 [200]	500 19.7 [500]	Sectionalized				
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]		
<i>Button Options:</i>						B3	P	CS/B3	B3	CS/B3
61186010	.039 [1.0]	8.661 [220.0]								
61186005	M .020 [0.5]	8.654 [219.8]								
61186016	M .063 [1.6]	8.638 [219.4]								
61186020	M .079 [2.0]	8.630 [219.2]								
61186023	M .091 [2.3]	8.622 [219.0]	900							
61186025	M .098 [2.5]	8.610 [218.7]								
61186030	M .118 [3.0]	8.614 [218.8]								
61186032	M .126 [3.2]	8.606 [218.6]								
61186040	M .157 [4.0]	8.594 [218.3]								

Reference # OW201s

- Max Ton = 28 ft [92m]

Tooling for special application available upon request.
2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.

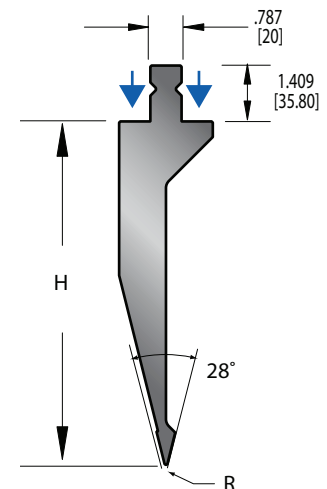


SERIES 612			28° ACUTE WITH RELIEF PUNCH			220MM TALL				
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	200 7.87 [200]	500 19.7 [500]	Sectionalized				
						X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]		
<i>Button Options:</i>						B3	P	CS/B3	B3	CS/B3
61228010	.039 [1.0]	8.661 [220.0]								
61228005	M .020 [0.5]	8.654 [219.8]								
61228016	M .063 [1.6]	8.575 [217.8]								
61228020	M .079 [2.0]	8.504 [216.0]								
61228023	M .091 [2.3]	8.488 [215.6]	1000							
61228025	M .098 [2.5]	8.425 [214.0]								
61228030	M .118 [3.0]	8.378 [212.8]								
61228032	M .126 [3.2]	8.374 [212.7]								
61228040	M .157 [4.0]	8.260 [209.8]								

Reference # OW202s

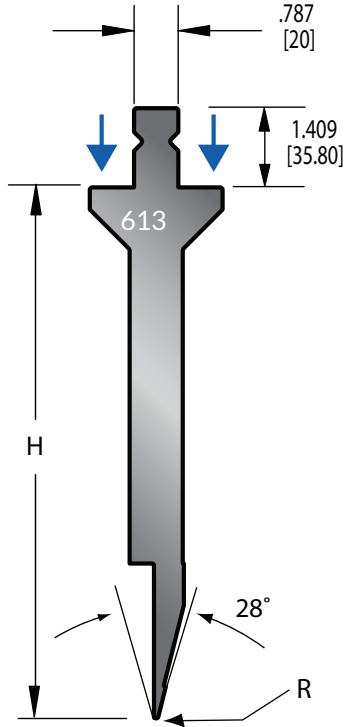
- Max Ton = 31 ft [102m]

Tooling for special application available upon request.
2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.

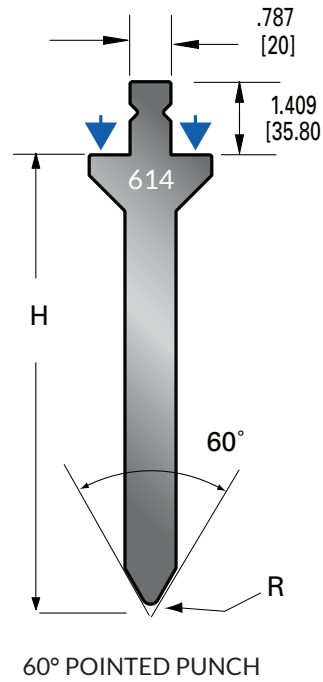


M Made To Order

↓ Indicates how tonnage is applied to punches



28° HEMMING PUNCH



60° POINTED PUNCH

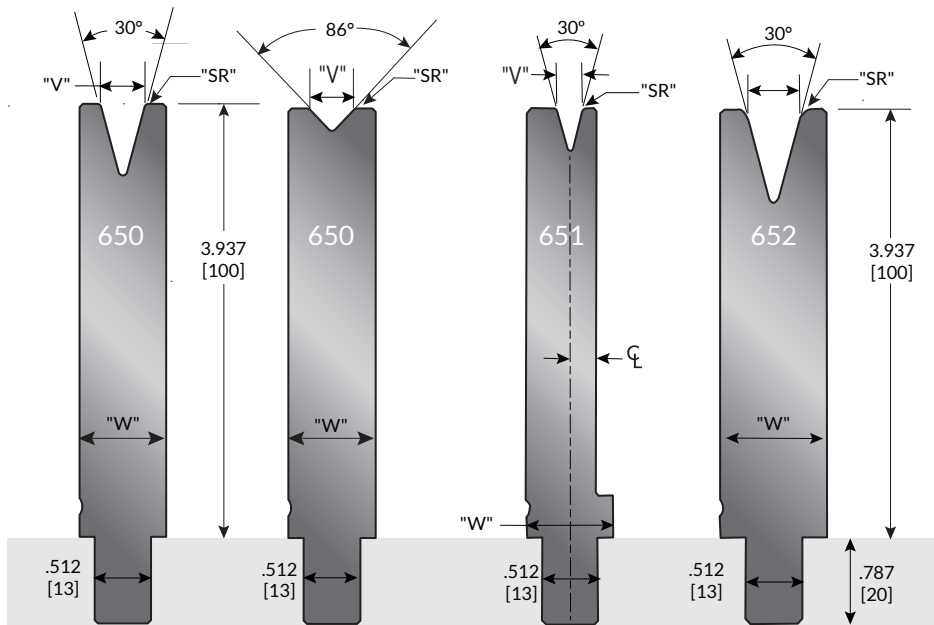
SERIES 613		28° HEMMING PUNCH			240MM TALL				
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	Max Ton feet [meter]	200 7.87 [200]	500 19.7 [500]	Sectionalized		
							X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
					Button Options: B3 P CS/B3 B3 CS/B3				
61328010	.039 [1.0]	9.449 [240.0]	650	20 [66]					
61328005	M .020 [0.5]	9.441 [239.8]							
Reference # OW210s									
Tooling for special application available upon request. 2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.									

SERIES 614		60° POINTED PUNCH			220MM TALL				
CAT. NO.	R Tip Radius inch [mm]	H Height inch [mm]	kN/m	Max Ton feet [meter]	200 7.87 [200]	500 19.7 [500]	Sectionalized		
							X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
					Button Options: B3 P CS/B3 B3 CS/B3				
61460040	.157 [4.0]	8.661 [220.0]	1600	49 [163]					
61460020	M .079 [2.0]	8.654 [219.8]							
61460025	M .098 [2.5]	8.654 [219.8]							
61460030	M .118 [3.0]	8.654 [219.8]							
61460047	M .185 [4.7]	8.622 [219.0]							
61460050	M .197 [5.0]	8.606 [218.6]							
61460060	M .236 [6.0]	8.567 [217.6]							
Reference # OW203s									
Tooling for special application available upon request. 2050mm, 2550mm, 3050mm and 4050mm sets available - call for pricing.									

M Made To Order

↓ Indicates how tonnage is applied to punches

100 MM TALL FULL BODY DIES



650 = Standard Die
 651 = Relieved Die
 652 = Large Shoulder Radius Die

SERIES 650, 651, 652 30° DIES - 3.937" [100MM] TALL

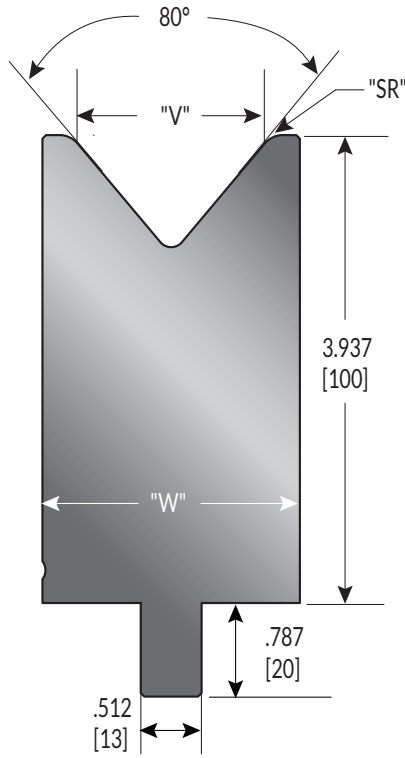
CAT. NO.	REF. NO.	V Opening inch [mm]	W Width inch [mm]	CL Width inch [mm]	SR Shoulder Radius	kN/m	Max Ton ft [m]	500 19.7 [500]	Sectionalized		
									X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
65030006	EV001	.236 [6]			.024 [0.6]	600	18 [61]				
65030006H											
65030008	EV002	.315 [8]	.787 [20]			550	17 [56]				
65030008H											
65030010	EV003	.394 [10]			.039 [1.0]	450	14 [46]				
65030010H											
65030012	EV004	.472 [12]	.984 [25]	N/A		550	17 [56]				
65030012H											
65030016	EV005	.630 [16]	1.181 [30]		.063 [1.6]	650	20 [66]				
65030016H											
65030020	EV006	.787 [20]	1.378 [35]		.078 [2.0]						
65030020H											
65030024	EV007	.945 [24]	1.575 [40]		.098 [2.5]	750	23 [76]				
65030024H											
65130006	M EV001/S	.236 [6]	.787 [20]	.236 [6]	.024 [0.6]	170	6 [17.3]				
65130008	M EV002/S	.315 [8]	.787 [20]	.275 [7]		200	7 [20.3]				
65130010	M EV003/S	.394 [10]	.787 [20]	.315 [8]	.039 [1.0]	200	7 [20.3]				
65130012	M EV004/S	.472 [12]	.984 [25]	.354 [9]		200	9 [25.5]				
65230006	M EV001 R3	.236 [6]	.787 [20]			600	18 [61]				
65230008	M EV002 R3	.315 [8]	.787 [20]			550	17 [56]				
65230010	M EV003 R3	.394 [10]	.787 [20]	N/A	.118 [3]	450	14 [46]				
65230012	M EV004 R3	.472 [12]	.984 [25]			550	17 [56]				
65230016	M EV005 R3	.630 [16]	1.181 [30]			650	20 [66]				

H designation indicates 'with hole' option for hemming

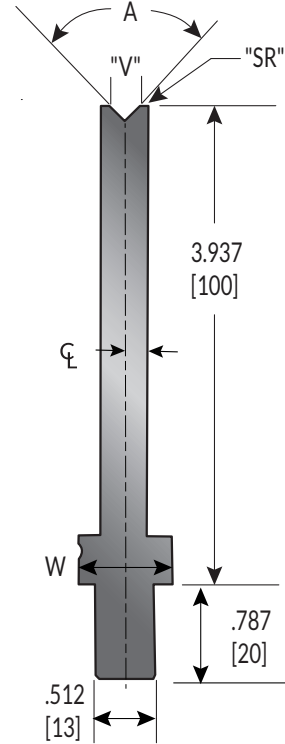
SERIES 650 84° & 86° DIES - 3.937" [100MM] TALL

M Made To Order

CAT. NO.	REF. NO.	ANGLE	V Opening inch [mm]	W Width inch [mm]	SR Shoulder Radius	kN/m	Max Ton ft [m]	500 19.7 [500]	Sectionalized		
									X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
65084006	M EV W6/84	84°	.236 [6]	.787 [20]	.024 [0.6]	1200	37 [122]				
65084008	M EV W8/84	84°	.315 [8]	.787 [20]	.032 [0.8]	1100	34 [112]				
65084010	M EV W10/84	84°	.394 [10]	.787 [20]	.039 [1.0]	900	28 [92]				
65084012	M EV W12/84	84°	.472 [12]	.984 [25]	.039 [1.0]	1200	37 [122]				
65084016	M EV W16/84	84°	.630 [16]	1.181 [30]	.063 [1.6]	1300	40 [133]				
65084020	M EV W20/84	84°	.787 [20]	1.181 [30]	.078 [2.0]	1400	43 [143]				
65086006	EV 020/86	86°	.236 [6]	.787 [20]	.024 [0.6]	1200	37 [122]				
65086008	EV 021/86	86°	.315 [8]	.787 [20]	.032 [0.8]	1100	34 [112]				
65086010	EV 022/86	86°	.394 [10]	.787 [20]	.039 [1.0]	900	28 [92]				
65086012	EV 023/86	86°	.472 [12]	.984 [25]	.039 [1.0]	1200	37 [122]				
65086016	EV 024/86	86°	.630 [16]	1.181 [30]	.063 [1.6]	1300	40 [133]				
65086020	EV 025/86	86°	.787 [20]	1.181 [30]	.078 [2.0]	1400	43 [143]				
65086024	EV 026/86	86°	.945 [24]	1.378 [35]	.098 [2.5]	1500	46 [153]				
65086030	EV 027/86	86°	1.181 [30]	1.772 [45]	.118 [3.0]	1500	46 [153]				
65086040	EV 028/86	86°	1.575 [40]	2.165 [55]	.118 [3.0]	1500	46 [153]				
65086050	EV 029/86	86°	1.969 [50]	2.950 [75]	.118 [3.0]	1500	46 [153]				



80° Die

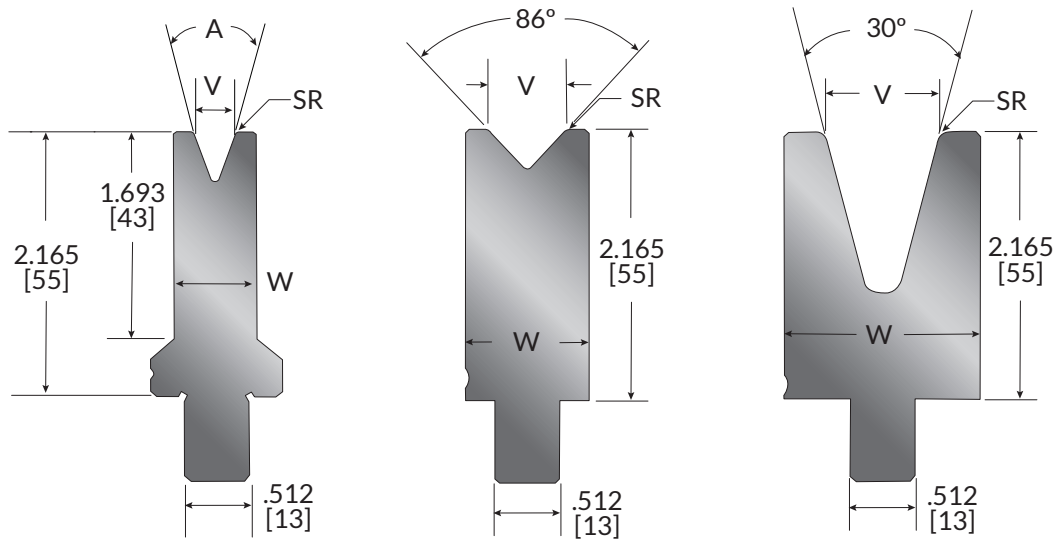


84°/86° Dies

SERIES 650		80° DIES - 3.937" [100MM] TALL / 4.724" [120MM] TALL										
CAT. NO	REF. NO.	V Opening inch [mm]	W Width inch [mm]	SR Shoulder Radius	kN/m	Max Ton feet [meter]				Sectionalized		
							200 7.87 [200]	300 11.81 [300]	500 19.7 [500]	X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
65080024	EVW24/80	.945 [24]	1.378 [35]	.098 [2.5]	700	21 [71]	N/A	N/A				
65080030	EVW30/80	1.181 [30]	1.772 [45]	.197 [5.0]	900	28 [92]	N/A	N/A				
65080040	EVW40/80	1.575 [40]	2.165 [55]	.197 [5.0]	1200	37 [122]	N/A	N/A				
65080050	EVW50/80	1.969 [50]	2.559 [65]	.197 [5.0]	1500	46 [153]						
65080060	EVW60/80	2.362 [60]	2.953 [75]	.197 [5.0]	1500	46 [153]			N/A			
65080080	EVW80/80	3.150 [80]	3.937 [100]	.197 [5.0]	1500	46 [153]			N/A			
65080100	EVW100/80	3.937 [100]	4.724 [120]	.315 [8.0]	1500	46 [153]			N/A			

SERIES 651		84° & 86° DIES - 3.937" [100MM] TALL											
CAT. NO	REF. NO.	ANGLE	V Opening inch [mm]	W Width inch [mm]	CL Width inch [mm]	SR Shoulder Radius	kN/m	Max Ton feet [meter]				Sectionalized	
									500 19.7 [500]	X1 19.7 [500]	X2 21.65 [550]		
65184006	EV/SW6/84	84°	.236 [6]	.787 [20]	.197 [5]	.024 [0.6]	250	8 [26]					
65184008	EV/SW8/84	84°	.315 [8]	.787 [20]	.236 [6]	.031 [0.8]	350	11 [36]					
65184010	EV/SW10/84	84°	.394 [10]	.787 [20]	.276 [7]	.039 [1.0]	400	12 [41]					
65184012	EV/SW12/84	84°	.472 [12]	.984 [25]	.315 [8]	.039 [1.0]	500	15 [51]					
65186006	EV/O20/S86	86°	.236 [6]	.787 [20]	.197 [5]	.024 [0.6]	250	8 [26]					
65186008	EV/O21/S86	86°	.315 [8]	.787 [20]	.236 [6]	.031 [0.8]	350	11 [36]					
65186010	EV/O22/S86	86°	.394 [10]	.787 [20]	.276 [7]	.039 [1.0]	400	12 [41]					
65186012	EV/O23/S86	86°	.472 [12]	.984 [25]	.315 [8]	.039 [1.0]	500	15 [51]					

Tooling for special application available upon request.
2050mm, 2550mm, 3050mm & 4050mm sets available, please call for pricing.



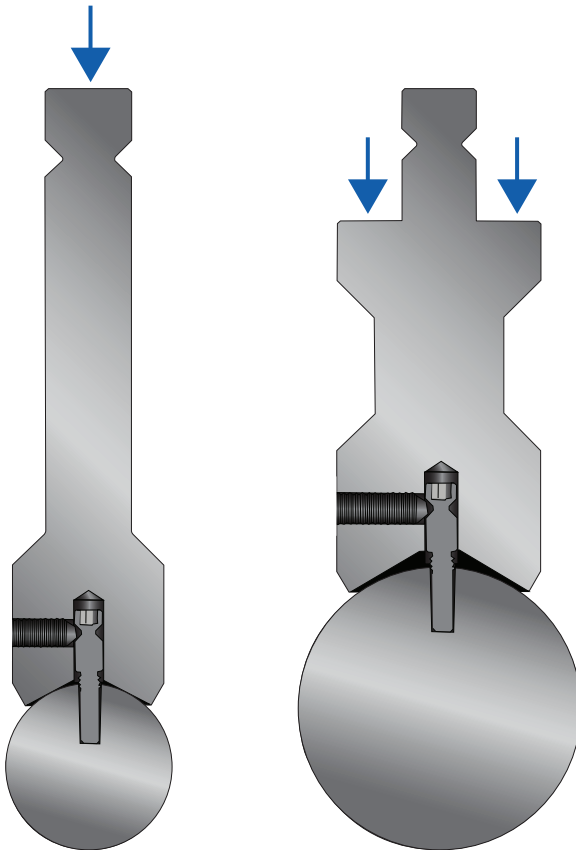
30° 6-12mm
86° 6-12 mm

86° 16 - 50 mm

30° 16 - 20 mm

SERIES 950		30°, 80°, AND 86° DIES - 2.165" [55MM] TALL									
CAT. NO	REF. NO.	A Angle	V Opening inch [mm]	W Width inch [mm]	SR Shoulder Radius	kN/m	Max Ton feet [meter]	Sectionalized			
								500 19.7 [500]	X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
95030006	M OZU-061	30	.236 [6]	.630 [16]	.039 [1.0]	780	24 [80]				
95030008	M OZU-051	30	.315 [8]	.630 [16]	.039 [1.0]	780	24 [80]				
95030010	M OZU-062	30	.394 [10]	.787 [20]	.039 [1.0]	780	24 [80]				
95030012	M OZU-052	30	.472 [12]	.787 [20]	.039 [1.0]	780	24 [80]				
95030016	M OZU-053	30	.630 [16]	1.181 [30]	.059 [1.5]	780	24 [80]				
95030020	M OZU-063	30	.787 [20]	1.378 [35]	.078 [2.0]	780	24 [80]				
95030024	M OZU-054	30	.945 [24]	1.575 [40]	.098 [2.5]	780	24 [80]				
95080024	M OZU-013	80	.945 [24]	1.378 [35]	.118 [3.0]	1230	38 [125]				
95080030	M OZU-014	80	1.181 [30]	1.575 [40]	.157 [4.0]	1230	38 [125]				
95080040	M OZU-015	80	1.575 [40]	1.969 [50]	.157 [4.0]	1230	38 [125]				
95080050	M OZU-035	80	1.969 [50]	2.952 [75]	.157 [4.0]	1230	38 [125]				
95086006	M OZU-021	86	.236 [6]	.630 [16]	.039 [1.0]	1180	36 [120]				
95086008	M OZU-010	86	.315 [8]	.630 [16]	.039 [1.0]	1180	36 [120]				
95086010	M OZU-022	86	.394 [10]	.787 [20]	.039 [1.0]	1180	36 [120]				
95086012	M OZU-011	86	.472 [12]	.787 [20]	.039 [1.0]	1180	36 [120]				
95086016	M OZU-012	86	.630 [16]	.984 [25]	.059 [1.5]	1180	36 [120]				
95086020	M OZU-023	86	.787 [20]	1.181 [30]	.078 [2.0]	1180	36 [120]				

M Made To Order

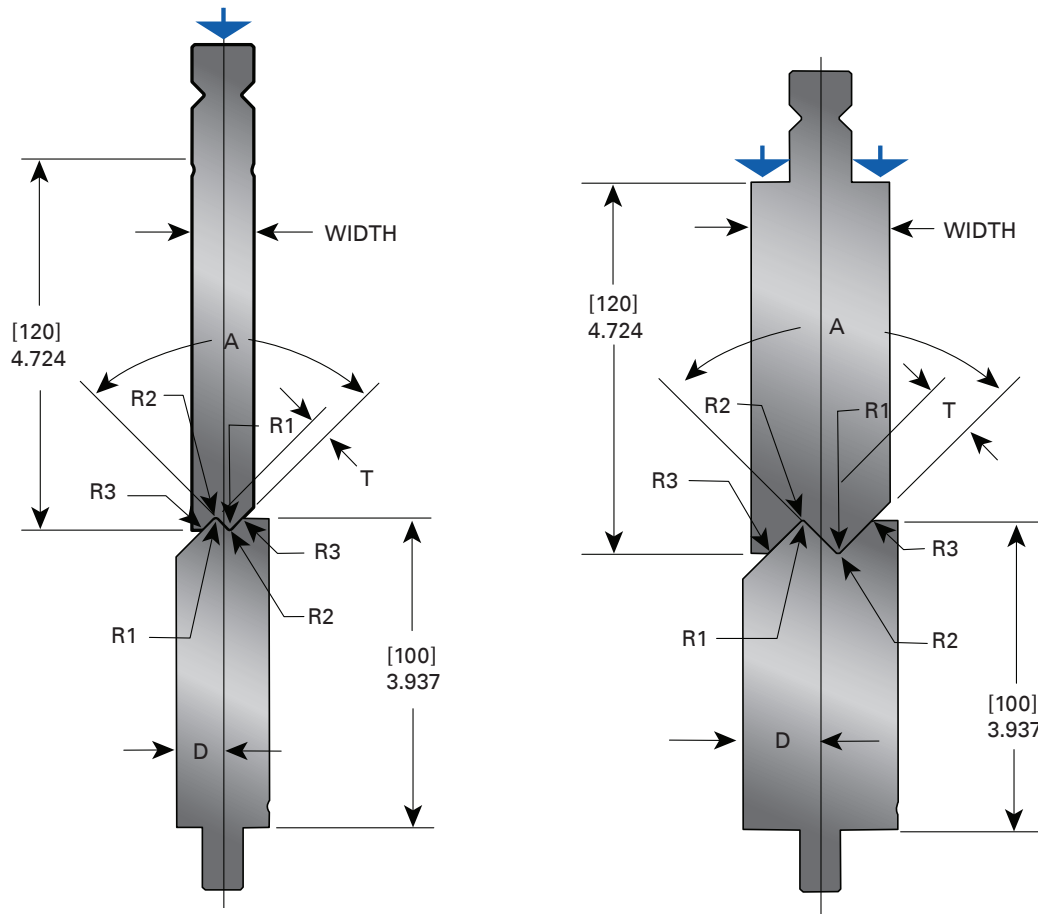


See this tool in action on the Wilson Tool YouTube Channel

LARGE RADIUS INSERT AND HOLDER					LENGTH: 19.69" [500mm]				
Radius Material #	Radius Size inch [mm]	Radius Price	Radius Approx. Weight [lbs]	Holder Material #	Holder Width inch [mm]	Holder Price	Holder Approx. Weight lbs. [kg]	Holder & Radius Assembled Height inch [mm]	MAX Ton / Ft
6R095-500	.375 [9.5]		3	60T35-500	1.3778 [35]		28 [12.8]	4.684 [119]	700 kN/m 71 T/m 21 T/Ft
6R127-500	.500 [12.7]		5					4.953 [125.8]	
6R158-500	.625 [15.8]		7					5.223 [132.7]	
6R190-500	.750 [19.0]		10					5.492 [139.5]	
6R222-500	.875 [22.2]		14					5.762 [146.4]	
6R254-500	1.000 [25.4]		18	60T55-500	2.165 [55]	44 [20.1]	6.031 [153.2]	71 T/m 21 T/Ft	
6R381-500	1.500 [38.1]		40				6.747 [171.37]		
6R508-500	2.000 [50.8] MTO		72				7.761 [197.1]		
LARGE RADIUS INSERT AND HOLDER					LENGTH: 9.84" [250mm]				
6R381-250	1.500 [38.1]		20	60T55-250	2.165 [55]		22 [10.5]	6.747 [171.37]	700 kN/m 71 T/m 21 T/Ft
6R508-250	2.000 [50.8]		36					7.761 [197.1]	

NOTE: The large radius assemblies shown above are not designed to stage bend. Contact our sales desk if stage bending is needed.
Make to order (MTO) sizes are available upon request.

CAUTION: Do not load the radius tip into the holder while in the machine. Remove the holder from the machine to change radius.

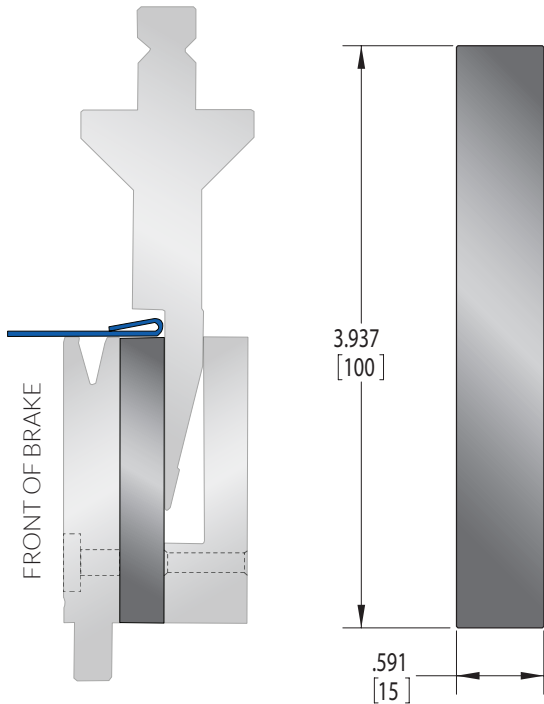


↓ Indicates how tonnage is applied to punches

OFFSET TOOL PUNCH AND DIE SETS														
CAT. NO.	A Angle	T Offset Dim. inch [mm]	Effective V inch [mm]	500	X	X1	X2	Load Style	W Width inch [mm]	R1 Punch Radius inch [mm]	R2 V Radius inch [mm]	R3 SH. Radius inch [mm]	D Centerline Dim. inch [mm]	MAX. Load
63190125	90°	.125 [3.2]	.177 [4.5]											
63190157	M	.157 [4.0]	.222 [5.6]											
63190188	M	.188 [4.8]	.266 [6.8]						.787 [20]	.024 [.6]	.024 [.6]		.394 [10]	
63190236	M	.236 [6.0]	.334 [8.5]											
63190250	90°	.250 [6.4]	.354 [9.0]					TOP						
63190312	M	.312 [7.9]	.441 [11.2]											1300 kN/m
63190315	M	.315 [8.0]	.445 [11.3]						1.181 [30]	.039 [1]	.039 [1]	.079 [2]	.591 [15]	133 T/m
63190375	M	.375 [9.5]	.530 [13.5]											40 T/Ft
63190394	M	.394 [10.0]	.557 [14.2]											
63190438	M	.438 [11.1]	.619 [15.7]											
63190500	M	.500 [12.7]	.707 [17.9]					SHOULDER	1.575 [40]	.039 [1]	.039 [1]		.787 [20]	
63190625	M	.625 [15.9]	.884 [22.4]						1.969 [50]	.039 [1]	.039 [1]		.984 [25]	
63190750	M	.750 [19.1]	1.061 [26.9]											

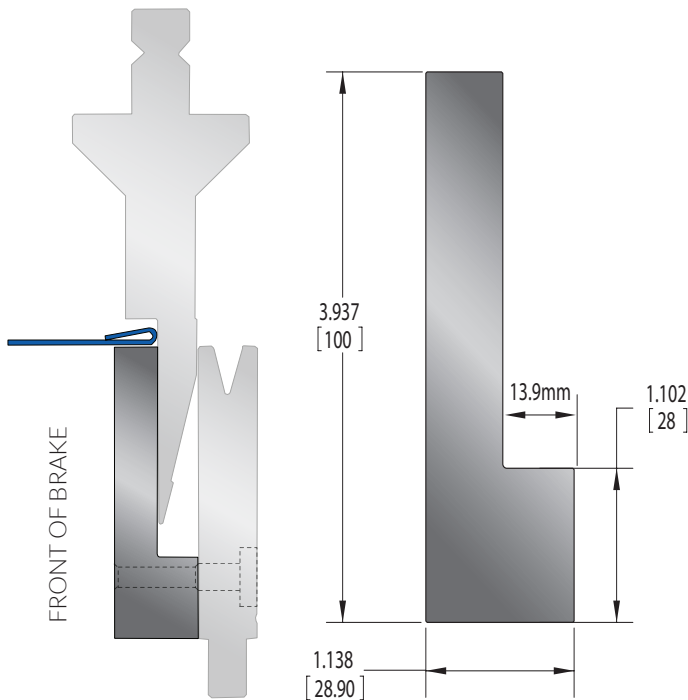
MTO size available upon request.

M Made To Order



FLATTENING 'I' SPACER BLOCK ATTACHMENT				
CAT. NO.	500 19.7" [500mm]	Sectionalized		
		X 41.3" [1050mm]	X1 19.7" [500mm]	X2 21.65" [550mm]
65300001				

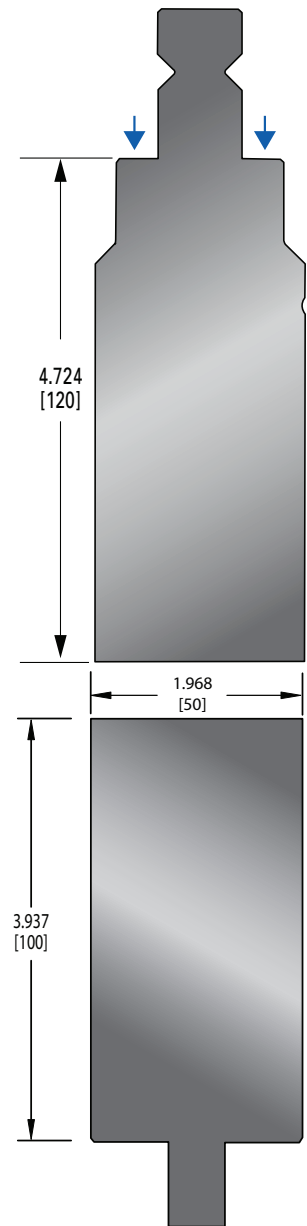
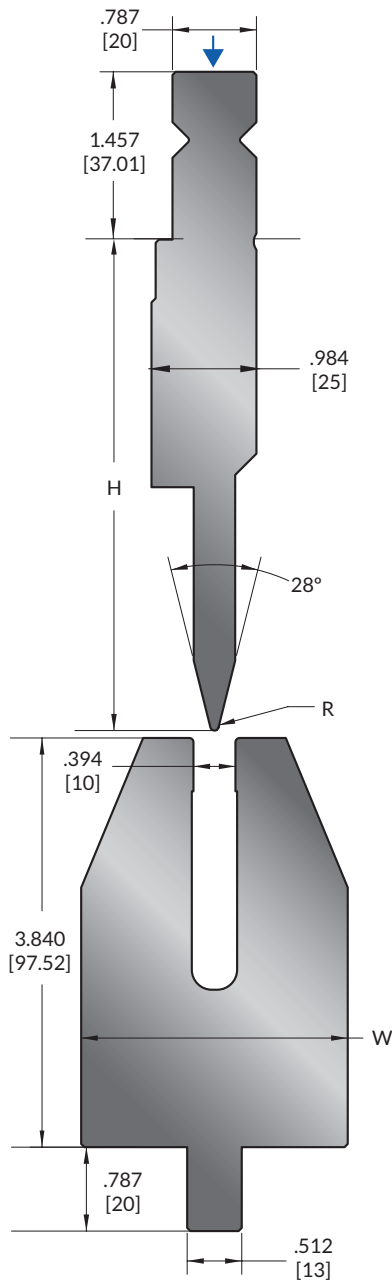
MOUNTING HARDWARE KIT			
CAT. NO.	V Opening [mm]	500 19.7 [500] (7 incl.)	X 41.3 [1050] (13 incl.)
H/6-10	6-10		
H/12	12		
H/16	16		
Each kit includes (2) socket head cap screws and (1) nut.			
980883	M8 x 1.25 Hex Nut Class 10		
970508	M8 x 30mm LG socket head cap screw		
8001944	M8 x 45mm LG socket head cap screw		



FLATTENING 'L' SPACER BLOCK ATTACHMENT				
CAT. NO.	500 19.7" [500mm]	Sectionalized		
		X 41.3" [1050mm]	X1 19.7" [500mm]	X2 21.65" [550mm]
65300002				

MOUNTING HARDWARE KIT			
CAT. NO.	V Opening [mm]	500 19.7 [500] (7 incl.)	X 41.3 [1050] (13 incl.)
H/6-10	6-10		
H/12	12		
H/16	16		
Each kit includes (2) socket head cap screws and (1) nut.			
980883	M8 x 1.25 Hex Nut Class 10		
970508	M8 x 30mm LG socket head cap screw		
8001944	M8 x 45mm LG socket head cap screw		

TWO STAGE HEMMING , FLATTENING DIE



HEMMING, FLATTENING

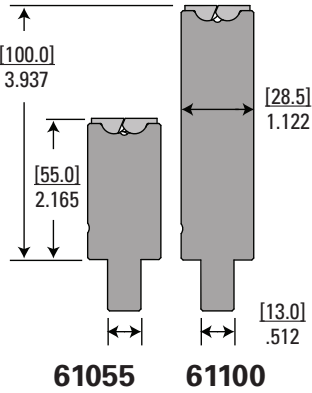
28° TWO STAGE HEMMING PUNCH									
CAT. NO.	R Tip Radius inch [mm]	A Angle	H Height inch [mm]	kN/m	Max Ton feet [meter]	Sectionalized			
						500 19.7 [500]	X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
<i>Button Options:</i>						CS	B1	B1	B1
69528010	.039 [1.0]	28	5.512 [140]	1000	31 [102]				
60528010	.039 [1.0]	28	4.724 [120]						

TWO STAGE HEMMING DIE					
CAT. NO.	V Opening inch [mm]	W Width inch [mm]	kN/m	Max Ton feet [meter]	500 19.7" [500mm]
65530010	.394 [10]	2.362 [60]	1000	31 [102]	

FLATTENING PUNCH			
CAT. NO.	500 19.7" [500mm]	X1 19.7 [500]	X2 21.65 [550]
<i>Button Option</i>			
	P	B1	B1
69500000			
FLATTENING DIE			
CAT. NO.	500 19.7" [500mm]	X1 19.7 [500]	X2 21.65 [550]
65300003			

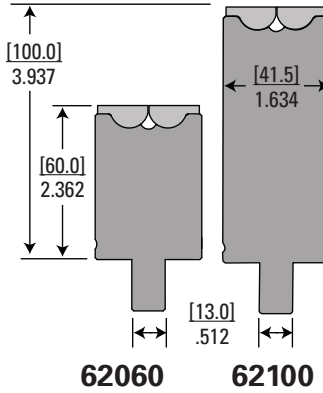
- Tonnage is based on direct load and does not apply for thrusting applications.
- Maximum material is 16ga. Cold rolled steel

MODEL 1



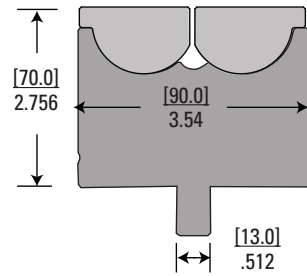
61055 61100

MODEL 2



62060 62100

MODEL 3



63070

MODEL 1 WT PRECISION V-SERIES BLACK

Height	9.84" [250mm]			19.68" [500mm] SOLID				21.65" [550mm] SECTIONAL				SPRINGS		
	Assembly CAT. NO.	WT. [lbs.]	PRICE	Assembly CAT. NO.	WT. [lbs.]	PRICE	250 Insert CAT. NO.	Assembly CAT. NO.	WT. [lbs.]	PRICE	Inserts CAT. NO.	CAT. NO.	500 mm QTY	550 mm QTY
55	61055-250	6		61055-500	11		(4) 980872A	61055-550	13		980873A and 980874A	980683	40	44
100	61100-250	10		61100-500	20			61100-550	22			981031		

MODEL 2 WT PRECISION V-SERIES BLACK

Height	9.84" [250mm]			19.68" [500mm] SOLID				21.65" [550mm] SECTIONAL				SPRINGS		
	Assembly CAT. NO.	WT. [lbs.]	PRICE	Assembly CAT. NO.	WT. [lbs.]	PRICE	250 Insert CAT. NO.	Assembly CAT. NO.	WT. [lbs.]	PRICE	Inserts CAT. NO.	CAT. NO.	250 mm QTY	455 mm QTY
60	62060-250	9		62060-500	15		(4) 980948	62060-550	17		980949 and 980950	980682	40	44
100	62100-250	14		62100-500	25			62100-550	29			981032		

MODEL 3 WT PRECISION V-SERIES BLACK

Height	3.94" [100mm]			9.84" [250mm]				17.91" [455mm]				SPRINGS				
	Assembly CAT. NO.	WT. [lbs.]	PRICE	Inserts CAT. NO.	Assembly CAT. NO.	WT. [lbs.]	PRICE	Inserts CAT. NO.	Assembly CAT. NO.	WT. [lbs.]	PRICE	Inserts CAT. NO.	CAT. NO.	WT. [lbs.]	500 mm QTY	550 mm QTY
70	63070.2-100	11		987163	63070.2-250	27		980959	63070.2-455	47		980960 and 980977	980881	.25	8	18

INSTALLATION TOOLS

DESCRIPTION	CAT. NO.	PRICE
Spring Installation Tool Kit	981002	
Spring Extension Wire (short)	981003	
Spring Extension Wire (long)	981004	



ZIP-MAR URETHANE SHOULDER STRIPS [54' Roll, .020" Thick]

DESCRIPTION	CAT. NO.	PRICE
Model 1, 1/2" wide	980953	
Model 2, 3/4" wide	980954	
Model 3, 1-5/8" wide	980955	



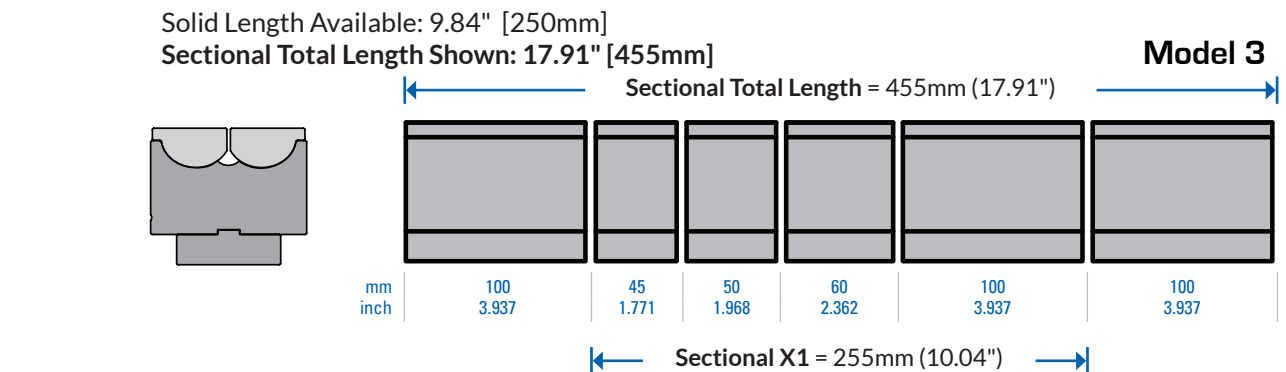
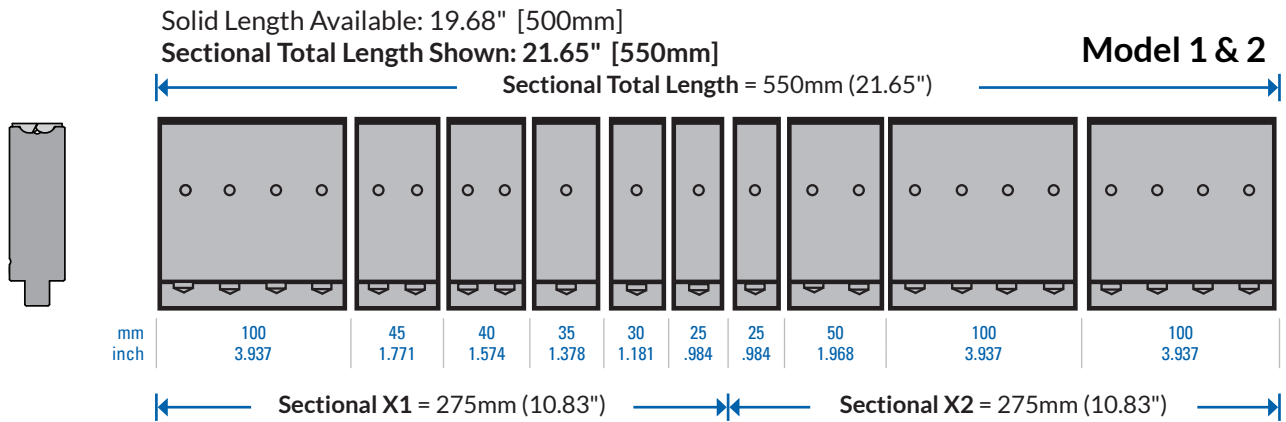
See this tool in action on the Wilson Tool YouTube Channel

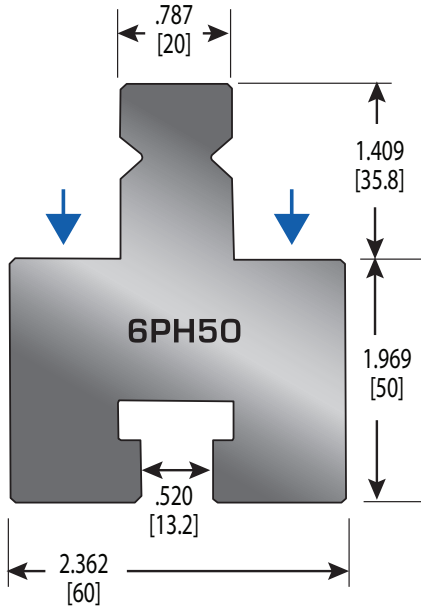
V-SERIES BLACK SPECIFICATIONS										
Model	Material Thickness inch [mm]	Min. Out-side Flange inch [mm]	Ton/ FT	Min. Angle	Punch Tip Required to Achieve Angle	Max OR Radius @ Min. Angle inch [mm]	Max OR Radius @ 90° inch [mm]	Tonnage Cap/FT	T/M	kN/M
1	.018 [.45]	.118 [3.0]	1.8	34°	0.054	.125 [3.17]	.175 [4.45]	34	112	1100
	.020 [.50]		1.8		0.052					
	.024 [.60]		2.0		0.047					
	.030 [.80]		2.5		0.042					
	.036 [.90]	3.3	0.036							
	.040 [1.0]	4.0	0.031							
	.048 [1.2]	5.8								
2	.074 [1.9]	.335 [8.5]	7	42°	0.122	.216 [5.5]	.354 [9.0]	50	168	1650
	.105 [2.9]	.347 [8.8]	13		0.112					
	.118 [3.0]	.366 [9.3]	15		0.099					
	.126 [3.2]		20	0.091						
	.135 [3.4]	22	55°	0.082	.276 [7.9]					
3	.157 [4.0]	.886 [22.5]	9	65°	0.078	.453 [11.5]	.500 [12.7]	60	204	2000
	.187 [4.75]		26		0.094					
	.250 [6.35]		28		0.125					

V OPENING AND SHOULDER RADIUS DIMENSIONS				
MODEL	SHOULDER RAD inch/[mm]	DESIRED ANGLE	THEORETICAL V - METRIC	THEORETICAL V - IMPERIAL
1	.040 [1.0]	90°	7.2	0.283
		34°	6.5	0.256
2	.051 [1.3]	90°	13.9	0.547
		42°	13.3	0.524
3	.236 [6.0]	90°	33.0	1.299
		65°	31.4	1.236



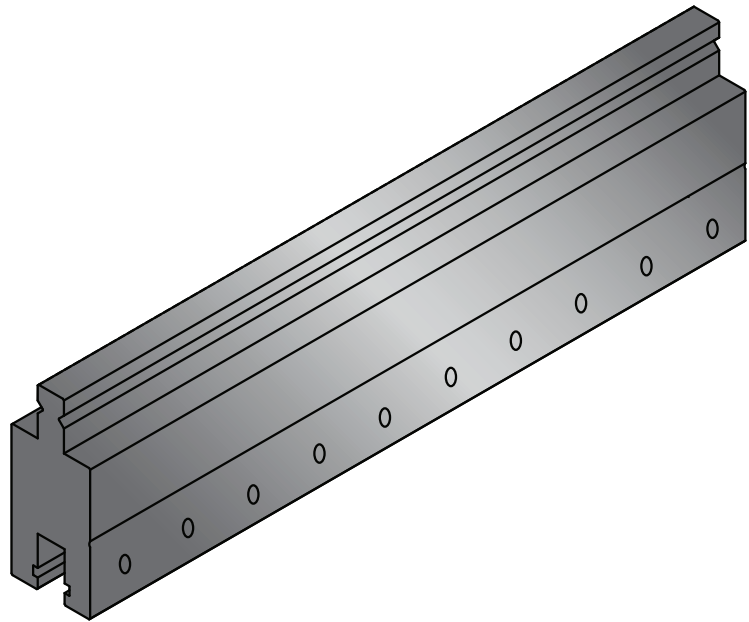
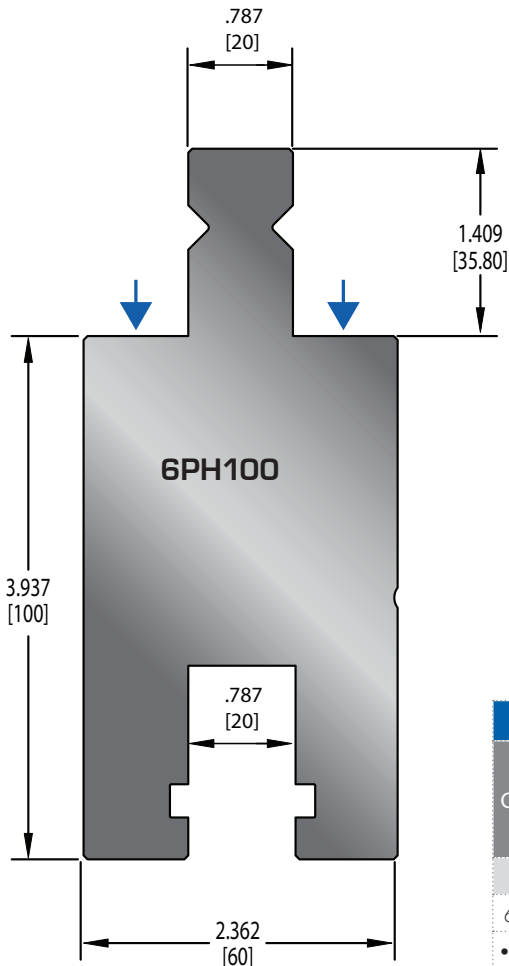
V-SERIES BLACK STANDARD LENGTHS





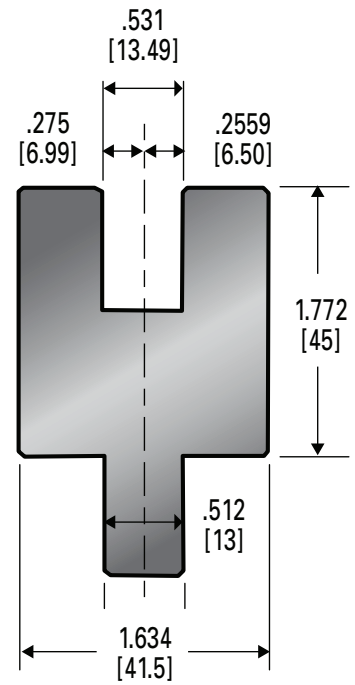
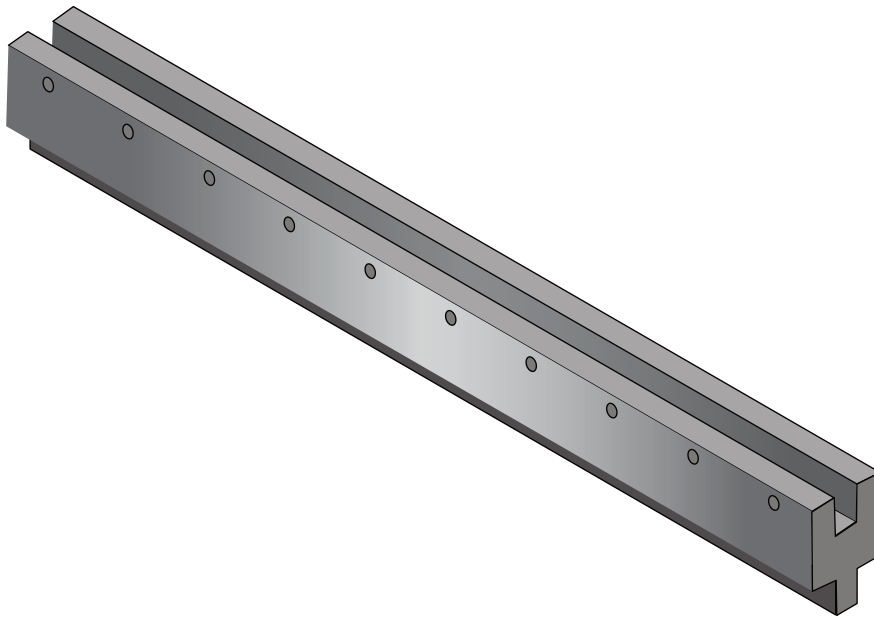
WT TO AMERICAN PUNCH HOLDER							
CAT. NO.	H Height inch [mm]	kN/m	Max Ton feet [meter]	500 19.7 [500]	SECTIONALIZED		
					X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
Button Options:				P	P/B3	B3	P/B3
6PH50	1.969 [50]	1900	60 [197]				

- Tonnage is based on direct load and does not apply for thrusting applications.
- Set screws every 2".



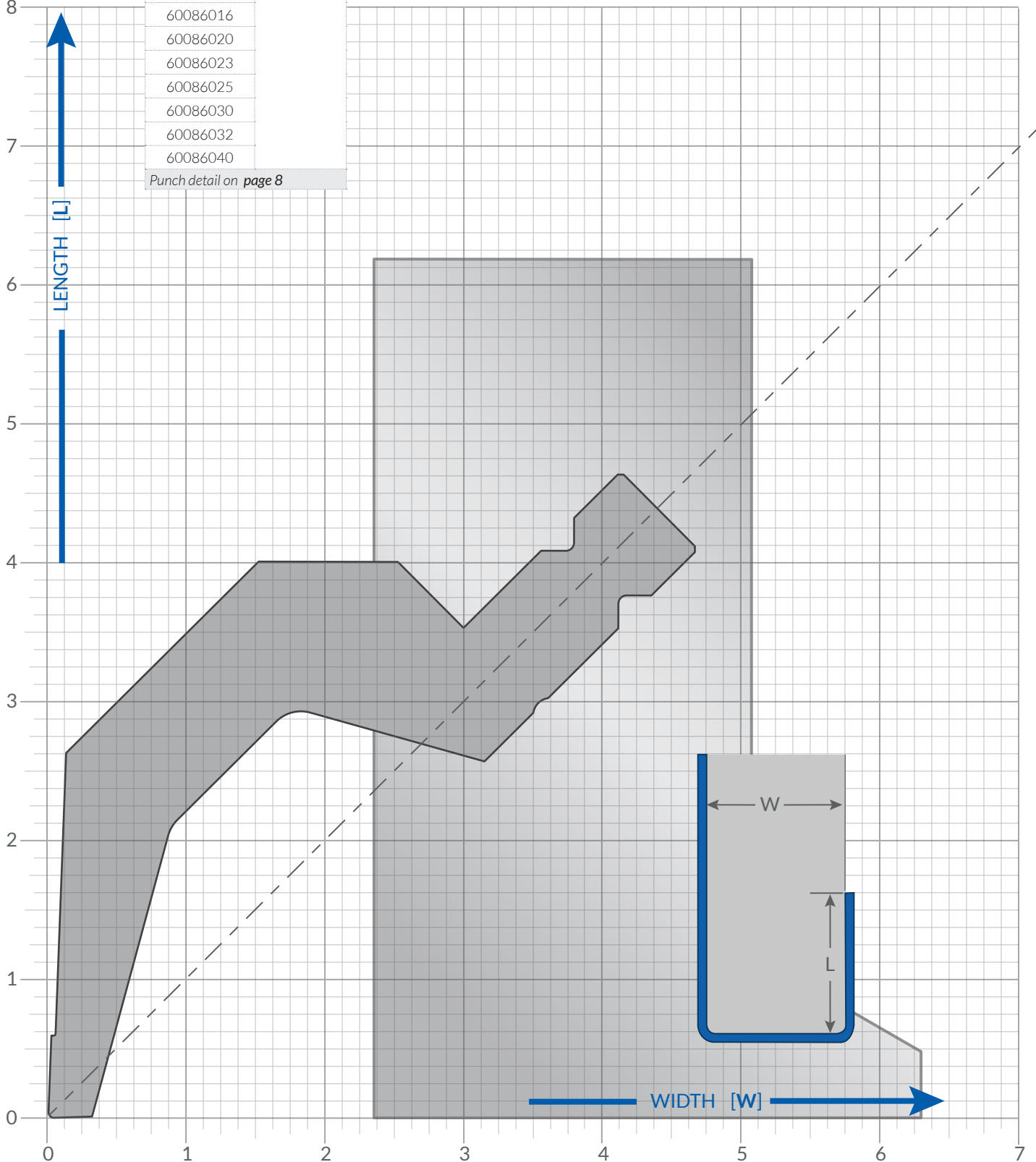
WT TO WT PUNCH HOLDER							
CAT. NO.	H Height inch [mm]	kN/m	Max Ton feet [meter]	500 19.7 [500]	SECTIONALIZED		
					X 41.3 [1050]	X1 19.7 [500]	X2 21.65 [550]
Button Options:				P	P/B3	B3	P/B3
6PH100	3.937 [100]	2300	70 [232]				

- Set screws every 2".



DIE HOLDER							
CAT. NO.	H Height inch [mm]	kN/m	Max Ton feet [meter]	500 19.7" [500mm]	X	X1	X2
6DH45	1.772 [45]	1700	52 [175]				
• Set screws every 2".							

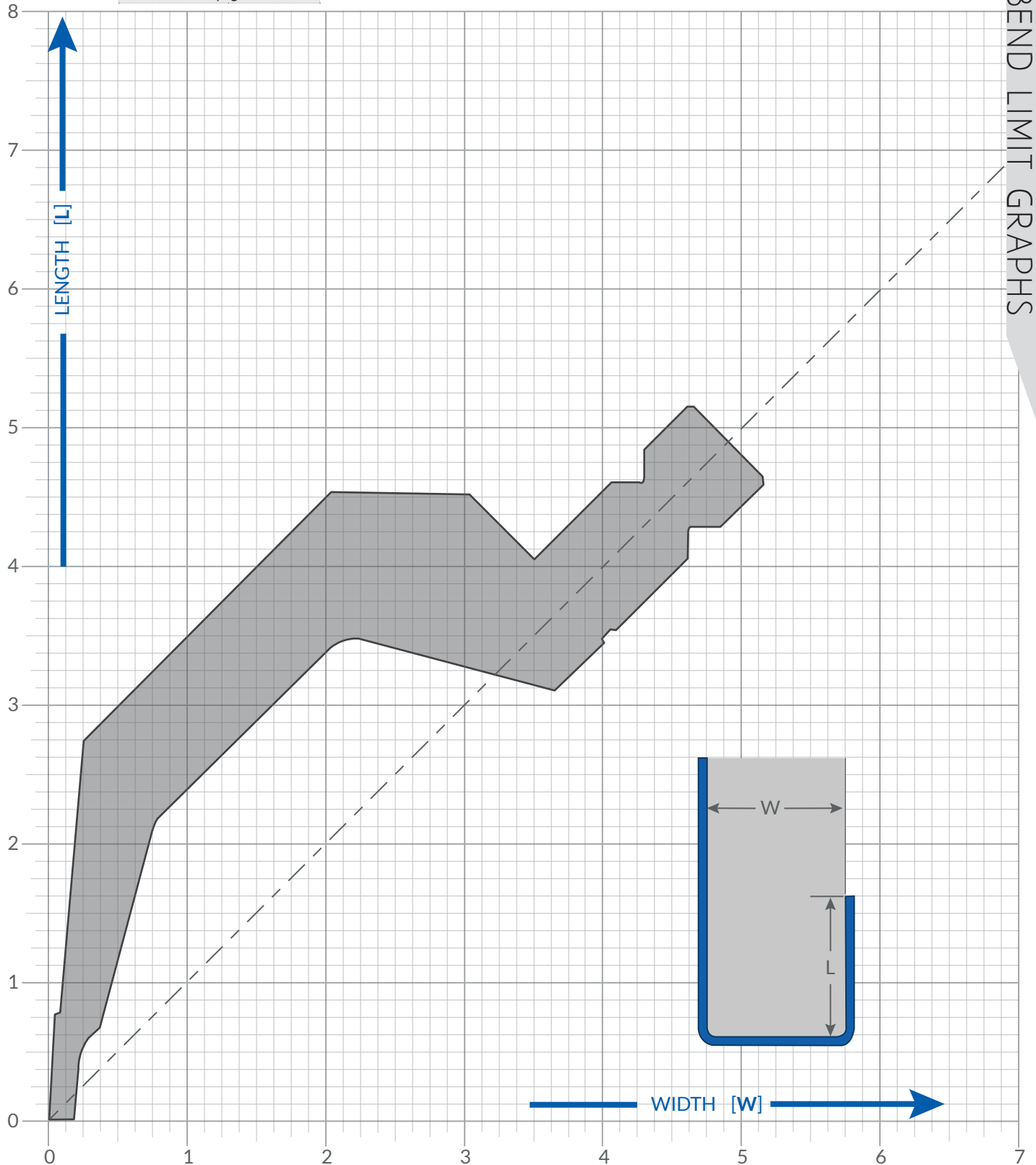
86° ANGLE	NOTES
CAT. NO.	
60086010	
60086005	
60086016	
60086020	
60086023	
60086025	
60086030	
60086032	
60086040	
Punch detail on page 8	



605 80° SWAN NECK PUNCH WITH THIN TIP



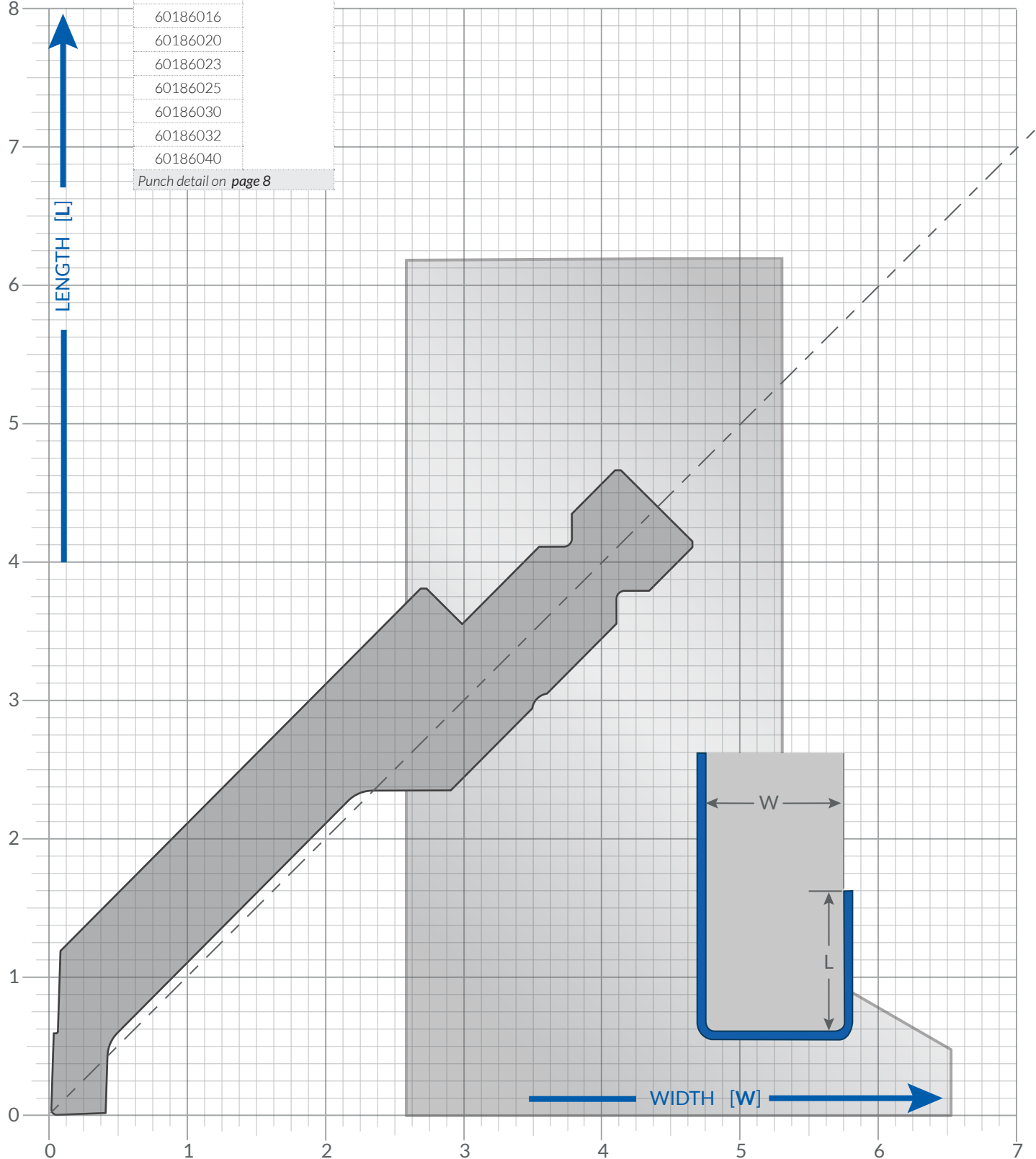
80° ANGLE	NOTES
CAT. NO.	
60580005	
Punch detail on page 8	



BEND LIMIT GRAPHS

86° ANGLE	NOTES
CAT. NO.	
60186010	
60186005	
60186016	
60186020	
60186023	
60186025	
60186030	
60186032	
60186040	

Punch detail on [page 8](#)

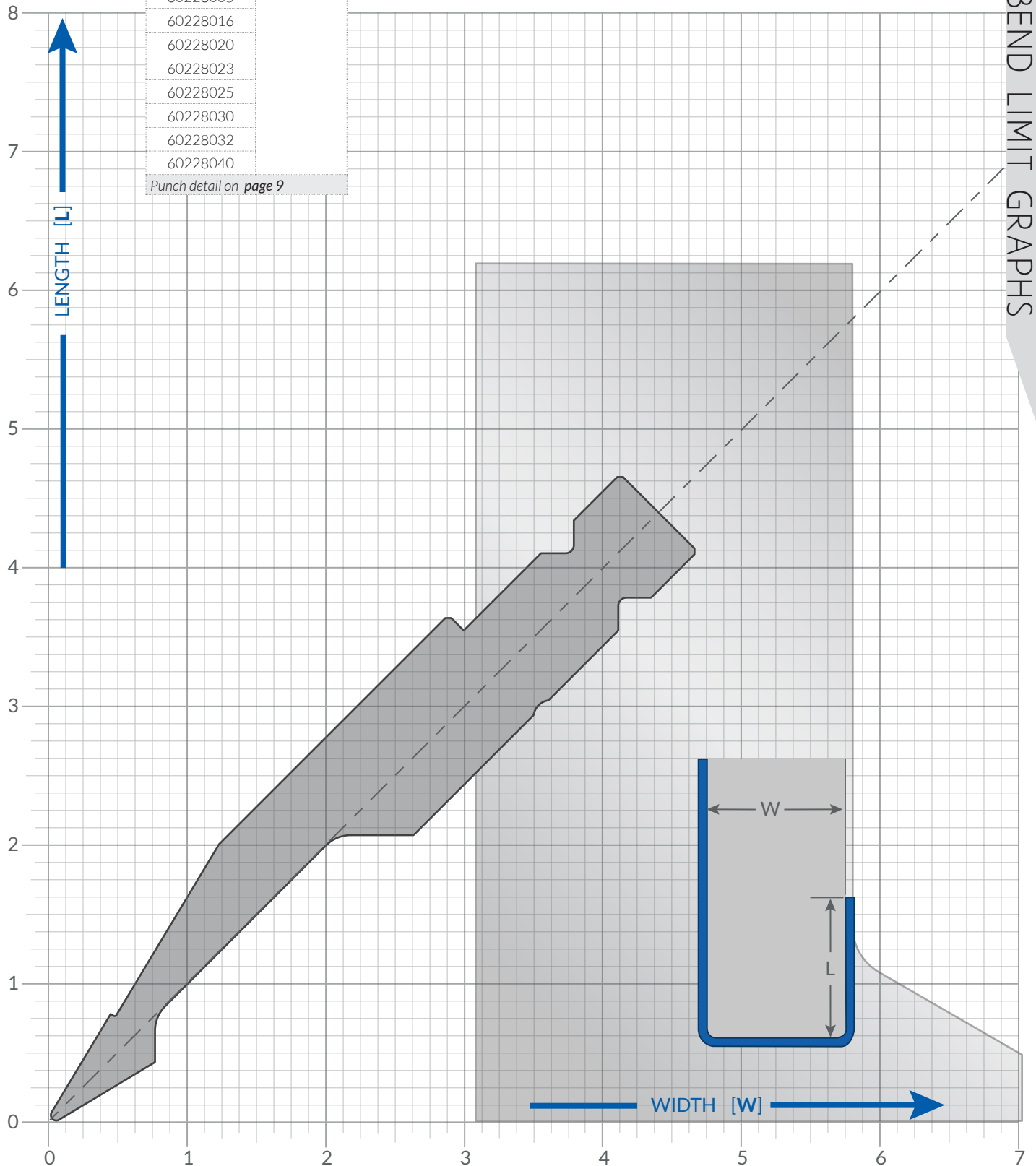


602 28° ACUTE WITH RELIEF PUNCH



28° ANGLE	NOTES
CAT. NO.	
60228010	
60228005	
60228016	
60228020	
60228023	
60228025	
60228030	
60228032	
60228040	

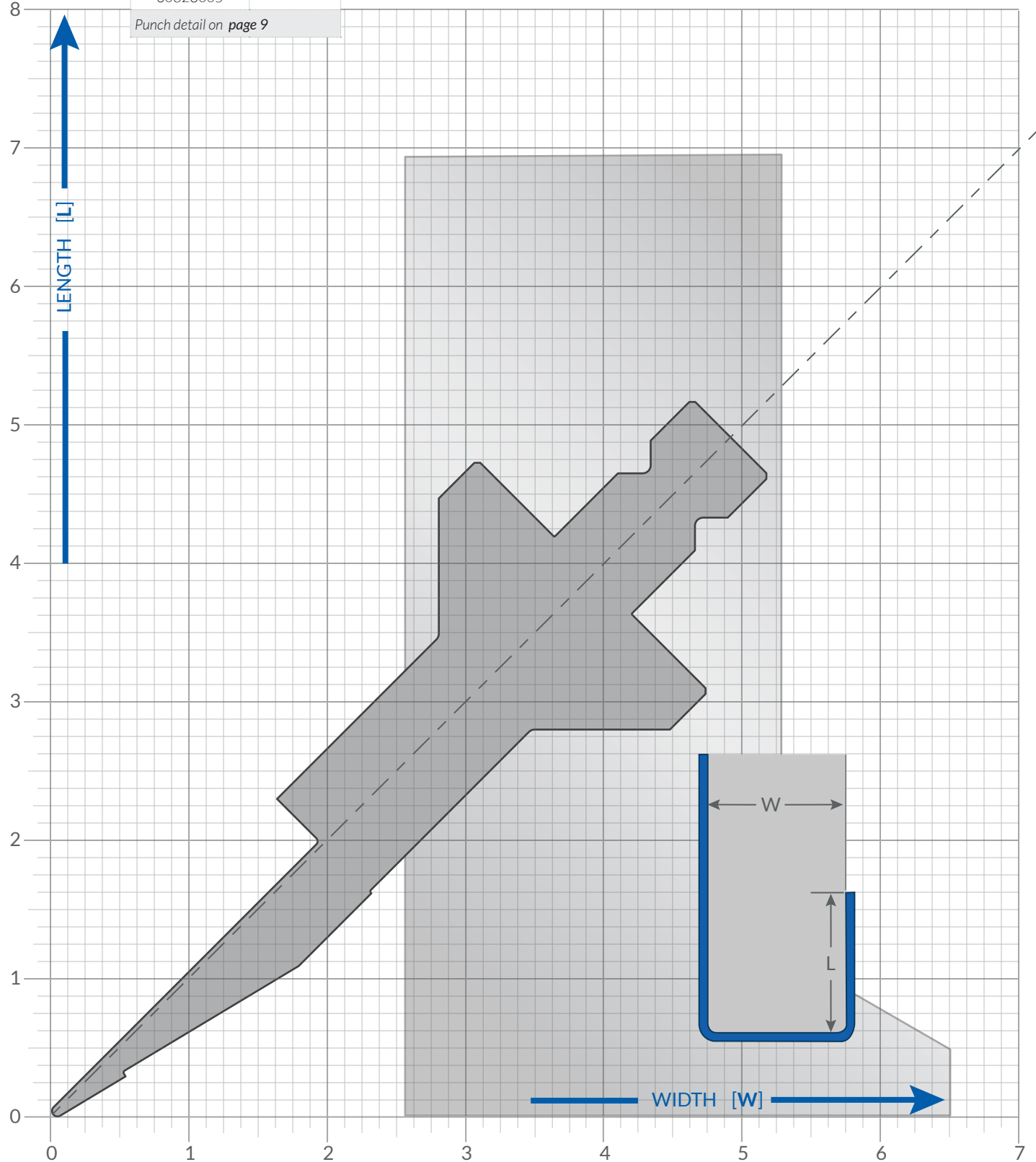
Punch detail on page 9



28° ANGLE	NOTES
CAT. NO.	
60328010	
60328005	

Punch detail on [page 9](#)

BEND LIMIT GRAPHS

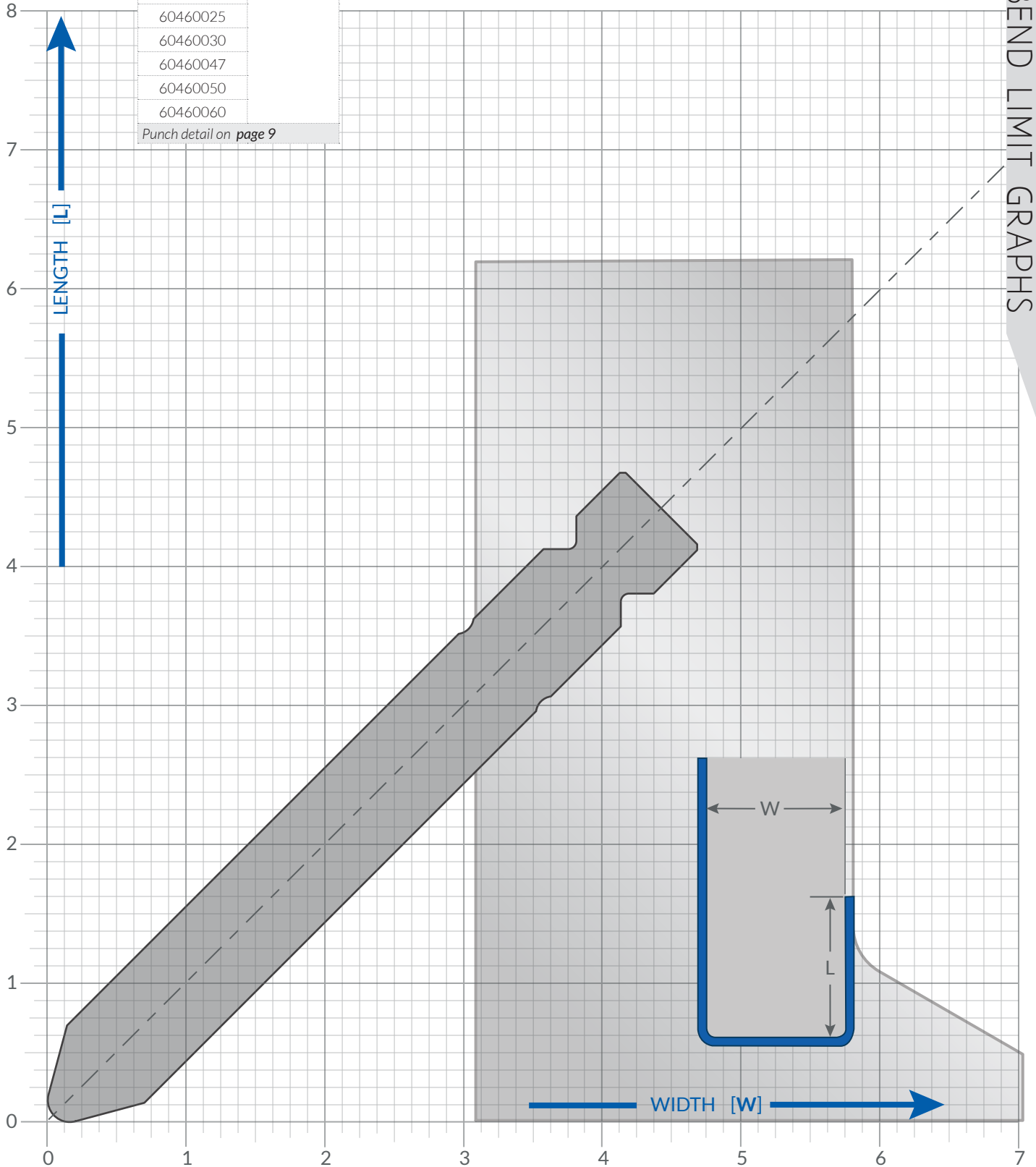


604 60° POINTED/BOTTOMING PUNCH



60° ANGLE	NOTES
CAT. NO.	
60460040	
60460020	
60460025	
60460030	
60460047	
60460050	
60460060	

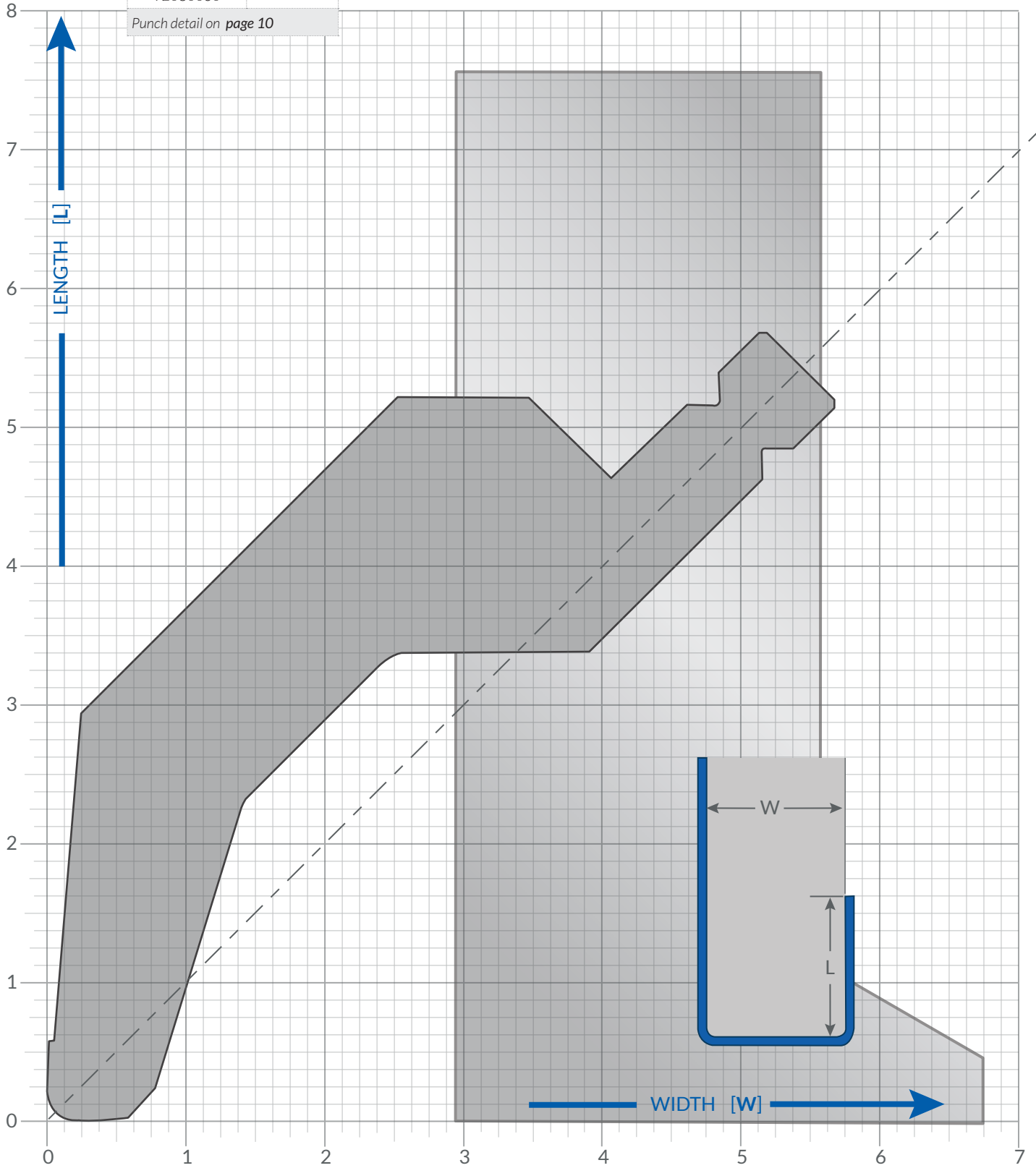
Punch detail on [page 9](#)



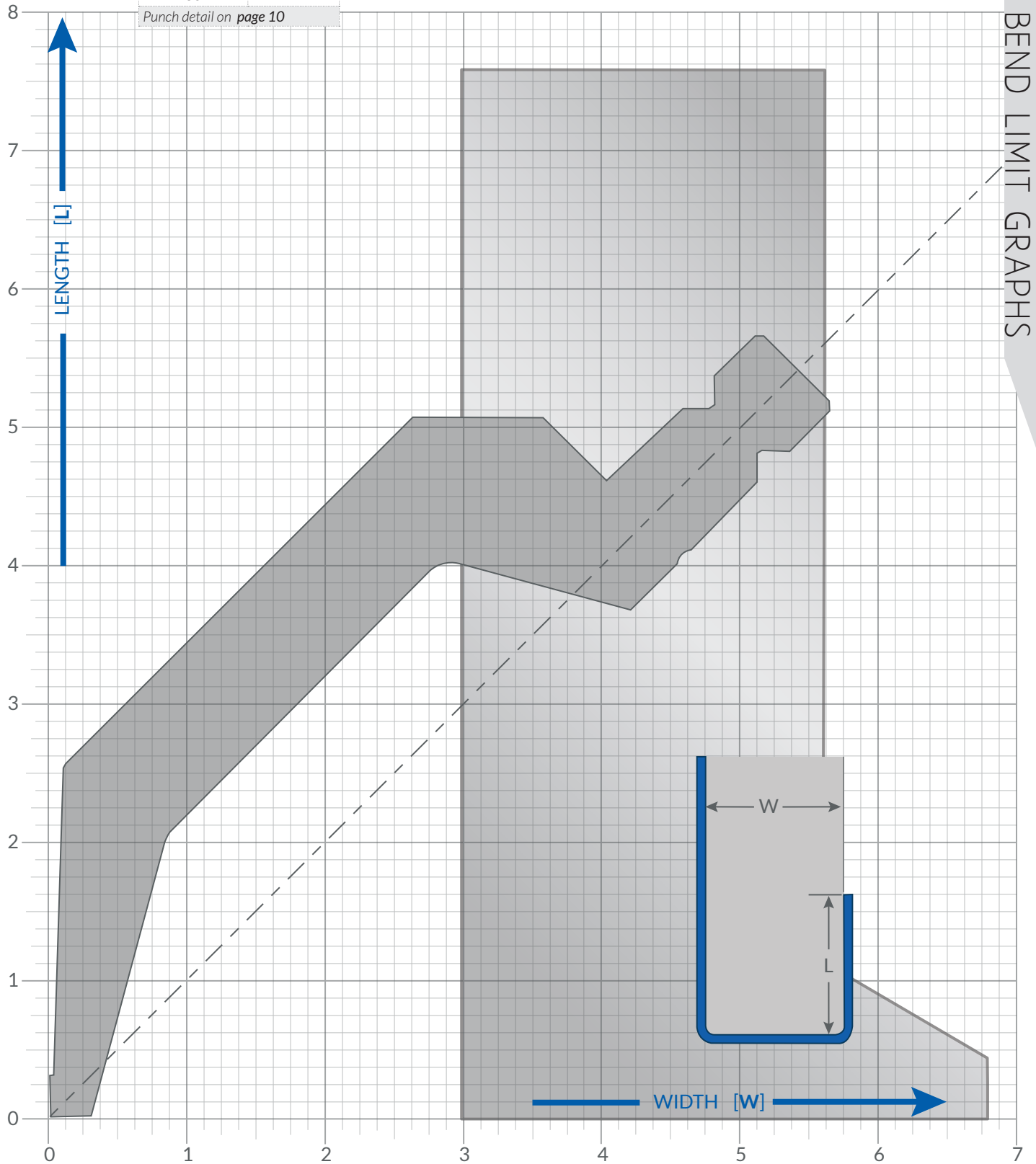
BEND LIMIT GRAPHS

80° ANGLE	NOTES
CAT. NO.	
92080060	
Punch detail on page 10	

BEND LIMIT GRAPHS



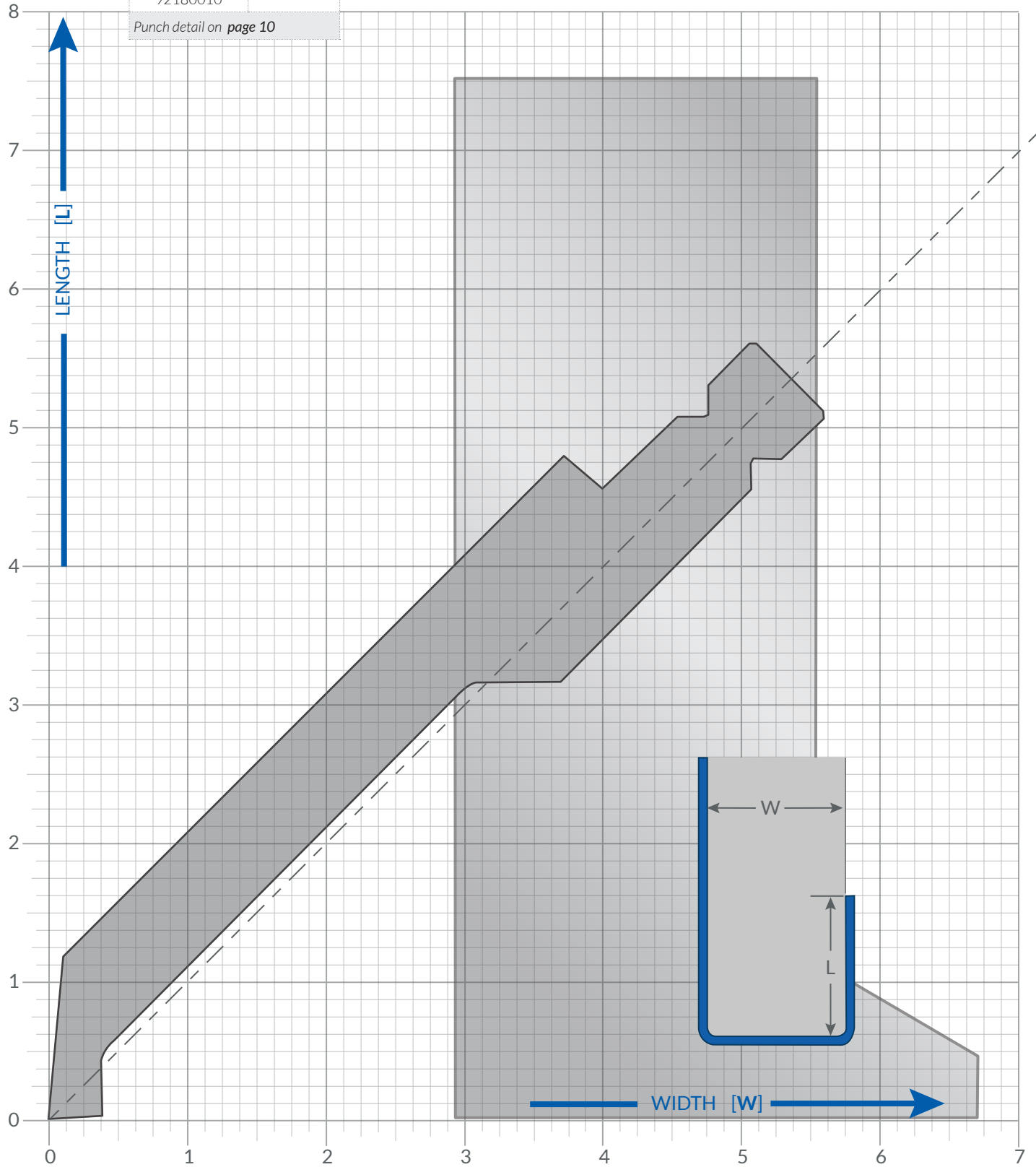
86° ANGLE	NOTES
CAT. NO.	
92086010	
Punch detail on page 10	



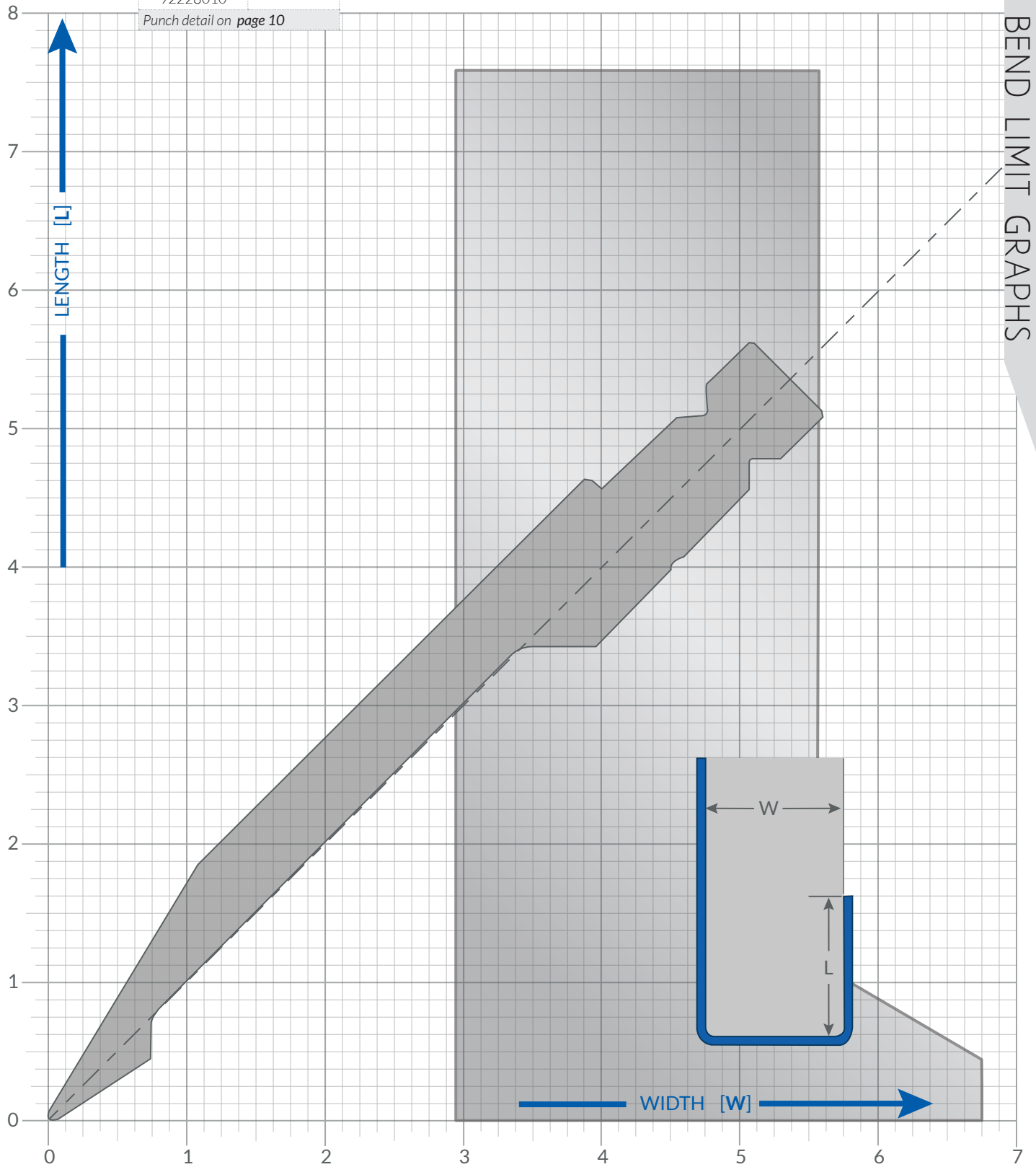
BEND LIMIT GRAPHS

80° ANGLE	NOTES
CAT. NO.	
92180010	
Punch detail on page 10	

BEND LIMIT GRAPHS



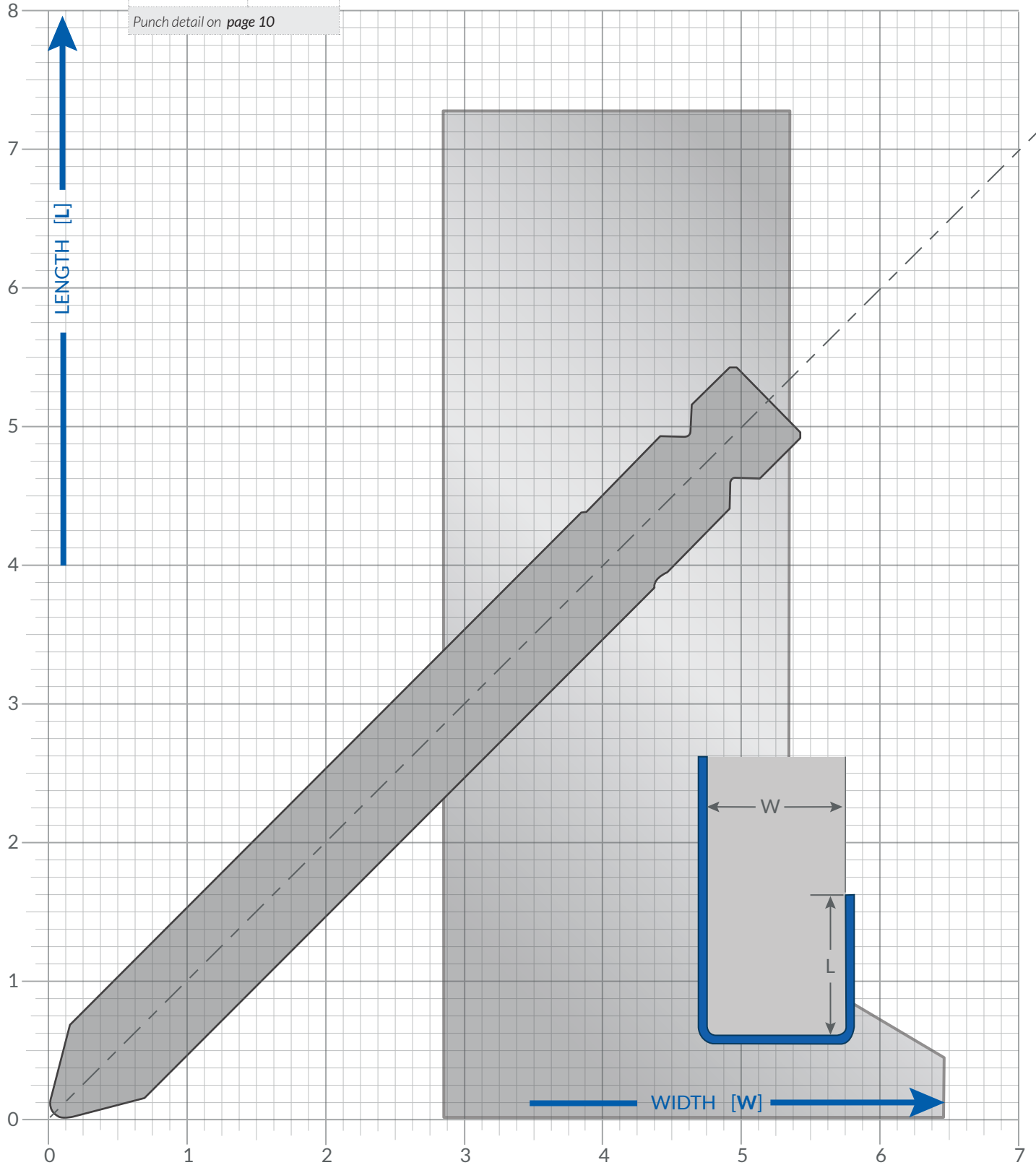
28° ANGLE	NOTES
CAT. NO.	
92228010	
Punch detail on page 10	



BEND LIMIT GRAPHS

60° ANGLE	NOTES
CAT. NO.	
92460030	
Punch detail on page 10	

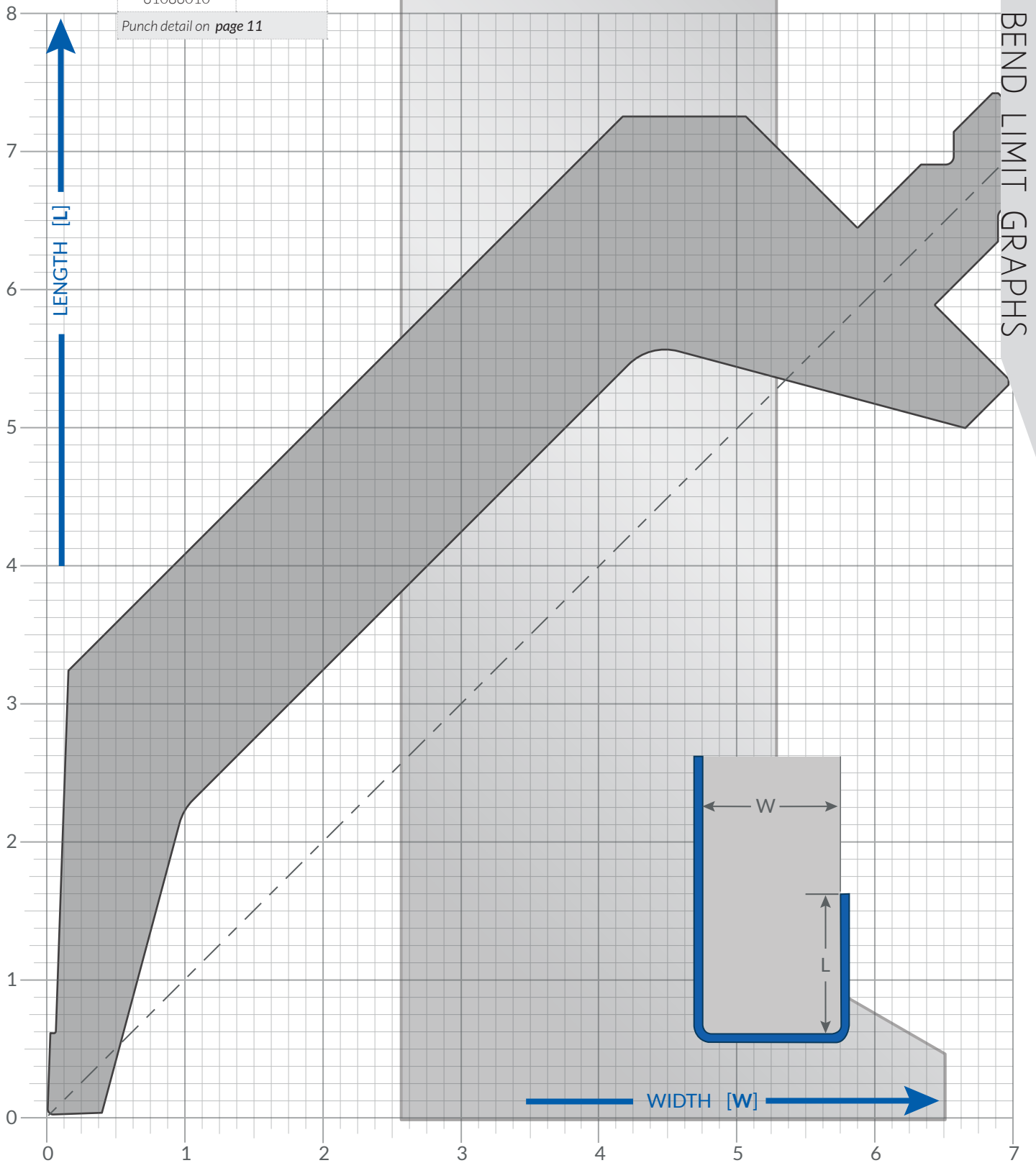
BEND LIMIT GRAPHS



610 86° SWAN NECK PUNCH



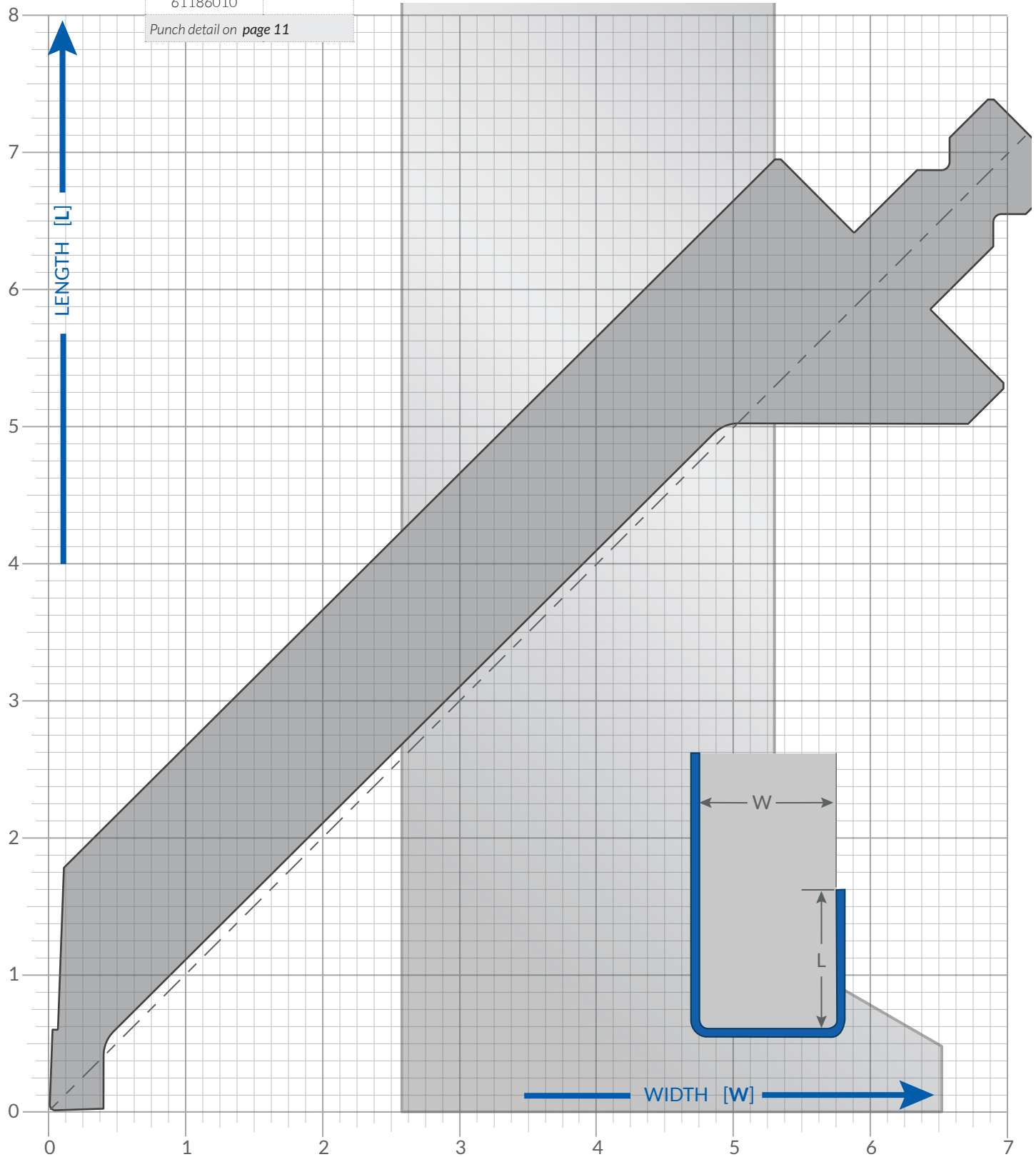
86° ANGLE	NOTES
CAT. NO.	
61086010	
Punch detail on page 11	



BEND LIMIT GRAPHS

86° ANGLE	NOTES
CAT. NO.	
61186010	
Punch detail on page 11	

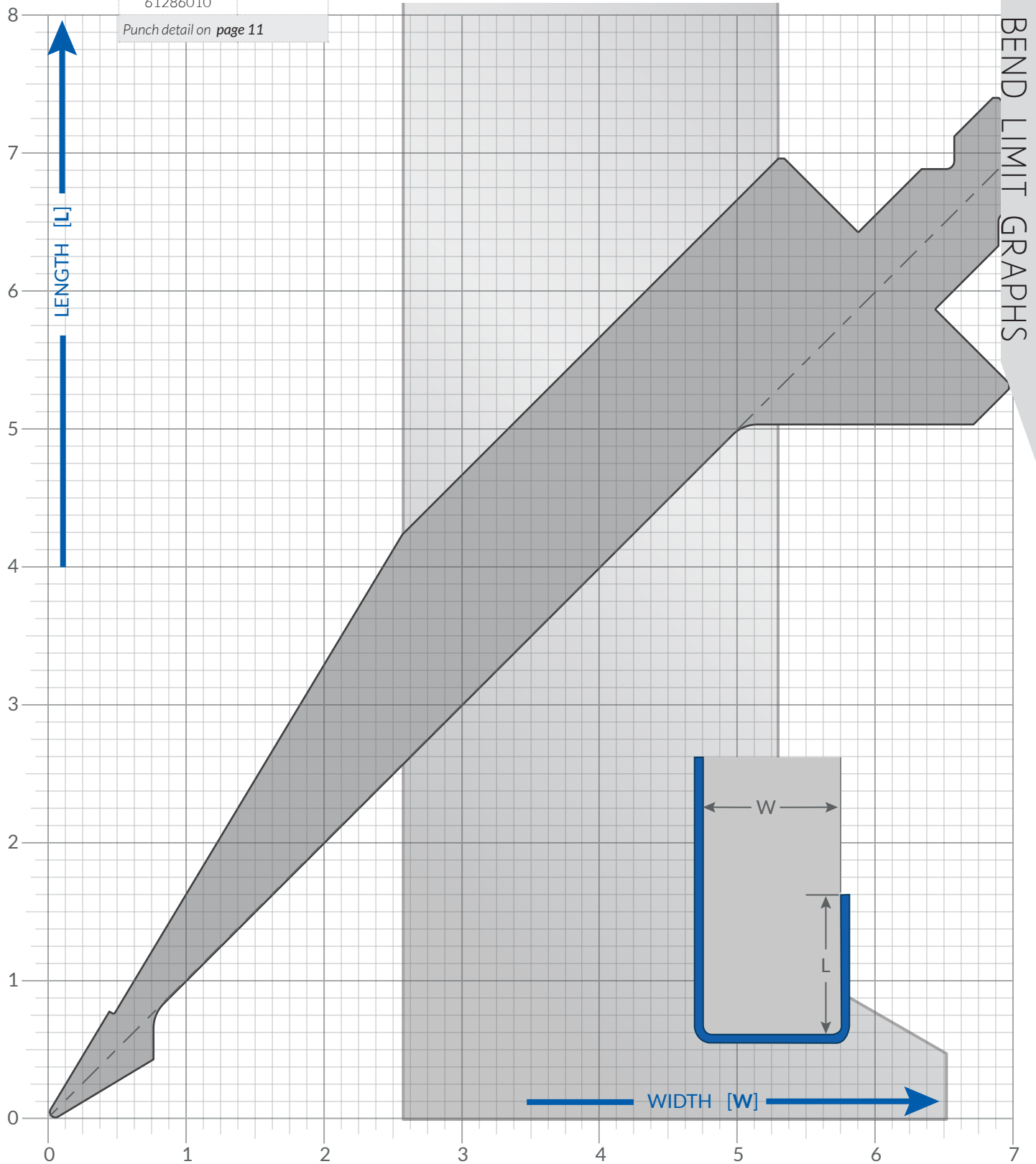
BEND LIMIT GRAPHS



612 28° ACUTE WITH RELIEF PUNCH

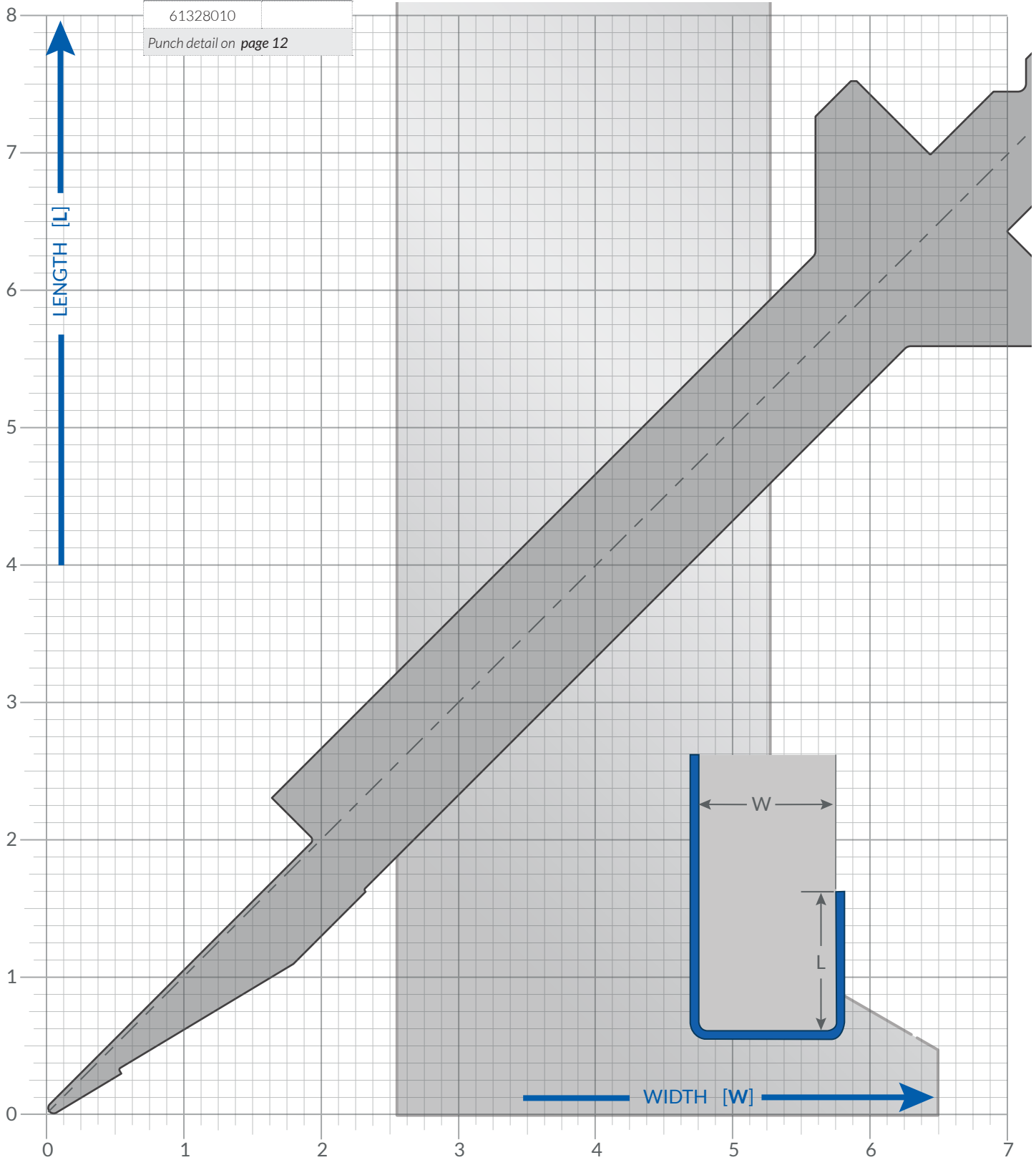


28° ANGLE	NOTES
CAT. NO.	
61286010	
Punch detail on page 11	



BEND LIMIT GRAPHS

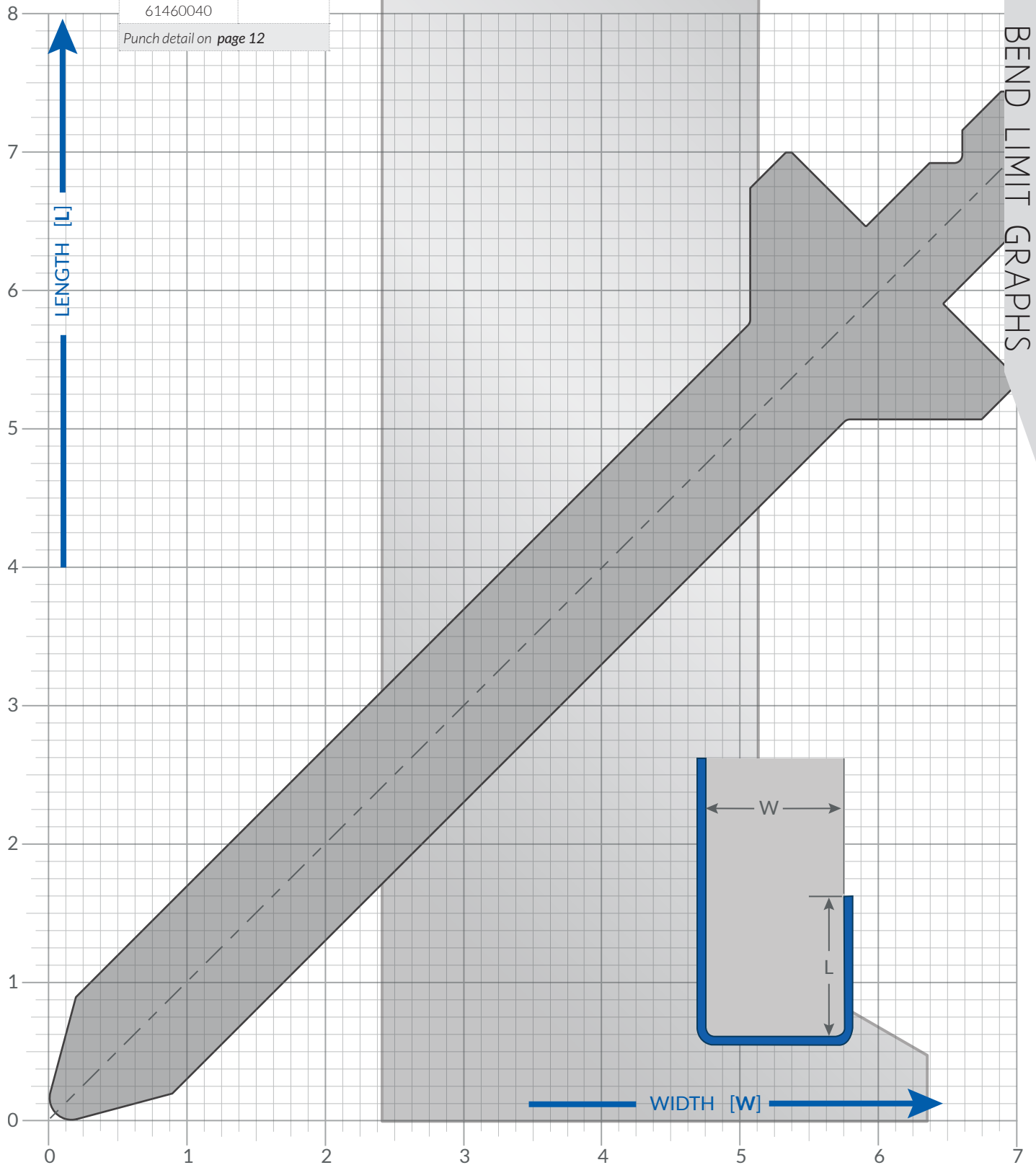
28° ANGLE	NOTES
CAT. NO.	
61328010	
<i>Punch detail on page 12</i>	



614 60° POINTED PUNCH



60° ANGLE	NOTES
CAT. NO.	
61460040	
Punch detail on page 12	



Wilson Tool International offers several solutions for manufacturers who use thick, heavy materials in their manufacturing process.

ADJUSTABLE V DIE

see page 45

Adjustable V dies are a great solution when bending thick materials and you need the flexibility to adjust the width of the V opening. Instead of buying several dies with different V openings, Adjustable V dies enable you to adjust the width, rather than changing out the die.

Adjustable V openings range from 1 to 18 inches and can be adjusted in 1 inch increments. Adjustable V dies are induction hardened and are capable of withstanding tonnage of up to 200 tons per foot, allowing you to easily bend thick material. Hard chrome rollers help reduce required tonnage by as much as 20%.

REPLACEABLE SHOULDER DIE

see page 45

When you work with heavy or abrasive materials such as stainless, hardened steel or parts that are not completely de-burred, you can wear out the shoulders of a die long before the entire die is worn out. With Wilson Tool's Replaceable Shoulder Dies, you eliminate the need to replace the entire die every time a shoulder wears out. Just simply replace the shoulder in the existing die body. This will save you money on every purchase, and because the shoulder inserts are not fixed in place like on an ordinary die, you may see reduced marking as well.

AMERICAN PLANED PRESS BRAKE TOOLING

Wilson Tool offers a complete selection of conventional press brake tooling. Standard or special forming tools can be manufactured in one-piece lengths of up to 20 feet or can be sectionalized to any length required.

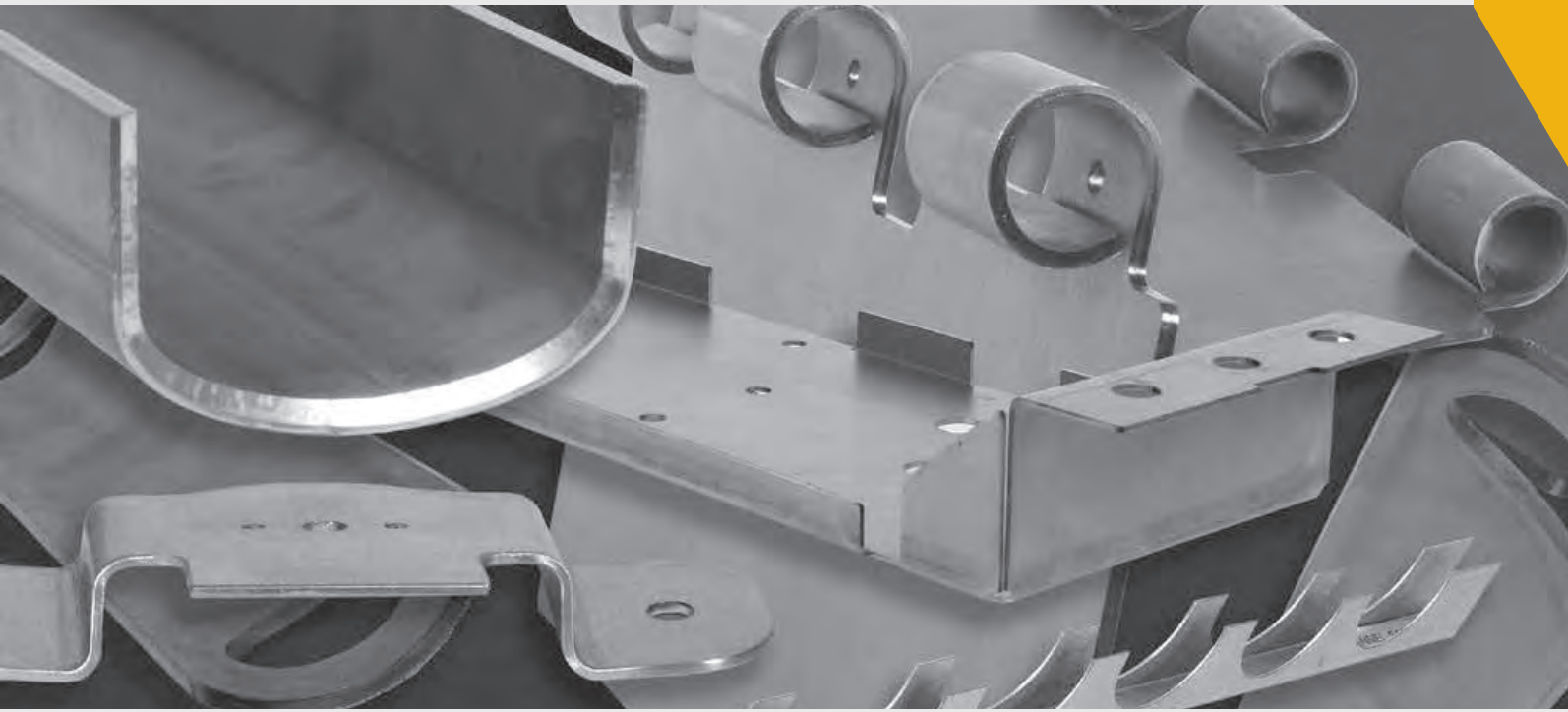
If additional surface hardness is needed for working with abrasive or hard material, we offer induction-hardening treatments on punch tips and die openings.

THICK MATERIAL BENDING CONSIDERATIONS:

- Check your Tonnage and Upsize for Strength
- Consider Heat Treat Options
- Increase Punch Radius
- Increase Die Shoulder Radius



SPECIALS



CHALLENGE US!

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.

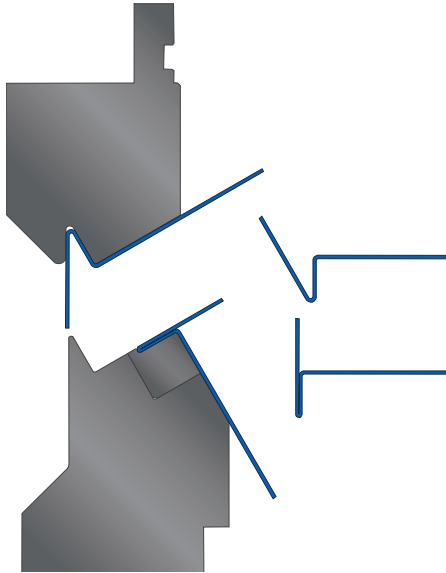
QUALITY MATERIALS. QUALITY CONTROL.

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

QUICK QUOTES. SHORT LEAD TIMES.

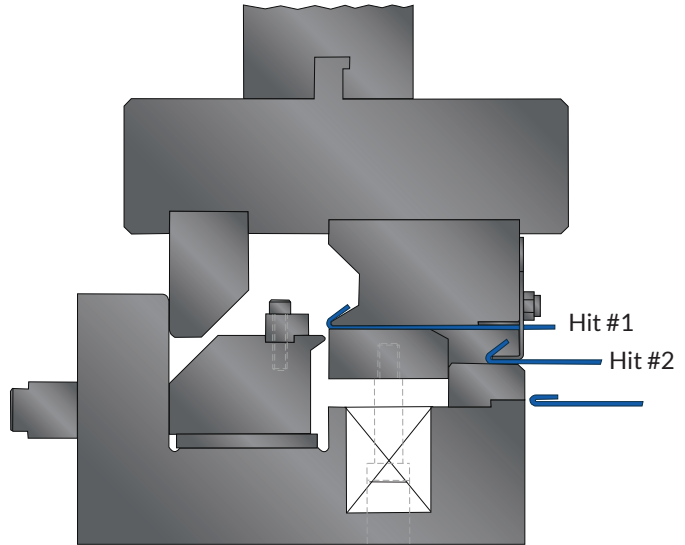
With the fastest lead times in the industry, our tool might ship before the competition provides a quote.

800-445-4518



AH1 ANGLE HEM

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

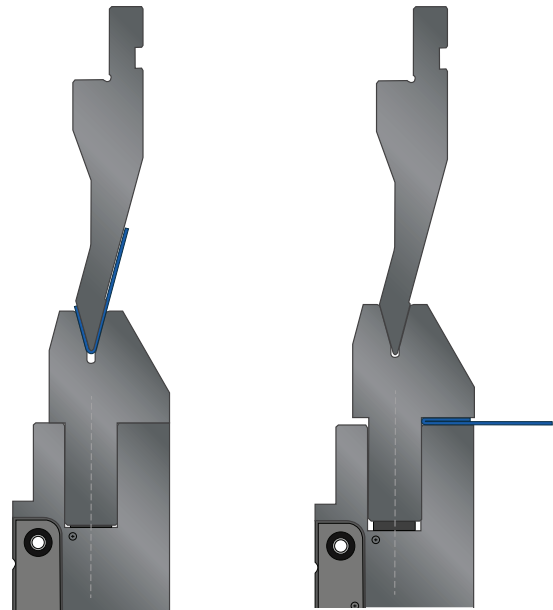


FSH1 FLAT SHEET HEM



HDH1 HEAVY DUTY HEM

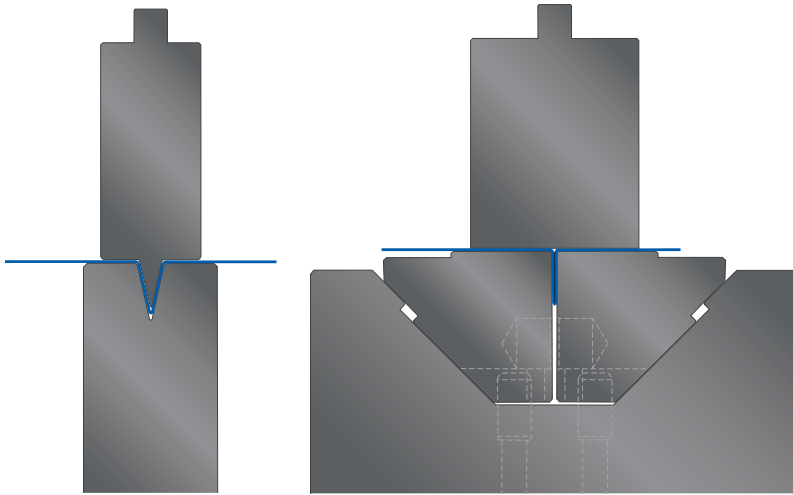
Heavy Duty Hemming for thick gauge applications.



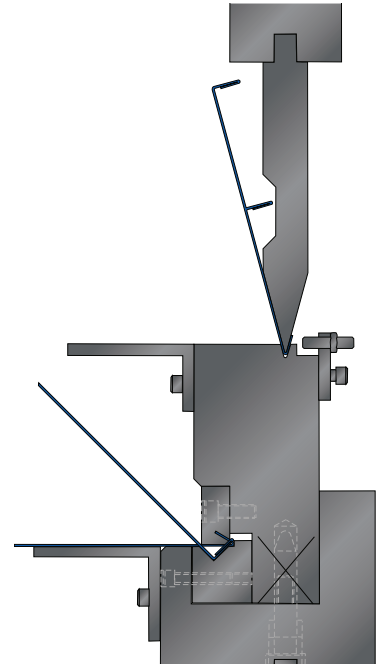
See this tool in action on the [Wilson Tool YouTube Channel](#)

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.



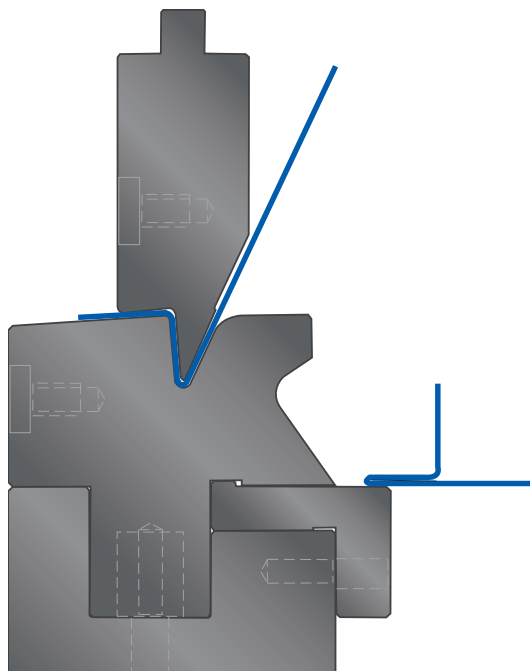
SH1 SEAM HEM
Two tool sets.
Two machine strokes.



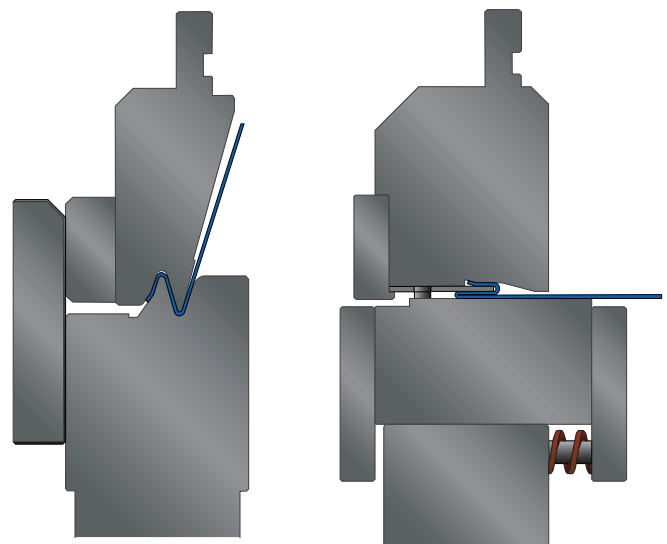
SSH2 STANDING SEAM HEM



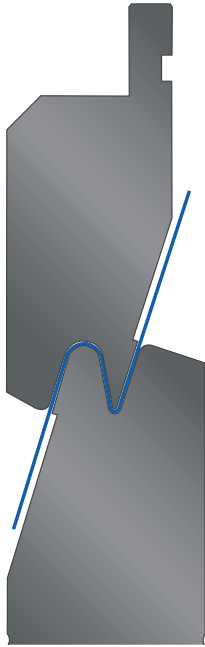
See this tool in action on the Wilson Tool YouTube Channel



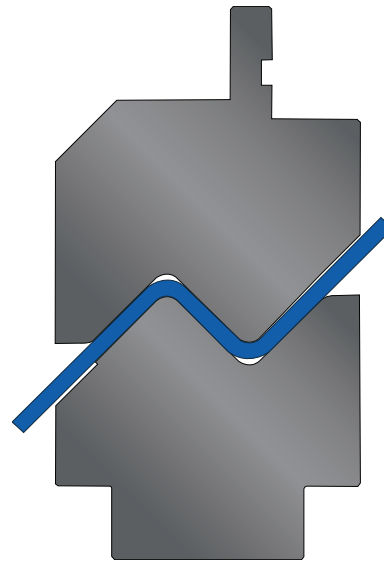
SSH1 STANDING SEAM HEM
Used to form a standing seam in 2 strokes. The first stroke forms an acute angle offset, the second stroke closes the seam.



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.

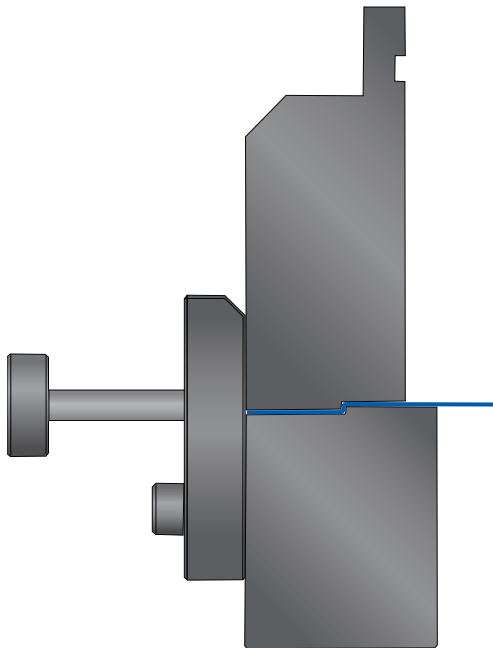


AO1 ANGLED OFFSET



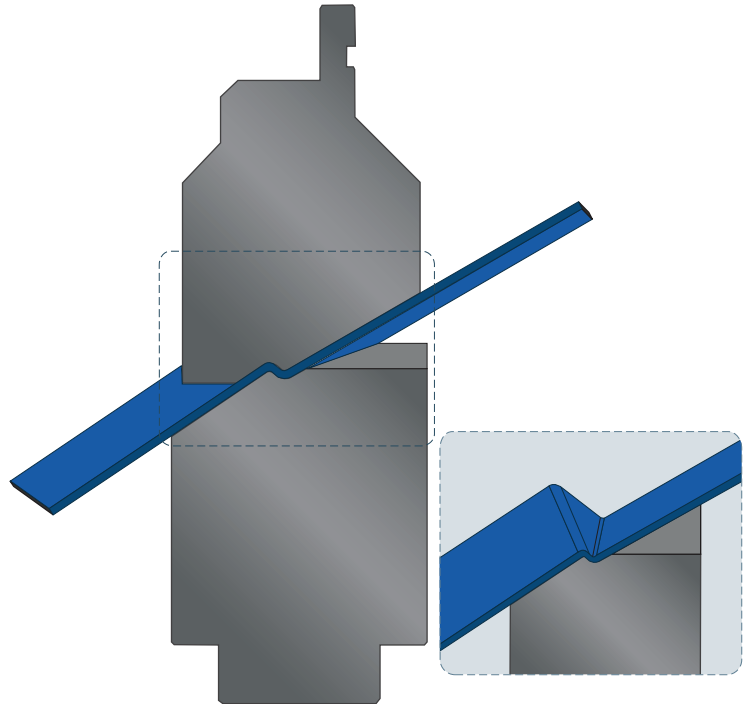
LO1 LARGE OFFSET

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.

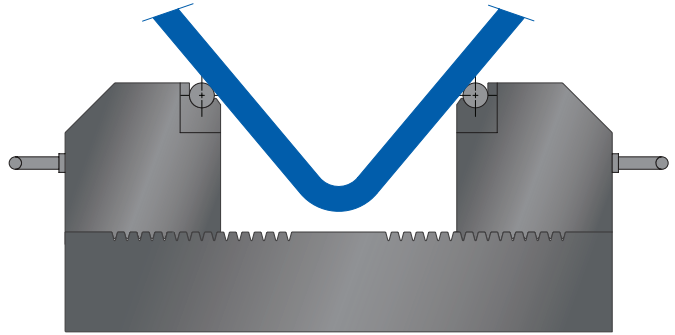


NPO1 NON PARALLEL OFFSET

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

ADJUSTABLE DIE

- Can be configured to remain on the press permanently and function as a standard die holder.
- 1 - 24" openings available.
- Cover bellows available to keep the grooves that are used to adjust the dies free from dirt and dust.
- Clamping options for side blocks:
 - » Manual clamping.
 - » Hydraulic clamping, manual movement.
 - » Hydraulic clamping, automated movement.



See this tool in action on the
Wilson Tool YouTube Channel

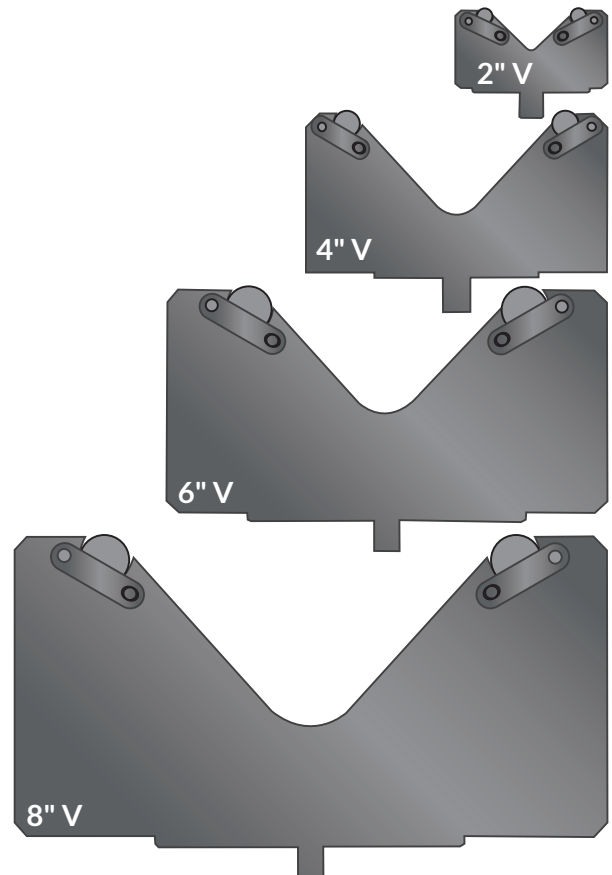
SPECIALS

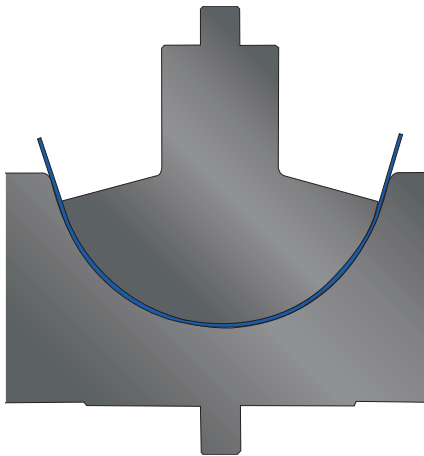
REPLACEABLE SHOULDER DIE

Replaceable 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.



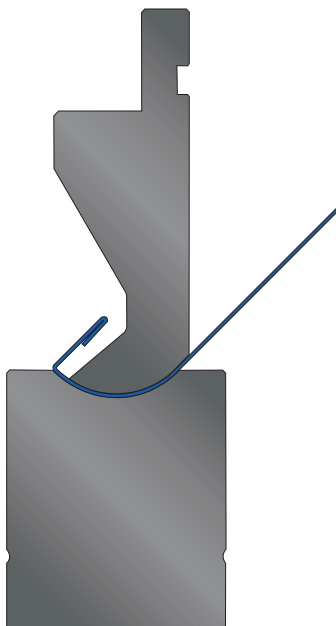


LR1 LARGE RADIUS

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.

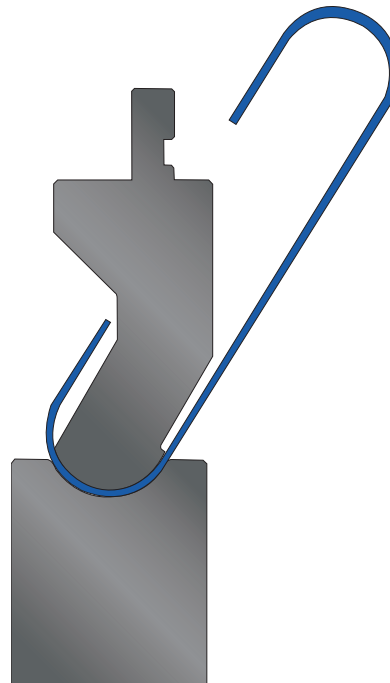


See this tool in action on the [Wilson Tool YouTube Channel](#)



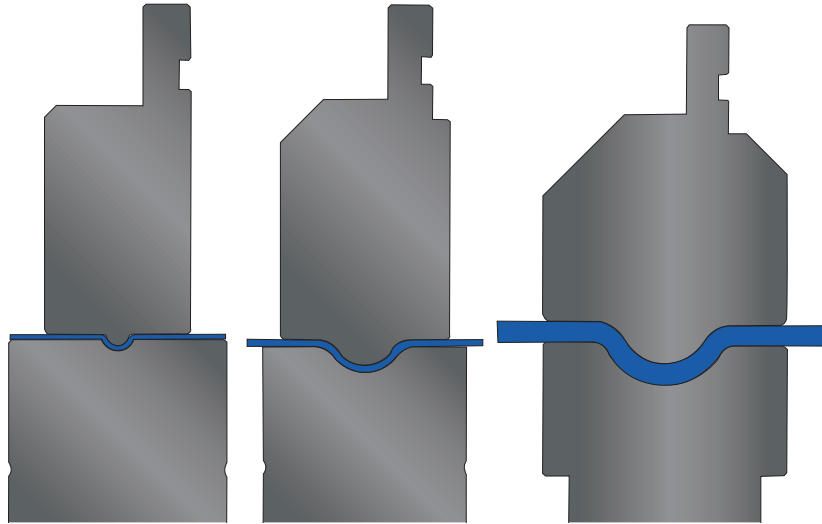
LR2 MULTI-HIT RADIUS

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.

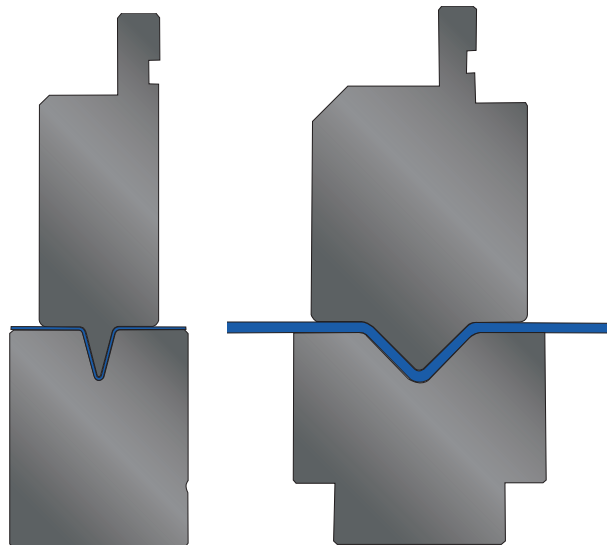


SR1 STRENGTHENING RIB

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

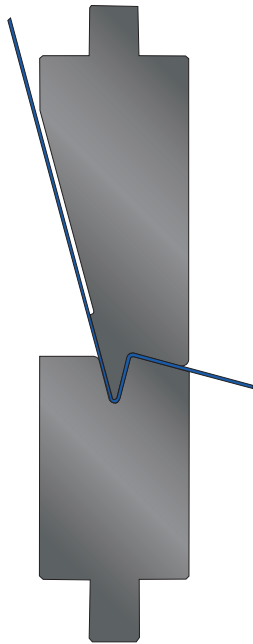


See this tool in action on the [Wilson Tool YouTube Channel](#)

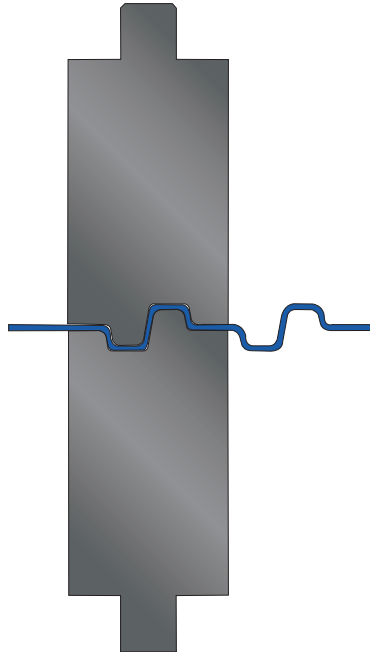


VR1 V RIB

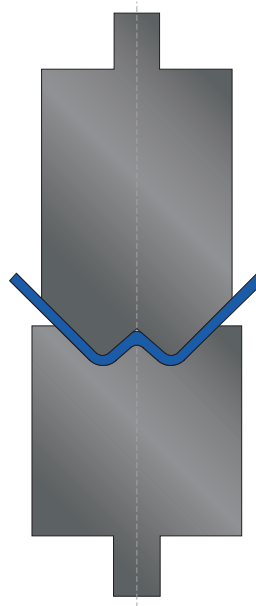
Produce a V rib in one stroke. Spring back allowance is built in.



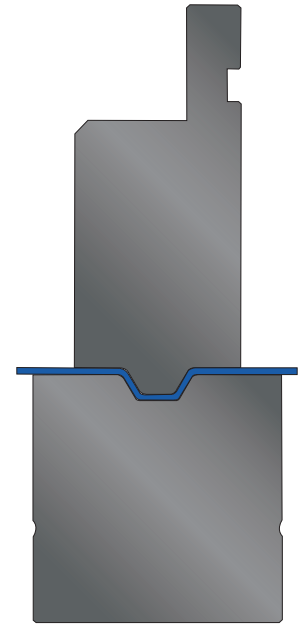
FM1 FORMING



FM2 FORMING

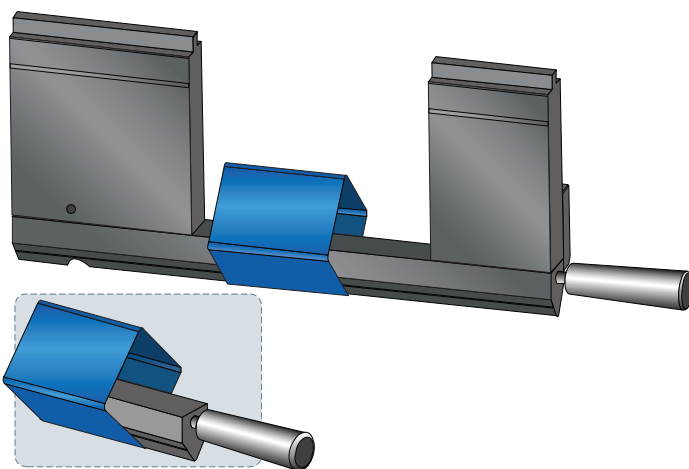


FM3 FORMING



OH1 OPEN HAT

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

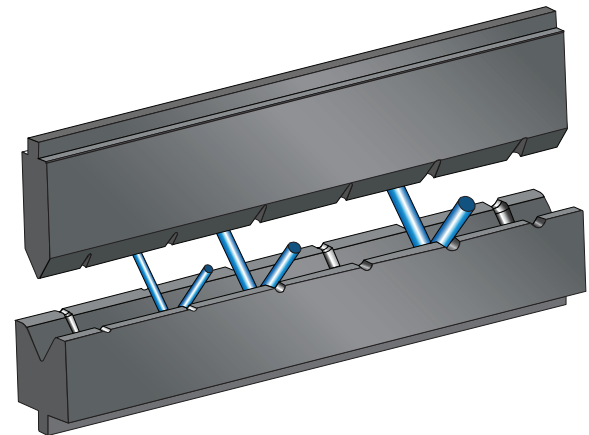


W1 WINDOW

Used when minimum return flange clearance is required.

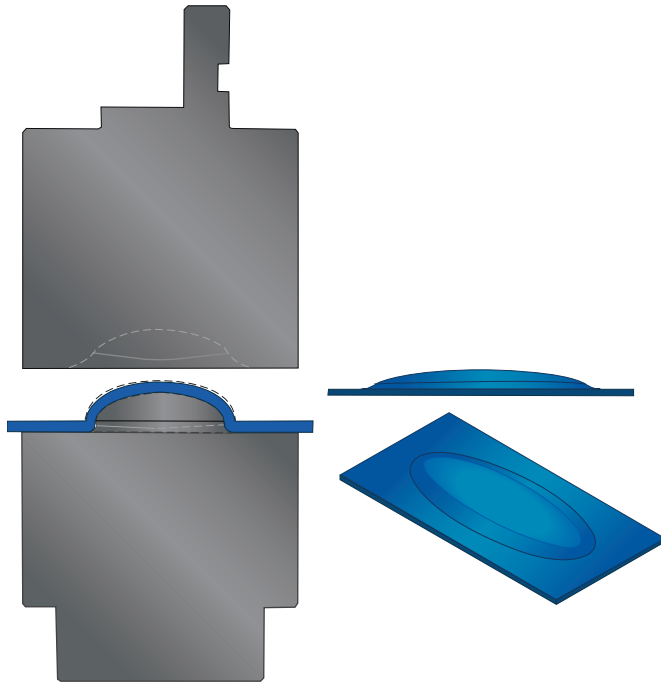


See this tool in action on the [Wilson Tool YouTube Channel](#)



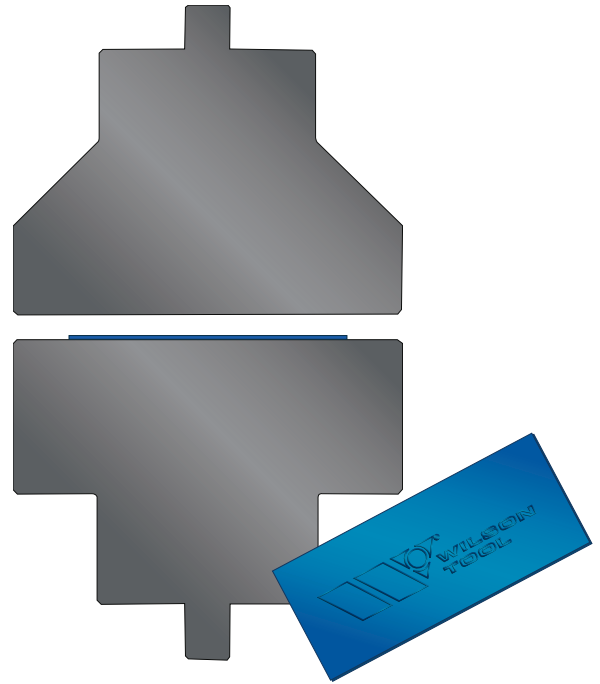
RB1 ROD BENDING

Provides nesting for the rod during the forming process.

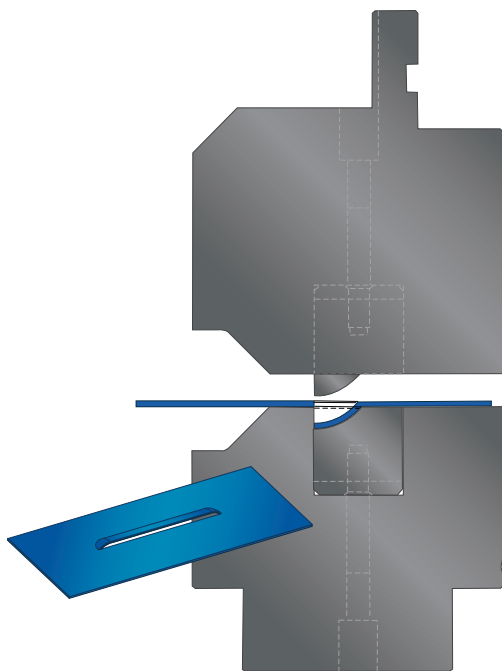


EM1 EMOSS

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

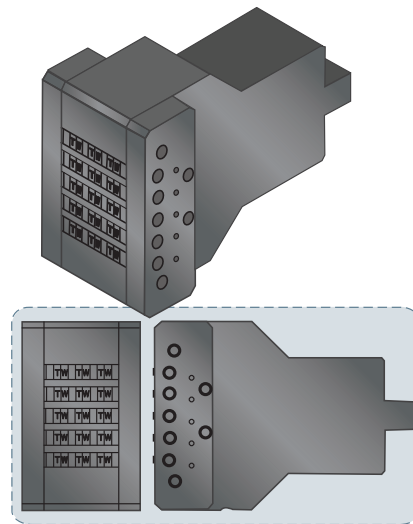


LG1 LOGO



LL1 LOUVER

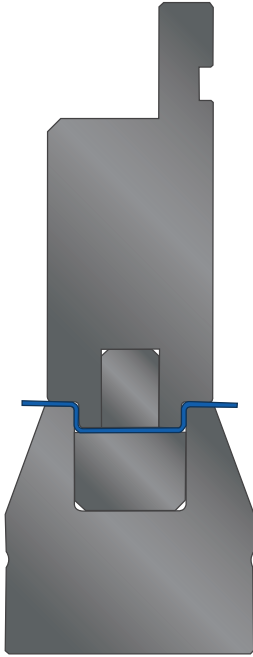
Multiple louver configurations are available. For louver forming, sheet must be pre-slit.



LS1 LETTERSTAMP

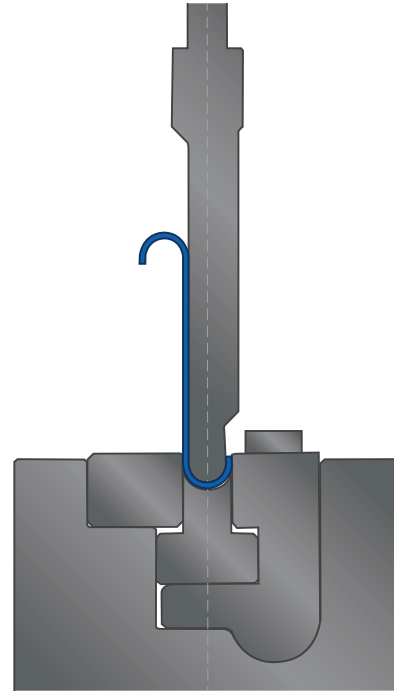
Provides chisel point embossing with inter-changeable characters. Single row or multi-row available.

CAT. NO.	DESCRIPTION	SIZE	PRICE
6LSP25	Punch Character Holder		
65300003-500	Flattening Block Die		
6898	Character	3/32"	
6896	Character	1/8"	



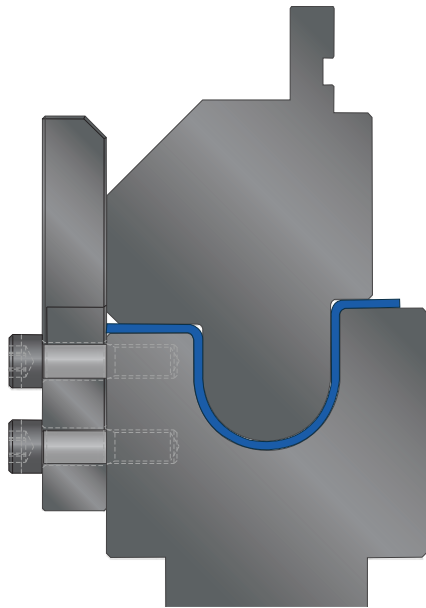
HT1 HAT CHANNEL

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



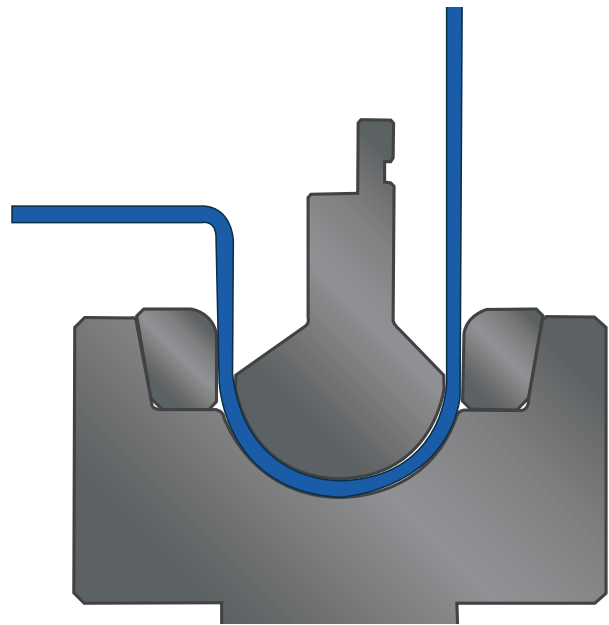
UC1 U CHANNEL

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



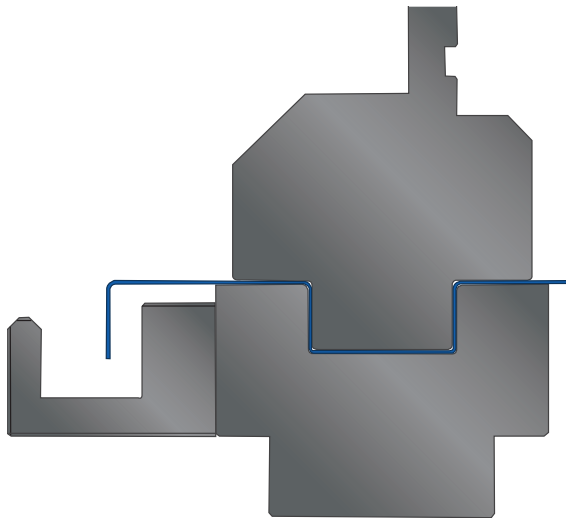
UC2 U CHANNEL

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

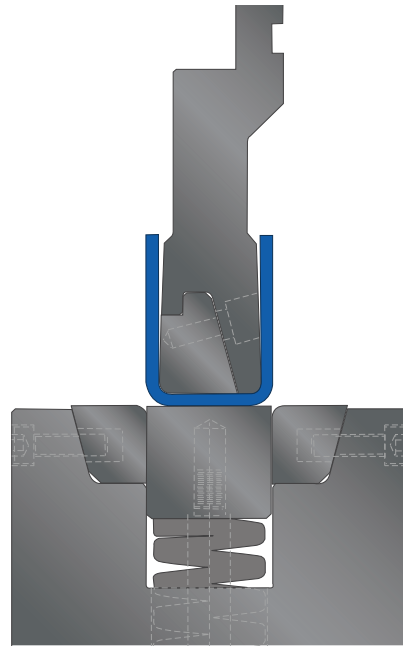


UC3 U CHANNEL

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



C1 CHANNEL

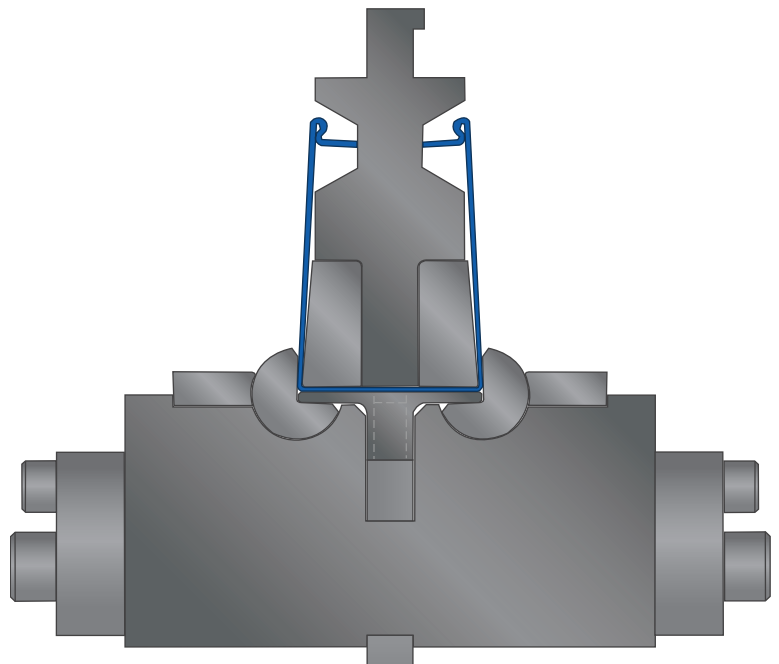


C2 CHANNEL

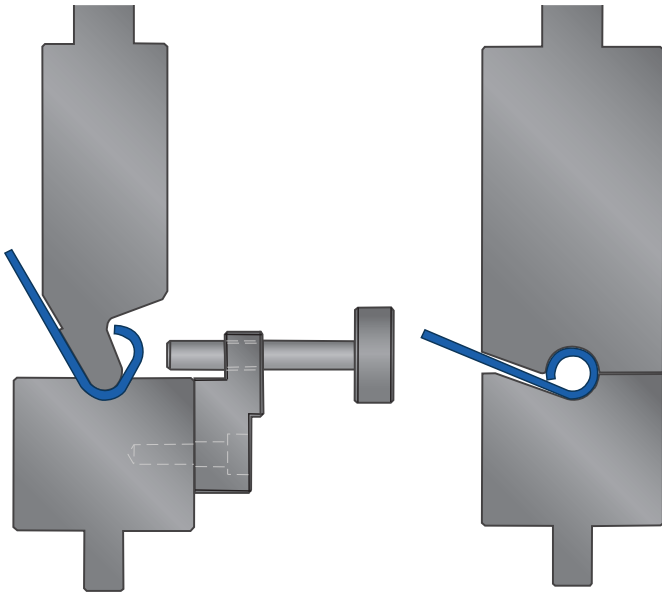
These applications are for deep channels when the channel bottom needs to remain flat.



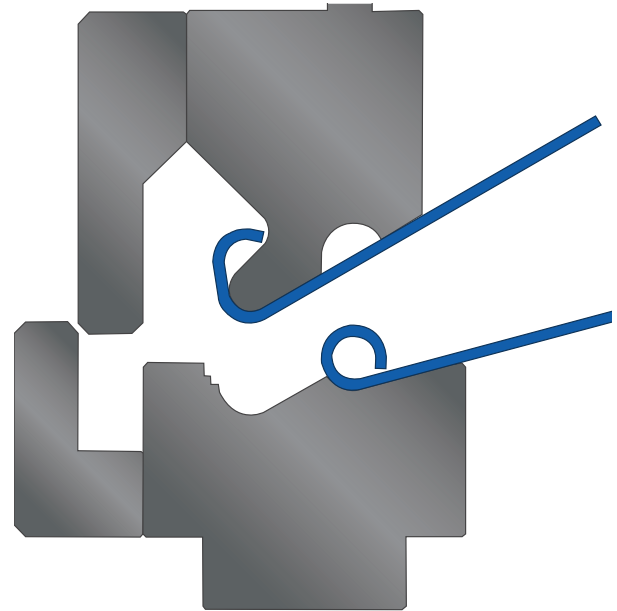
C3 CHANNEL



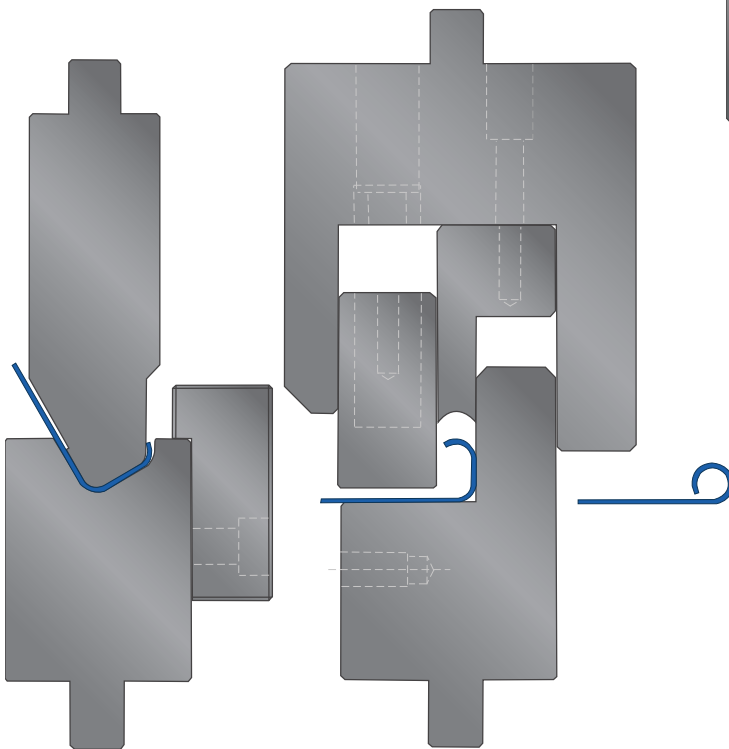
C4 ROTARY BEND CHANNEL



CL1 CURL TOOL SET
2 tool sets, 3 machine strokes.



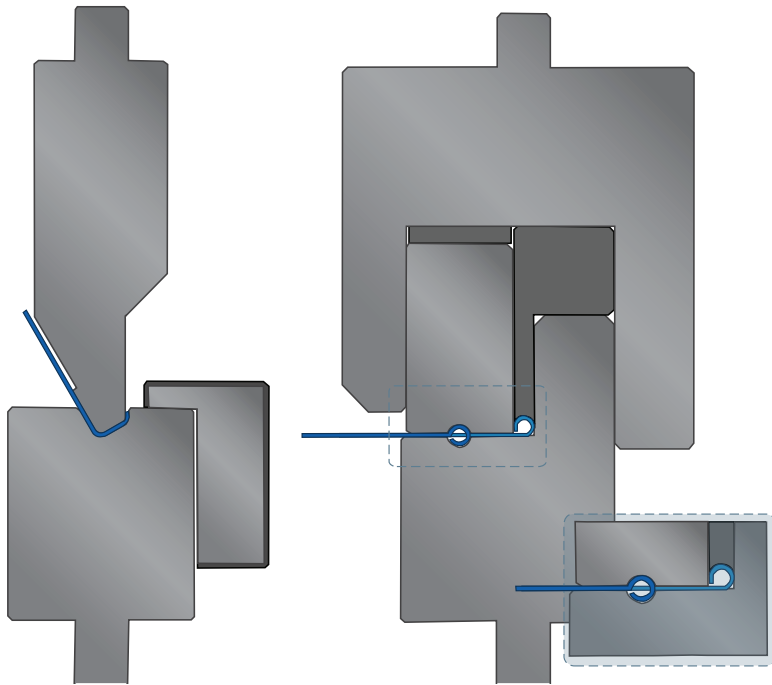
CL2 CURL TOOL SET
Typically used for thick materials and large diameter curls.
1 tool set, 3 machine strokes.



CL3 CURL
Used for hinges and corner beading.
2 tool sets, 2 machine strokes.



See this tool in action on the [Wilson Tool YouTube Channel](#)

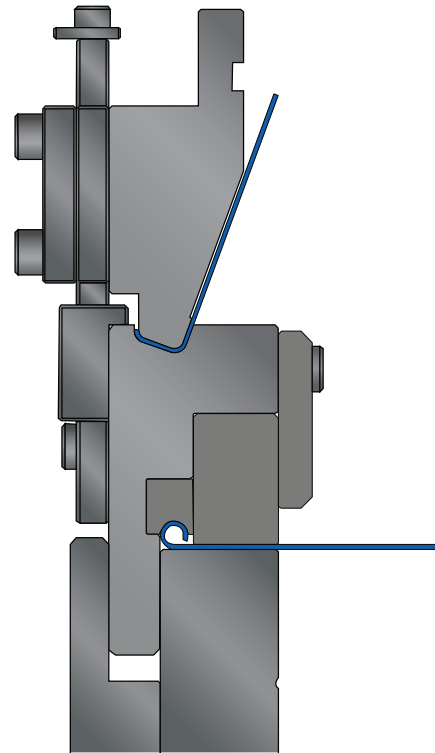


CL4 CENTER CURL APPLICATION

2 tool sets, 3 machine strokes.

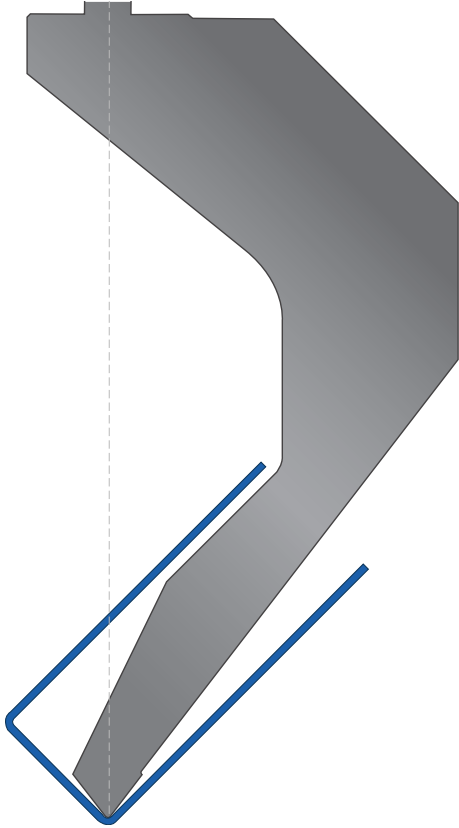


See this tool in action on the Wilson Tool YouTube Channel



CL5 DOUBLE DECKER TOOL SET

Used for hinges and corner beading.
1 tool set, 2 machine strokes.



PR1



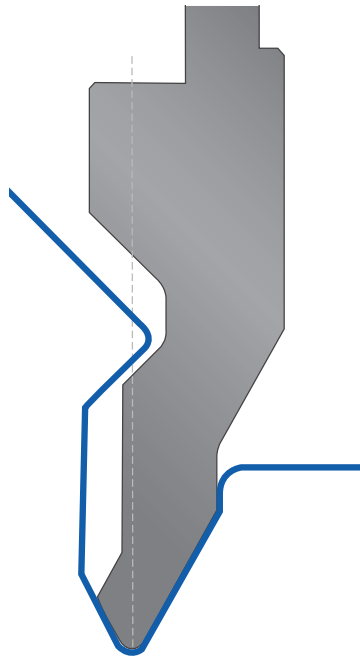
PR2



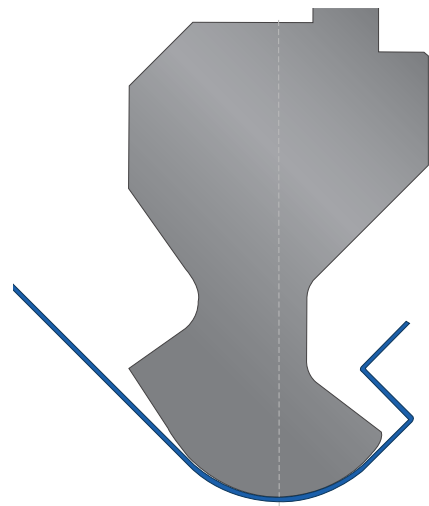
PR3



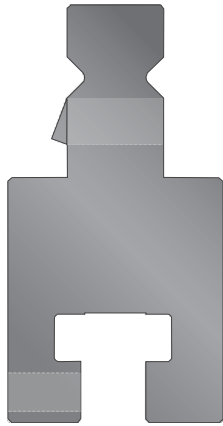
PR4



PR5



PR6



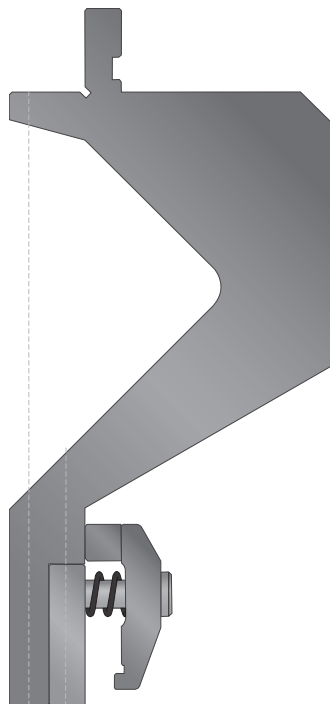
WT - AMERICAN



**AMERICAN SELF-SEAT
HOLDER**

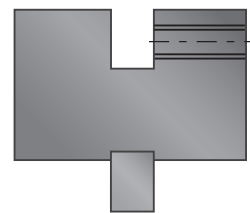


**AMERICAN DEEP
GOOSENECK HOLDER**

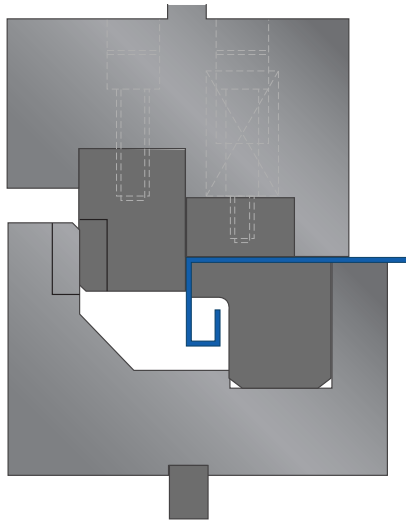


EURO Z1 OR Z2 CLAMPING

Cat. No. 43002

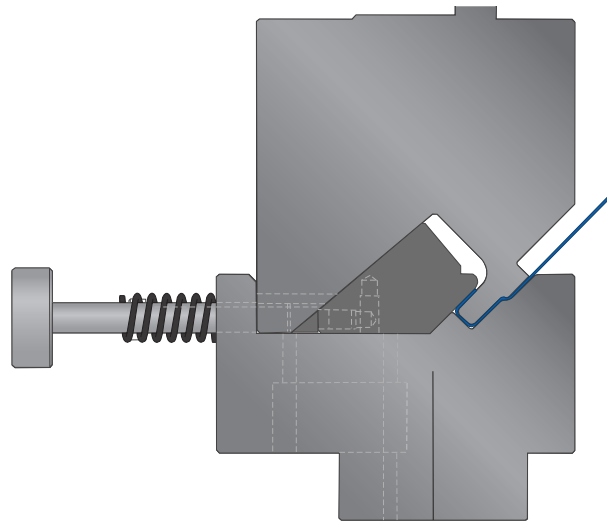


DIE HOLDER



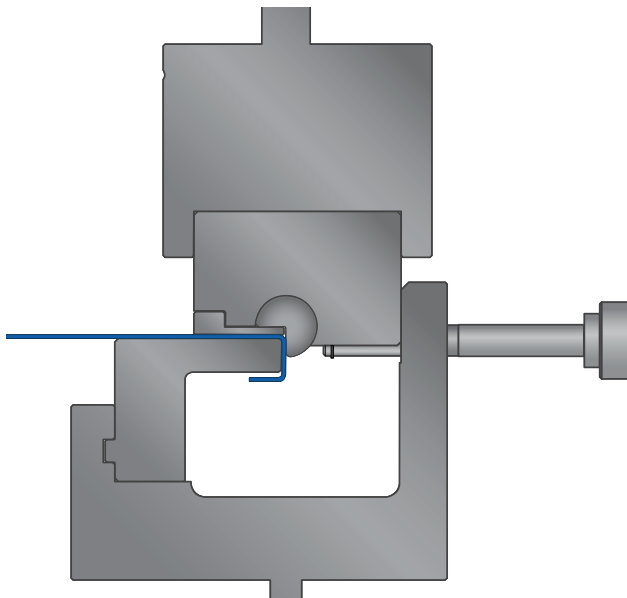
WD1 WIPE DOWN

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 up or down.
Ideal for large panels and high production.

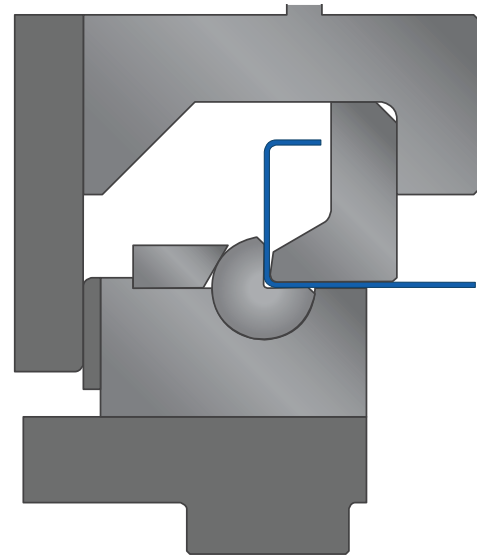


RTD ROTARY FLANGE FORMING FORM DOWN

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



See this tool in action on the Wilson Tool YouTube Channel

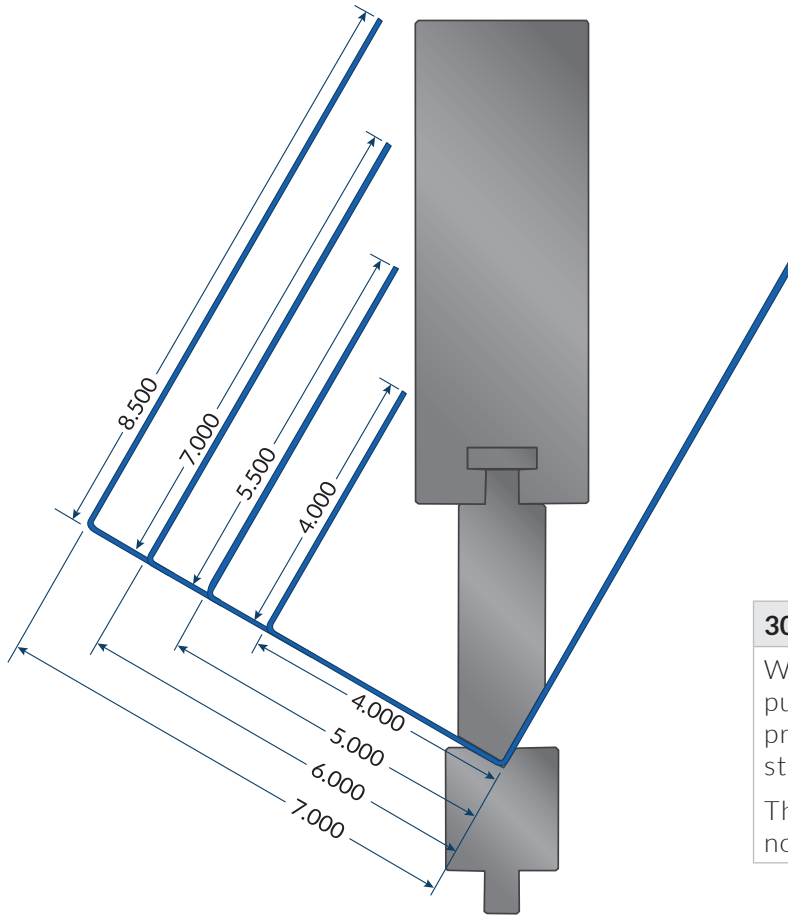


RTU ROTARY FLANGE FORMING FORM UP

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



See this tool in action on the Wilson Tool YouTube Channel



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 .500" - .750", 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.

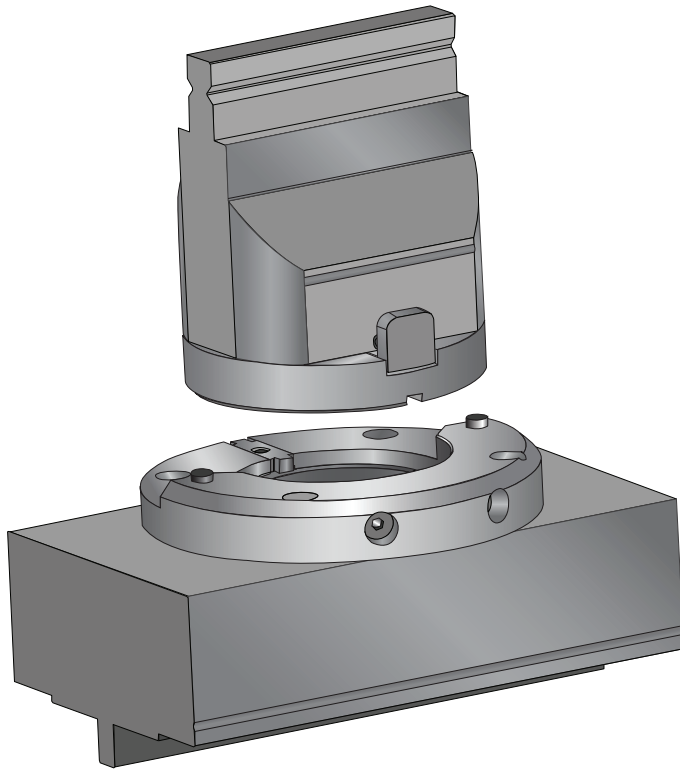
Consider open height and stroke with the additional height achieved by ear movement.

Application driven - consult with sales desk to review expected results prior to ordering.

Priced per pair (total 12" length), singles priced upon request.

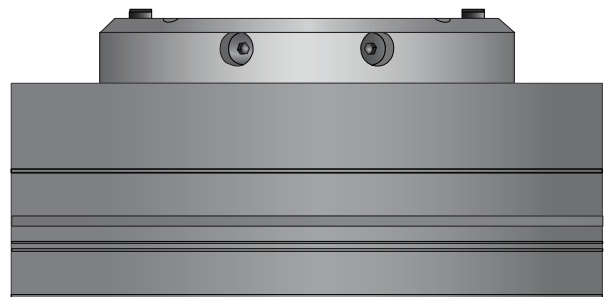
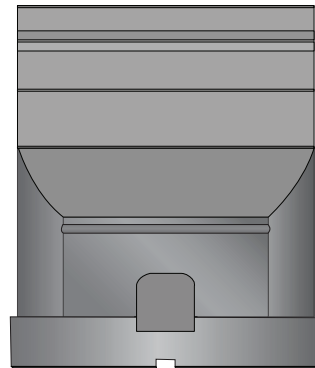


See this tool in action on the [Wilson Tool YouTube Channel](#)

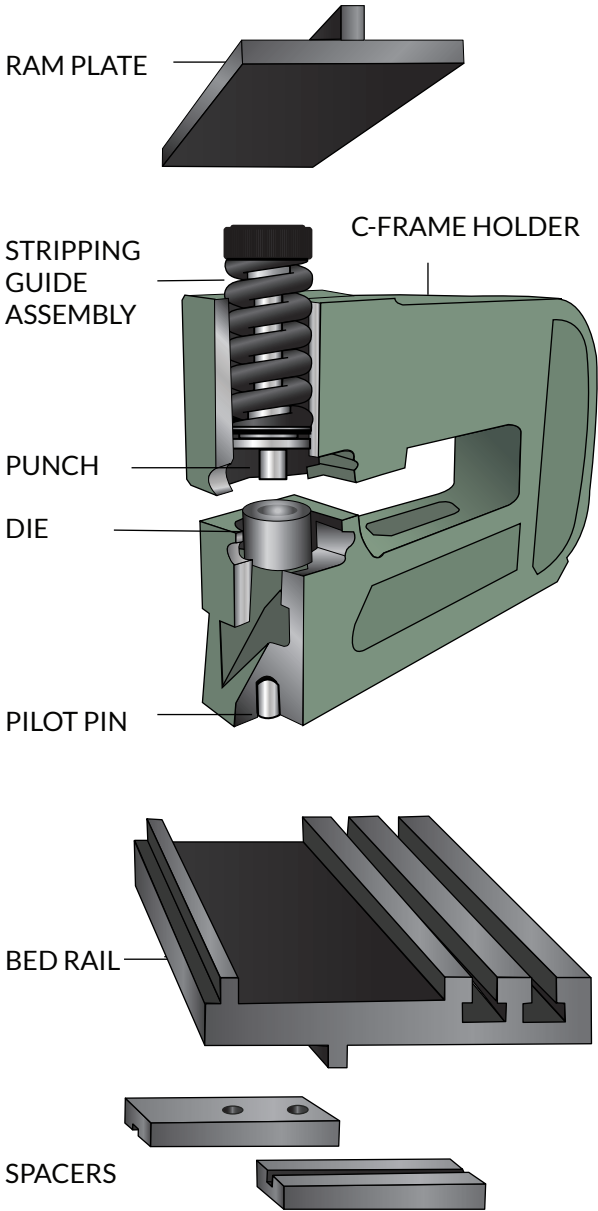
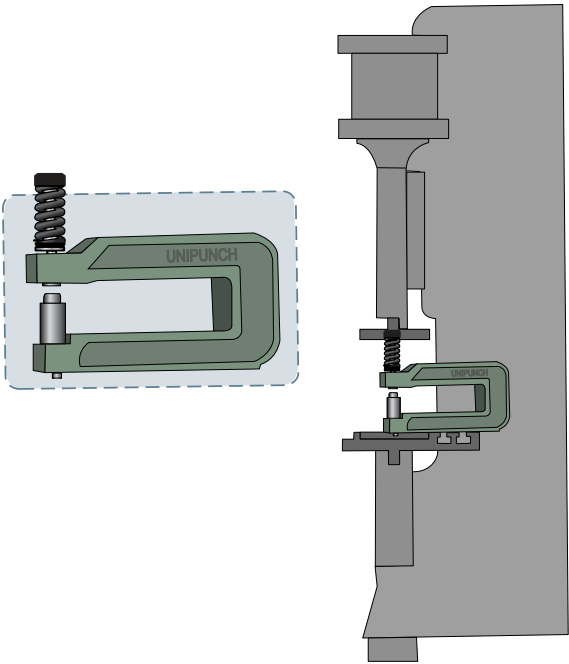
**TA1 TURRET ADAPTER**

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

Multiple configurations and options are available.



FRONT VIEW



C-FRAME TOOLING
Enables operation of single station thin turret tooling in a press brake.

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, specify if this is a :
- Wilson Tool repeat
 - Replicate Customer Tool
 - Redesign

Explain: _____

TOLERANCE BLOCK:

Part Radii Tolerance: _____
Tolerances tighter than $\pm 5\%$ may affect price / lead time.

Part Bend Angle Tolerance: _____
Tolerances tighter than $\pm 2\%$ may affect price / lead time.

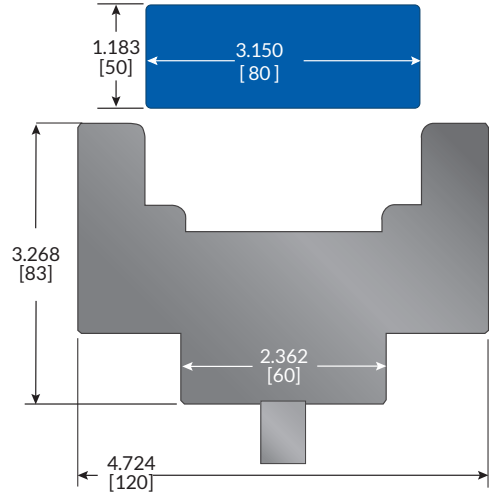
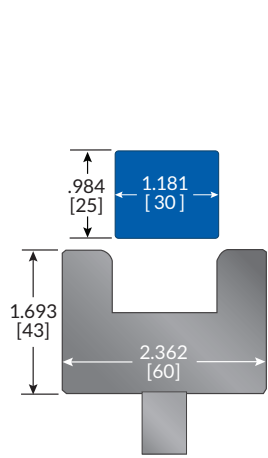
Estimated Annual Usage: _____

URETHANE PADS AND HOLDERS



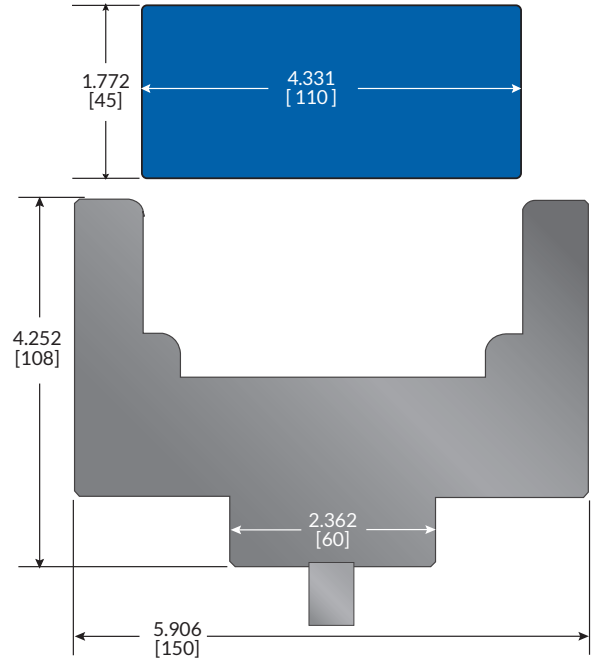
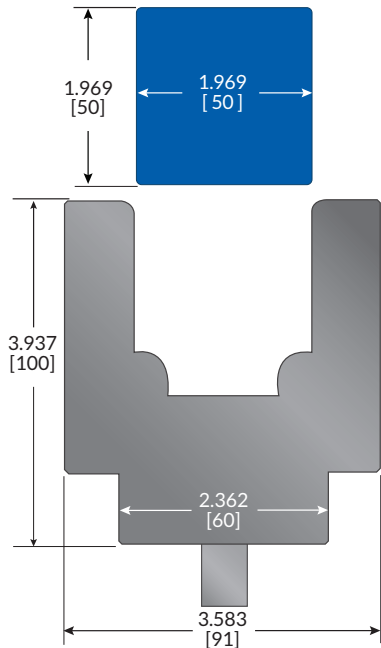
NOTE:

All urethane die holders are machined from 6061-T6 aluminum.
Check height against machine stroke prior to ordering.



CAT. NO.		SHORE HARDNESS	Approx. Gross Weight [lbs]		PRICE	
			L 32.87" [835mm]	S 16.34" [415mm]	L 32.87" [835mm]	S 16.34" [415mm]
42501c	M Holder	N/A	10	6		
42511	Pad	80A/Red	2	1		
42521	Pad	90A/Blue	2	1		

CAT. NO.		SHORE HARDNESS	Approx. Gross Weight [lbs]		PRICE	
			L 32.87" [835mm]	S 16.34" [415mm]	L 32.87" [835mm]	S 16.34" [415mm]
42503c	M Holder	N/A	35	19		
42513	Pad	80A/Red	6	3		
42523	Pad	90A/Blue	6	3		



CAT. NO.		SHORE HARDNESS	Approx. Gross Weight [lbs]		PRICE	
			L 32.87" [835mm]	S 16.34" [415mm]	L 32.87" [835mm]	S 16.34" [415mm]
42502c	M Holder	N/A	33	17		
42512	Pad	80A/Red	6	3		
42522	Pad	90A/Blue	6	3		

CAT. NO.		SHORE HARDNESS	Approx. Gross Weight [lbs]		PRICE	
			L 32.87" [835mm]	S 16.34" [415mm]	L 32.87" [835mm]	S 16.34" [415mm]
42504c	M Holder	N/A	52	27		
42514	Pad	80A/Red	11	6		
42524	Pad	90A/Blue	11	6		

M Made To Order

METRIC HEX KEY WRENCH SET

Press Brake Compatible
.....
Punch Press Compatible



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.

.....
Cat. No. 6105

SOFT FACE HAMMER

Press Brake Compatible
.....
Punch Press Compatible



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

.....
Cat. No. 6106

MAGNET SQUARE

Press Brake Compatible
.....
Punch Press Compatible



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

.....
Cat. No. 974150

MAGNETIC SQUARING ARM

Press Brake Compatible
.....
Punch Press Compatible



42750A

42750

DESCRIPTION	CAT. NO.
Magnetic Squaring Arm LEFT	42750L
Magnetic Squaring Arm RIGHT	42750R
30° Die Adapter	42750A

Not intended for use with American Precision style arrow dies.

DIGITAL ANGLE CUBE

Press Brake Compatible
.....
Punch Press Compatible



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.

.....
Cat. No. 974119

DIGITAL PROTRACTOR SET

Press Brake Compatible
.....
Punch Press Compatible



Lightweight, easy-to-use, highly accurate protractors measure angles from 0° to 360°.

- Accuracy: ±.01 degrees.
- Set angles in .05 degree increments
- Front locking lever to hold the arm position. A hold function and reverse reading capability.

.....
Cat. No. 980065

DIGITAL THICKNESS GAUGE

Press Brake Compatible
.....
Punch Press Compatible

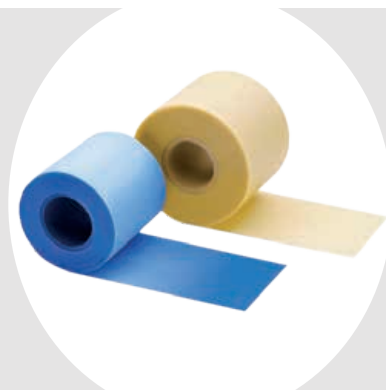


- Compact size with spring loaded jaw mechanism
- Accuracy to 0.002"
- Readings in millimeters, inches and fractions

.....
Cat. No. 974117

URETHANE 100 FT. ROLLS

Press Brake Compatible
.....
Punch Press Compatible



Urethane dies are also available for mark-free bending. Contact our sales desk for pricing and availability. See page 61 for Urethane Pads and Holders.

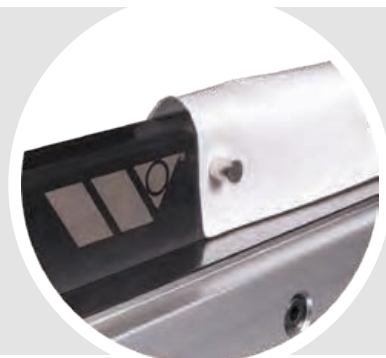
DESCRIPTION	CAT. NO.
.015" x 6" [.4 X 152mm]	42530
.030" x 6" [.8 x 152mm]	42531
.022" x 6" [.56 x 152mm]	42532

DUROMETER:

42530 and 42531	85A
42532	95A

PROTECTIVE FABRIC DRAPE

Press Brake Compatible
.....
Punch Press Compatible



Forms a protective barrier between the sheet metal and the die shoulders during the bending process.

DESCRIPTION	CAT. NO.
12.5m [41'] length x 120mm [4.7"] width	55335
3/8" x 1/2" Cylinder Magnet	987041

TOOL STORAGE CABINET

6 Drawer Cabinet
.....
Cat. No. 90020

10 Drawer Cabinet
.....
Cat. No. 90021



Extended wheel base prevents the cabinet from tipping.



6 DRAWER PUNCH STORAGE:

- Punches held in upright custom steel U-channels
- 12 punch channels for button style tooling
- 4 punch channels for solid tang tooling
- Additional separators available

10 DRAWER PUNCH STORAGE:

- Lay down storage allowing visibility of laser marking for easy tool identification.

ADDITIONAL SPECIFICATIONS:

- Solid steel construction
- Mobile base with heavy duty casters.
- Extended leg base to prevent tipping.
- Rated capacity of 3600 lbs.
- Drawers lined with industrial strength rubber mat
- Total weight capacity: 400 lbs. per drawer
- Retainer top with rubber mat
- Ships via truck freight

CAT. No.	Lead Time (Days)	Height inches	Width inches	Depth inches	Drawers Included			
					2" [50mm]	3" [76mm]	4" [101mm]	7" [175mm]
90020	5-15	48	48.0	24.0	2	1	N/A	3
90021	5-15	51.5	48.0	27.0	2	6	2	N/A

Additional tooling cabinets available.
Contact application sales desk for pricing and lead times.

CUSTOM COLOR OPTIONS

055	Avalanche Blue	061	Frost White
051	Everest Blue	071	Light Gray
052	Classic Blue	072	Charcoal Gray
057	Midnight Blue	208	Yellow
102	Boreal Green	085	Sienna Orange
091	Black	081	Flame Red
041	Beige	616	White

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

XTREME STORAGE CABINET

3 Drawer Cabinet
.....
Cat. No. 55130

5 Drawer Cabinet
.....
Cat. No. 55131



CABINET FEATURES:

- Vertical cabinet drawers are easily accessible from either side
- Each drawer contains three 7-inch wide shelves that hold up to 265 lbs. (120kg) each
- Each drawer contains a shallow top tray with adjustable dividers for storage of measurement devices, hand tools, etc.
- Flexible, adjustable trays and inserts can accommodate various tooling sizes and styles
- Punches are held securely in tip-up position
- Small footprint allows for easy placement of tools close to machines

CAT. No.	Number of Drawers	Cabinet Ht. (outside dim.)	Width - Left to Right (outside dim.)	Depth - Front to Back (inside dim.)	Number of Tool Trays	Total Length* of Tooling	
						1 Tool/Tray (inside dim.)	2 Tools/Tray (inside dim.)
55130 (XSC312)	3	48.8" (1.24m)	26.0" (0.66m)	51.2" (1.3m)	9	Up to 31 ft. (9.44m)	Up to 62 ft. (18.9m)
55131 (XSC512)	5	48.8" (1.24m)	40.9" (1.04m)	51.2" (1.3m)	15	Up to 51.5 ft. (15.7m)	Up to 103 ft. (31.4m)

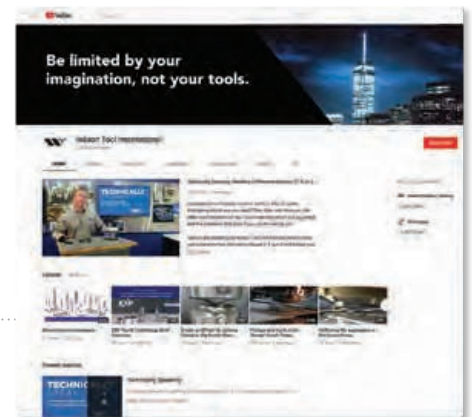
*Total length does not include available storage in the top most tray in each drawer.

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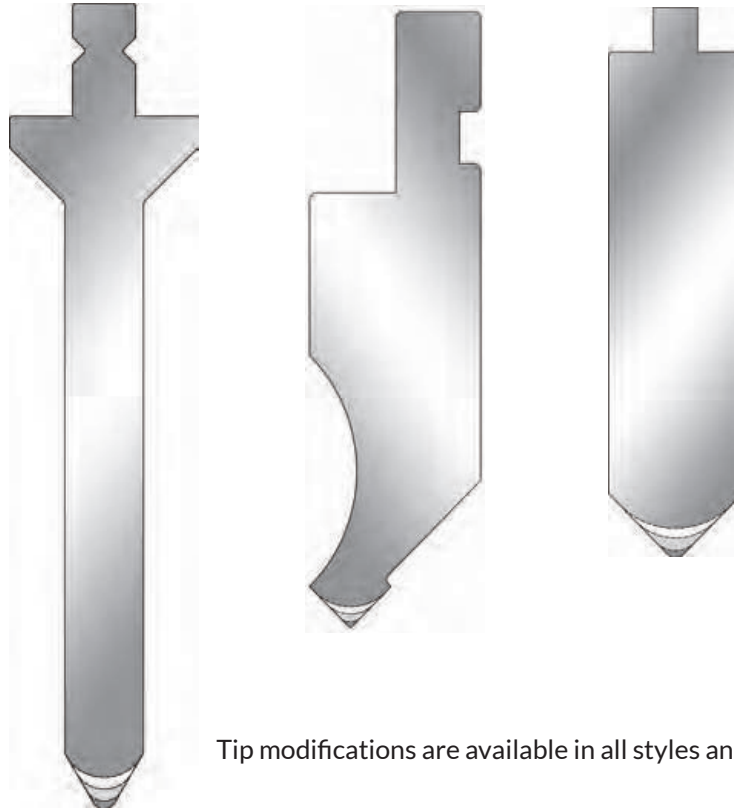


Our [e-newsletters](http://wilsontool.com) provide a solutions-based article to improve performance and productivity in your shop. In addition, they keep you up to date on the latest product and industry news along with training and event information. Sign-up at wilsontool.com or wilsontool.com/es-mx

Wilson Tool's YouTube channel showcases the latest tooling solutions in action and offers problem-solving application tips and tricks in our *Technically Speaking* video series. Explore application secrets, new products and productivity boosting tips in English and Spanish at youtube.com/wilsontooltube.



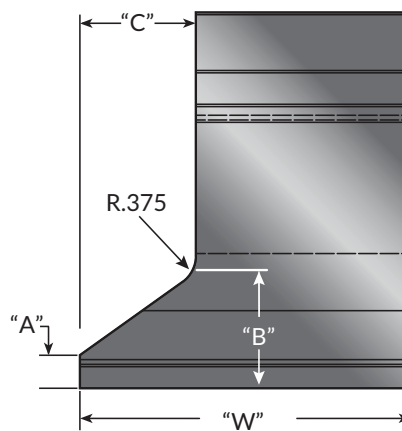
We post technical articles, helpful solutions, new products, free webinars and more to our LinkedIn company pages on a near daily basis. Follow us in English at linkedin.com/company/wilson-tool-international or in Spanish at linkedin.com/showcase/wilson-tool-international-en-espanol



Tip modifications are available in all styles and sizes.

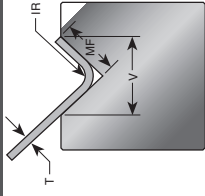
EAR PIECE

When ordering a special ear section from Wilson Tool, please indicate the dimensions on the diagram.



AIR BENDING FORCE CHART

IMPERIAL TONNAGE • IMPERIAL V OPENINGS



STANDARD FORMULAS FOR SELECTING A V-OPENING

MATERIAL THICKNESS: $.105" \text{ OR LESS} = T \times 6$
 $.120" - .313" = T \times 8$
 $.375" - .500" = T \times 10$
 $.625" \text{ \& THICKER} = T \times 12$

GAUGE		DEC. inch [mm]	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		
		V (")	2.9	2.2	1.7	1.2	1.0														
20	0.036 [9]		7.0	4.0	2.9	2.2	1.6	1.3													
18	0.048 [1.2]		7.8	5.6	3.6	2.7	2.2	1.7													
16	0.060 [1.5]				11.7	6.0	4.5	3.4	3.0	2.5	2.1										
14	0.075 [1.9]					12.2	6.8	5.4	4.3	3.7	3.3	2.9									
13	0.090 [2.3]						10.1	7.4	6.3	5.4	4.4	4.0	3.2								
12	0.105 [2.7]						10.5	8.8	7.2	6.2	5.4	4.3	3.2								
11	0.120 [3]						11.3	9.6	8.4	7.0	5.6	4.1									
10	0.135 [3.4]						13.1	11.9	9.0	6.7	5.2	3.5									
9	0.150 [3.8]						16.4	14.0	11.2	7.6	5.8	4.5									
7	0.188 [4.8]								28.8	22.0	15.3	9.1	7.5	6.2							
1/4"	0.250 [6.35]									38.0	26.0	19.2	16.0	12.5	10.6	7.6					
5/16"	0.312 [8]										41.0	29.9	24.0	19.4	16.0	12.3					
3/8"	0.375 [9.5]											45.2	35.0	28.0	24.0	17.0					
7/16"	0.438 [11.1]												47.9	39.0	33.1	24.0					
1/2"	0.500 [12.7]													69.5	58.0	42.2					
5/8"	0.625 [16]														92.0	69.0					
3/4"	0.750 [19]															104.0					
7/8"	0.875 [22]																				
1"	1.000 [25.4]																				

Larger v-openings generate less tonnage.

Tonnage increases with smaller v-openings.

Applications in red are not recommended.

TONS PER FOOT

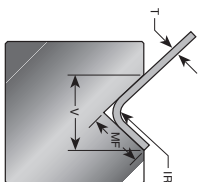
T = MATERIAL THICKNESS • V = V-OPENING • MF = MINIMUM FLANGE LENGTH • IR = INSIDE RADIUS

NOTE: The above formulas and chart are for reference only.
 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.

- Soft Brass
- Soft Aluminum
- Heat Treated Aluminum Alloys
- Stainless Steel
- High Strength Steel
- Tons x 50%
- Tons x 50%
- Tons x 100%
- Tons x 150%
- Tons x 275%

AIR BENDING FORCE CHART

IMPERIAL TONNAGE ● METRIC V OPENINGS



STANDARD FORMULAS FOR SELECTING A V-OPENING

MATERIAL THICKNESS: 2.6mm OR LESS = T x 6
 3.00mm - 8.0mm = T x 8
 9.00mm - 12.00mm = T x 10
 14.00mm & THICKER = T x 12

GAUGE	DEC. inch [mm]	TONS PER FOOT																										
		V [mm]	V(°)	MF	IR	4	6	7	8	10	12	14	16	18	20	25	32	40	50	63	80	100	125	160	200	250		
20	0.036 [.9]	4	0.157	0.110	0.026	5.4	3.6	3.0	2.5	2.0	1.7																	
18	0.048 [1.2]	6	0.236	0.165	0.039	7.2	5.8	4.8	3.7	2.7	2.4	2.0																
16	0.060 [1.5]	7	0.276	0.193	0.046	7.8	6.0	4.8	3.7	2.7	2.4	2.0																
14	0.075 [1.9]	8	0.315	0.220	0.052	8.4	6.6	5.0	3.7	2.7	2.4	2.0																
13	0.090 [2.3]	10	0.394	0.276	0.066	11.3	7.5	5.0	3.7	2.7	2.4	2.0																
12	0.105 [2.7]	12	0.472	0.331	0.079	12.5	8.1	5.0	3.7	2.7	2.4	2.0																
11	0.120 [3]	14	0.551	0.397	0.092	13.0	8.2	5.0	3.7	2.7	2.4	2.0																
10	0.135 [3.4]	16	0.630	0.454	0.105	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
9	0.150 [3.8]	18	0.709	0.510	0.118	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
3/16	0.188 [4.8]	20	0.787	0.567	0.131	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
1/4	0.250 [6.35]	25	0.984	0.709	0.164	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
5/16	0.313 [8]	32	1.260	0.945	0.210	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
3/8	0.375 [9.5]	40	1.575	1.181	0.262	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
1/2	0.500 [12.7]	50	1.969	1.476	0.328	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
5/8	0.625 [16]	63	2.480	1.860	0.413	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
3/4	0.750 [19]	80	3.150	2.362	0.525	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
1	1.000 [25.4]	100	3.937	2.953	0.656	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
1-1/4	1.250 [32]	125	4.921	3.789	0.820	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
		160	6.299	4.850	1.050	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
		200	7.874	6.063	1.312	13.1	8.1	5.0	3.7	2.7	2.4	2.0																
		250	9.843	7.579	1.640	13.1	8.1	5.0	3.7	2.7	2.4	2.0																

Tonnage increases with smaller V-openings.
















Applications in red are not recommended.

Larger V-openings generate less tonnage.

T = MATERIAL THICKNESS • V = V-OPENING • MF = MINIMUM FLANGE LENGTH • IR = INSIDE RADIUS

NOTE: The above formulas and chart are for reference only.
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- High Strength Steel
- Tons x 50%
- Tons x 50%
- Tons x 100%
- Tons x 150%
- Tons x 275%

MULTI-BEND ALLOWANCES			
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 or Convex sides	Material Thick Radii Min. Angle Variation Maintain Flatness

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 Foot.

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

WHAT IS "STAGED" TOOLING?

Staged bending is the process of developing multiple tooling setups that have a common shut height. This enables press brake operators to carry out multiple bends with a single setup. Groups of tools are set up progressively along the press brake, then all bends on a single part are performed in succession.

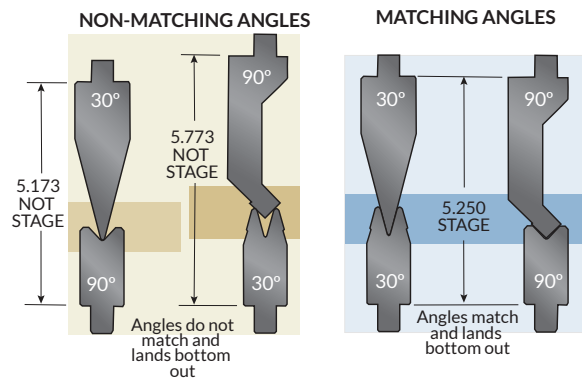
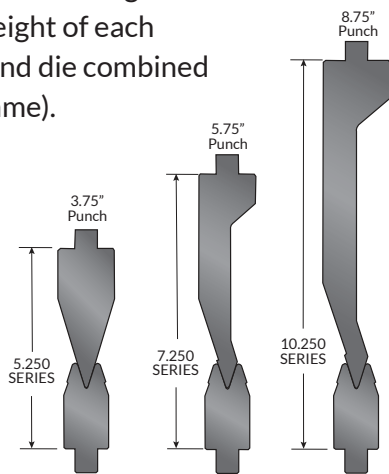
Unstaged Tooling
Tooling without a common shut height cannot be run in one setup because the punches and dies will collide.

TRADITIONAL NON-STAGED BENDING
3 Different Shut Heights

Staged Tooling
Staged tooling is designed to shut at the same height, so all bending can be done in one progressive setup.

STAGED BENDING
1 Common Shut Height

Common shut height
(total height of each punch and die combined is the same).



See this tool in action on the [Wilson Tool YouTube Channel](#)

Stage bending simplifies complex jobs by eliminating unproductive repetitive tasks - significantly reducing setup time, part handling and work-in-progress.

From standard tooling solutions for **American Precision, European Precision, WT-style, LVD-style and American Planed press brake tooling** to customized tooling for the most unique bending applications. Wilson Tool International provides the broadest selection of tooling options to press brake fabricators around the world.



EUROPEAN PRECISION

Clamping Innovations

Fast Tool Changes

Whether you're looking for cost-effective mechanical clamping, simple push-button setups or an ultra-fast hydraulic solution, Wilson Tool has a clamping system to meet your needs.



AMERICAN PRECISION

Express Rail® Hydraulic Clamping

The Express Rail® hydraulic clamping system reduces set-up time with a wireless pendant control that clamps and seats your press brake tooling in seconds. This system also gives you more open height and extended clamp life. The Express Rail hydraulic clamping system works with WT-style or American Precision G Series tooling.



LVD-STYLE

PowerExpress® Hydraulic Clamping

The PowerExpress® hydraulic clamping system offers easy installation, lightning fast changeouts, long-term reliability and increased bending capacity. Clamp and seat straight-tanged American style tooling in a single operation.

Express Clamping System®

Instantly lock European style press brake punches in place with the push of a lever. Express Clamps are uniquely designed to increase your productivity and reduce your operating costs. Available for virtually any make and model of press brake.



AMERICAN PLANED

Almost 200 years of experience is just a phone call or email away.

Our highly trained technical staff has a combined 190 years of experience. Our staff of engineers, designers, and customer support team are highly qualified to find the best tooling solutions for you. From your first inquiry into tooling until your business is more successful than you imagined, we are here to help.

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