



EUROPEAN STYLE STAGED PRESS BRAKE TOOLING

Your Choice for
Higher
Productivity



Strength. Performance. Innovation.

BEND MORE. SET UP LESS.



Save Time with Staged Bending.

Wilson Tool is making it easier than ever for European Style press brake fabricators to dramatically improve productivity with staged bending tools for European Style press brakes. With staged bending, fabricators save valuable time by performing multiple bends with a single setup. Staged bending simplifies complex short-run jobs by eliminating unproductive repetitive tasks – significantly reducing setup time, part handling and work-in-progress.



Standard Common Shut Height.

Typically, completing multiple bends in a single press brake setup would require a skilled press brake operator to use special risers and shims to achieve a common shut height across all punches and dies. With the new staged bending tools for European Style press brakes, Wilson Tool provides an easier way to achieve common shut heights. Our staged bending tools have common shut heights built in, allowing machine operators to carry out a series of bends in one setup without the complicated preparation process. Thirty-degree, offset, flattening, gooseneck and other tools are set up progressively in one press brake without the fear of punches and dies colliding.

The Strength is in the Steel.

Every Wilson European Style press brake tool is manufactured using only the hardest steels for increased strength and a longer tool life. We manufacture each and every press brake tool at our state-of-the-art manufacturing facility to ensure total quality control and quick delivery.

Precision Ground for Less Scrap.

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

Nitrex™ Extends Tool Life.

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

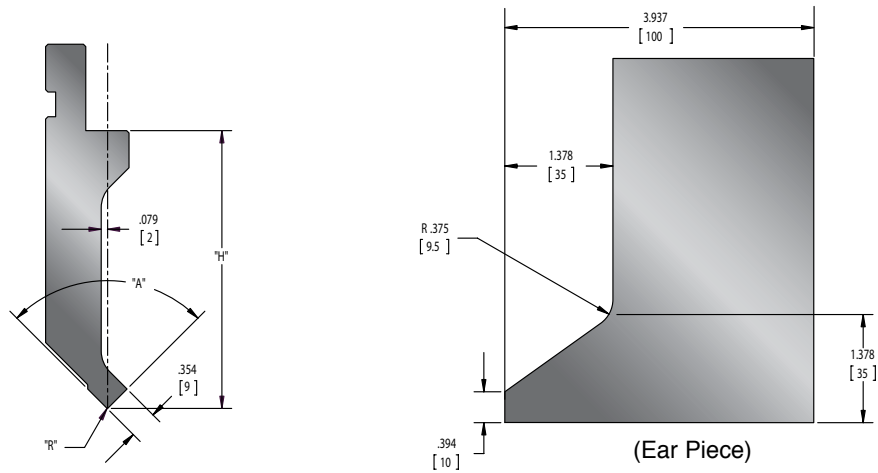
Nitrex also adds lubricity to press brake tooling that lowers friction, effectively minimizing galling. Unlike ordinary press brake tooling Nitrex treated tools experience zero corrosion, resulting in faster cleanups and longer lasting tooling.

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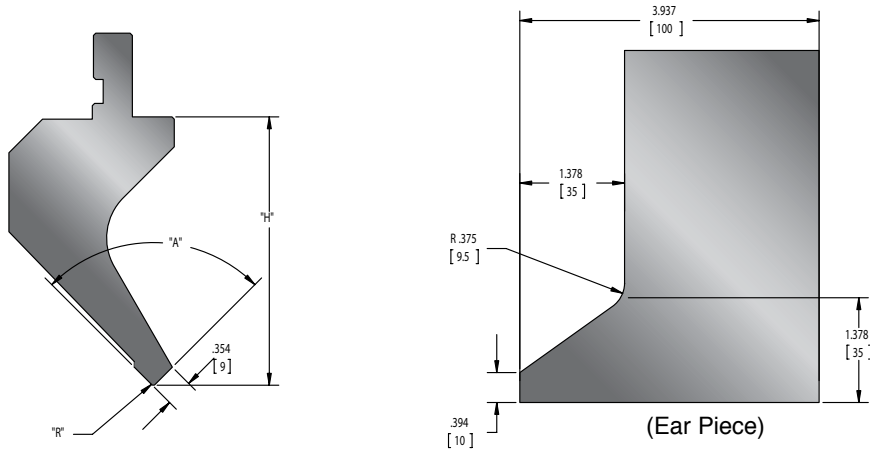
Staged Punches – 90mm



SASH PUNCHES - 411 SERIES

CATALOG NUMBER	R TIP RADIUS inch [mm]	A ANGLE	H HEIGHT inch [mm]	LT & ST MAX TON feet [meter]	XT MAX TON feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
41190002	.008 [0.2]	90	3.540 [89.9]	30 [100]	12 [40]			
41190008	.030 [0.8]	90	3.530 [89.7]	30 [100]	12 [40]			
41190015	.060 [1.5]	90	3.519 [89.4]	30 [100]	12 [40]			
41190023	.090 [2.3]	90	3.506 [89.0]	30 [100]	12 [40]			
41190030	.120 [3.0]	90	3.494 [88.8]	30 [100]	12 [40]			
41188002	.008 [0.2]	88	3.540 [89.9]	30 [100]	12 [40]			
41188008	.030 [0.8]	88	3.529 [89.6]	30 [100]	12 [40]			
41188015	.060 [1.5]	88	3.517 [89.3]	30 [100]	12 [40]			
41188023	.090 [2.3]	88	3.504 [89.0]	30 [100]	12 [40]			
41188030	.120 [3.0]	88	3.491 [88.7]	30 [100]	12 [40]			

Bend Limit Graph - page 7

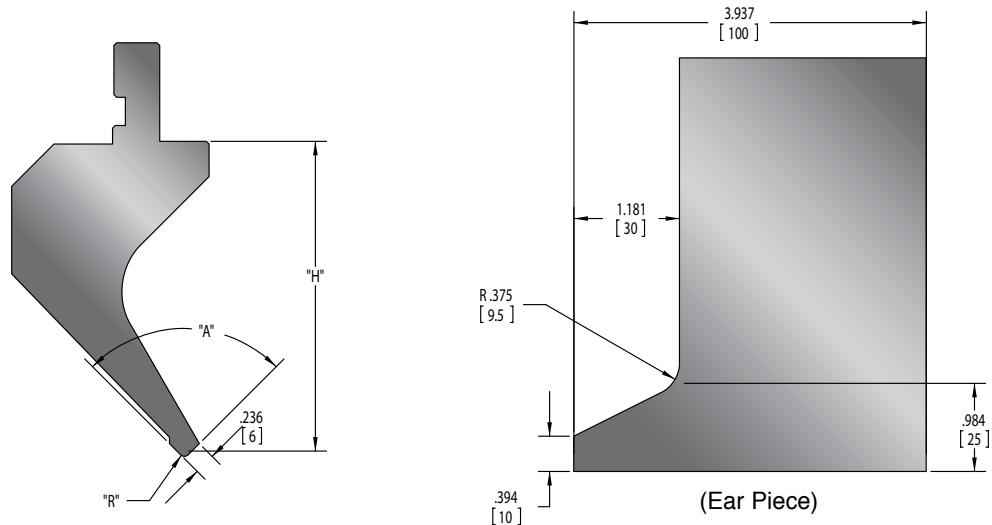


GOOSENECK PUNCHES - 410 SERIES

CATALOG NUMBER	R TIP RADIUS inch [mm]	A ANGLE	H HEIGHT inch [mm]	LT & ST MAX TON feet [meter]	XT MAX TON feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
41090002	.008 [0.2]	90	3.540 [89.9]	21 [70]	14 [47]			
41090008	.030 [0.8]	90	3.530 [89.7]	21 [70]	14 [47]			
41090015	.060 [1.5]	90	3.519 [89.4]	21 [70]	14 [47]			
41090023	.090 [2.3]	90	3.505 [89.0]	21 [70]	14 [47]			
41090030	.120 [3.0]	90	3.494 [88.8]	21 [70]	14 [47]			
40602	.008 [0.2]	88	3.539 [89.9]	21 [70]	14 [47]			
40608	.030 [0.8]	88	3.529 [89.6]	21 [70]	14 [47]			
40615	.060 [1.5]	88	3.517 [89.3]	21 [70]	14 [47]			
41088023	.090 [2.3]	88	3.504 [89.0]	21 [70]	14 [47]			
40630	.120 [3.0]	88	3.491 [88.7]	21 [70]	14 [47]			

Bend Limit Graph - page 8

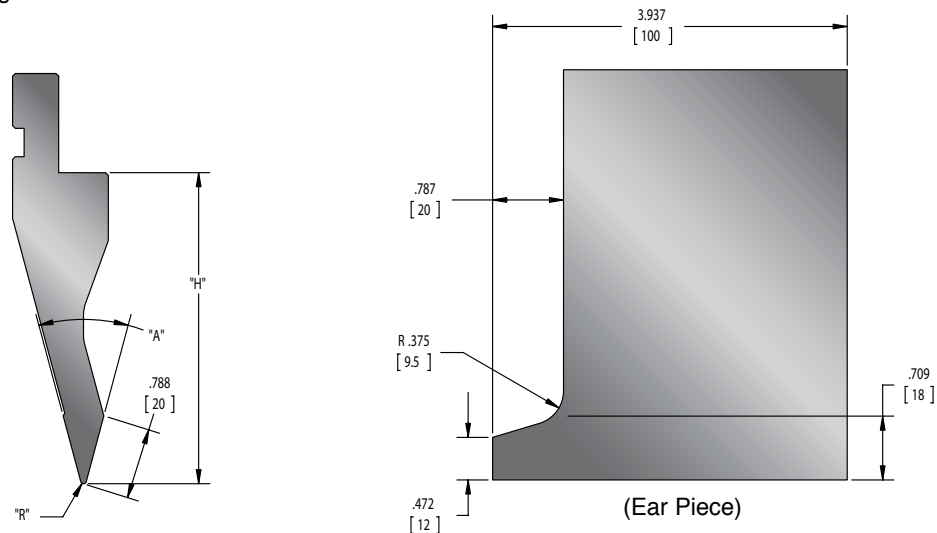
Staged Punches – 90mm



THIN TIP GOOSENECK PUNCHES - 413 SERIES

CATALOG NUMBER	R TIP RADIUS inch [mm]	A ANGLE	H HEIGHT inch [mm]	LT & ST MAX TON feet [meter]	XT MAX TON feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
40712	.008 [0.2]	90	3.540 [89.9]	15 [50]	9 [30]			
40718	.030 [0.8]	90	3.530 [89.7]	15 [50]	9 [30]			
41390015	.060 [1.5]	90	3.519 [89.4]	15 [50]	9 [30]			
41390023	.090 [2.3]	90	3.505 [89.0]	15 [50]	9 [30]			
41390030	.120 [3.0]	90	3.494 [88.8]	15 [50]	9 [30]			
41388002	.008 [0.2]	88	3.540 [89.9]	15 [50]	9 [30]			
40702	.008 [0.2]	88	3.529 [89.6]	15 [50]	9 [30]			
40708	.030 [0.8]	88	3.517 [89.3]	15 [50]	9 [30]			
41388023	.090 [2.3]	88	3.504 [89.0]	15 [50]	9 [30]			
41388030	.120 [3.0]	88	3.491 [88.7]	15 [50]	9 [30]			

Bend Limit Graph - page 9

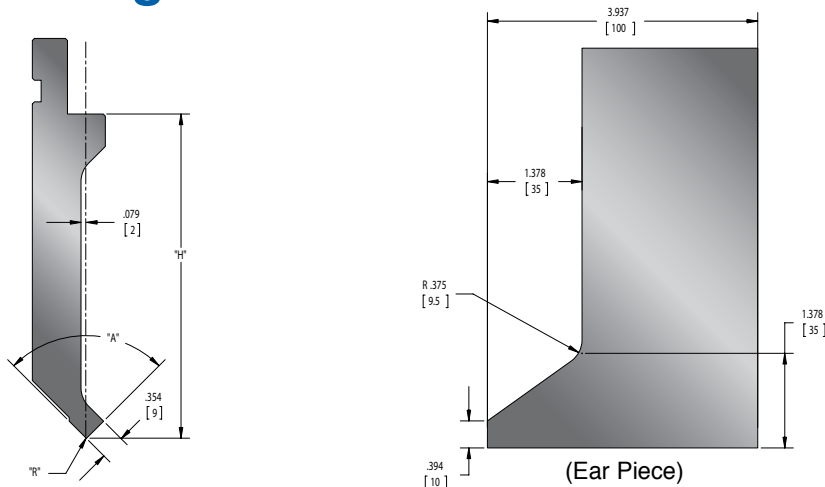


ACUTE PUNCHES - 412 SERIES

CATALOG NUMBER	R TIP RADIUS inch [mm]	A ANGLE	H HEIGHT inch [mm]	LT & ST MAX TON feet [meter]	XT MAX TON feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
41230008	.030 [0.8]	30	3.453 [87.7]	30 [100]	6 [20]			

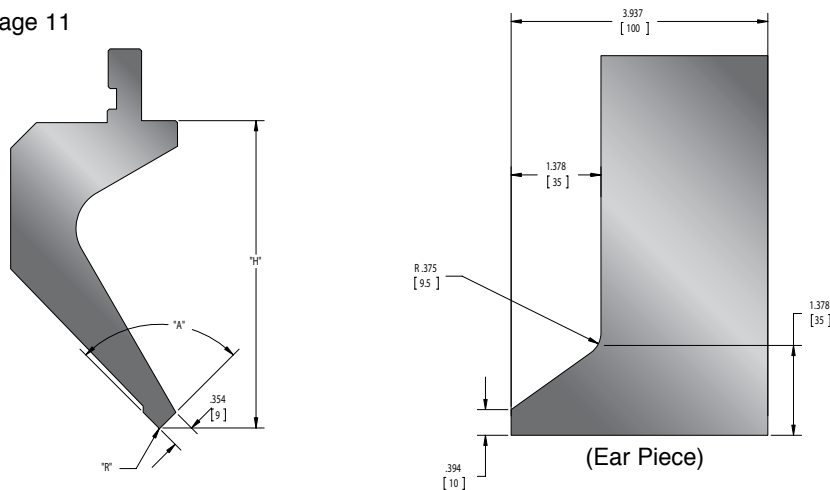
Bend Limit Graph - page 10

Staged Punches – 120mm



SASH PUNCHES - 401 SERIES								
CATALOG NUMBER	R TIP RADIUS inch [mm]	A ANGLE	H HEIGHT inch [mm]	LT & ST MAX TON feet [meter]	XT MAX TON feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
40190002	.008 [0.2]	90	4.721 [119.9]	30 [100]	12 [40]			
40190008	.030 [0.8]	90	4.711 [119.7]	30 [100]	12 [40]			
40190015	.060 [1.5]	90	4.700 [119.4]	30 [100]	12 [40]			
40190023	.090 [2.3]	90	4.687 [119.0]	30 [100]	12 [40]			
40190030	.120 [3.0]	90	4.675 [118.8]	30 [100]	12 [40]			
40188002	.008 [0.2]	88	4.721 [119.9]	30 [100]	12 [40]			
40188008	.030 [0.8]	88	4.711 [119.6]	30 [100]	12 [40]			
40188015	.060 [1.5]	88	4.698 [119.3]	30 [100]	12 [40]			
40188023	.090 [2.3]	88	4.685 [119.0]	30 [100]	12 [40]			
40188030	.120 [3.0]	88	4.672 [118.7]	30 [100]	12 [40]			

Bend Limit Graph - page 11



GOOSENECK PUNCHES - 400 SERIES								
CATALOG NUMBER	R TIP RADIUS inch [mm]	A ANGLE	H HEIGHT inch [mm]	LT & ST MAX TON feet [meter]	XT MAX TON feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
40090002	.008 [0.2]	90	4.721 [119.9]	15 [50]	9 [30]			
40090008	.030 [0.8]	90	4.711 [119.7]	15 [50]	9 [30]			
40090015	.060 [1.5]	90	4.700 [119.4]	15 [50]	9 [30]			
40090023	.090 [2.3]	90	4.687 [119.0]	15 [50]	9 [30]			
40090030	.120 [3.0]	90	4.675 [118.8]	15 [50]	9 [30]			
40302	.008 [0.2]	88	4.721 [119.9]	15 [50]	9 [30]			
40308	.030 [0.8]	88	4.711 [119.6]	15 [50]	9 [30]			
40088015	.060 [1.5]	88	4.698 [119.3]	15 [50]	9 [30]			
40088023	.090 [2.3]	88	4.685 [119.0]	15 [50]	9 [30]			
40088030	.120 [3.0]	88	4.672 [118.7]	15 [50]	9 [30]			

Bend Limit Graph - page 12



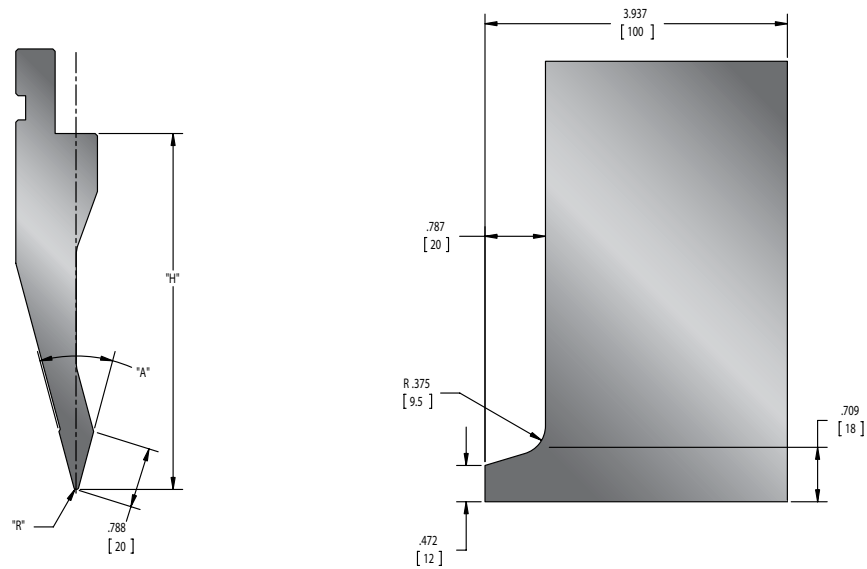
Local
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Toll Free U.S.A. & Canada
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Fax: 800-539-4590

Toll Free Mexico
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Website & Email
www.wilsontool.com
pressbrake@wilsontool.com

Staged Punches – 120mm



ACUTE PUNCHES - 402 SERIES								
CATALOG NUMBER	R TIP RADIUS inch [mm]	A ANGLE	H HEIGHT inch [mm]	LT & ST MAX TON feet [meter]	XT MAX TON feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
40230008	.030 [0.8]	30	4.634 [117.7]	30 [100]	6 [20]			

Bend Limit Graph - page 13

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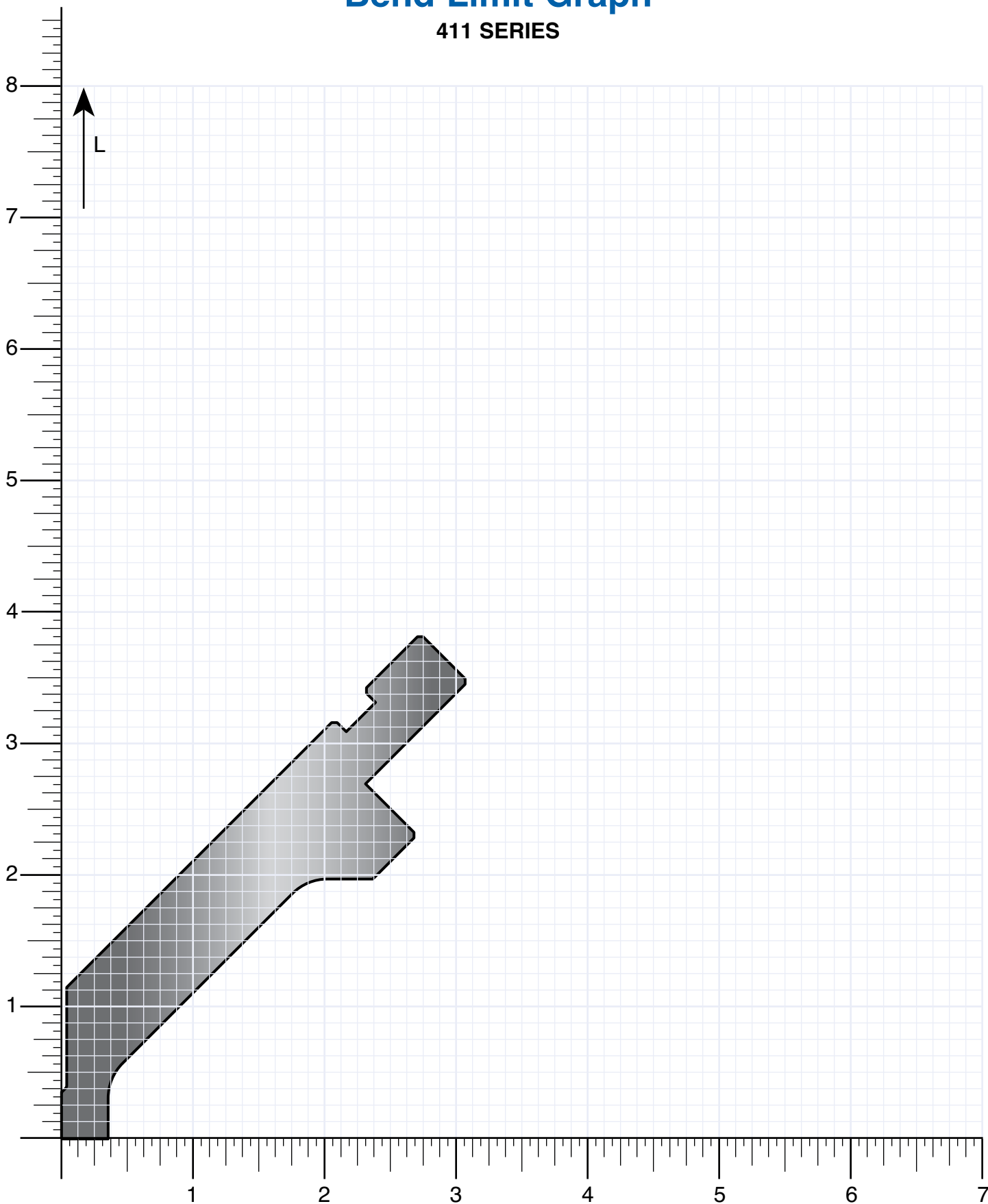
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Bend Limit Graph

411 SERIES



Product Details – page 3



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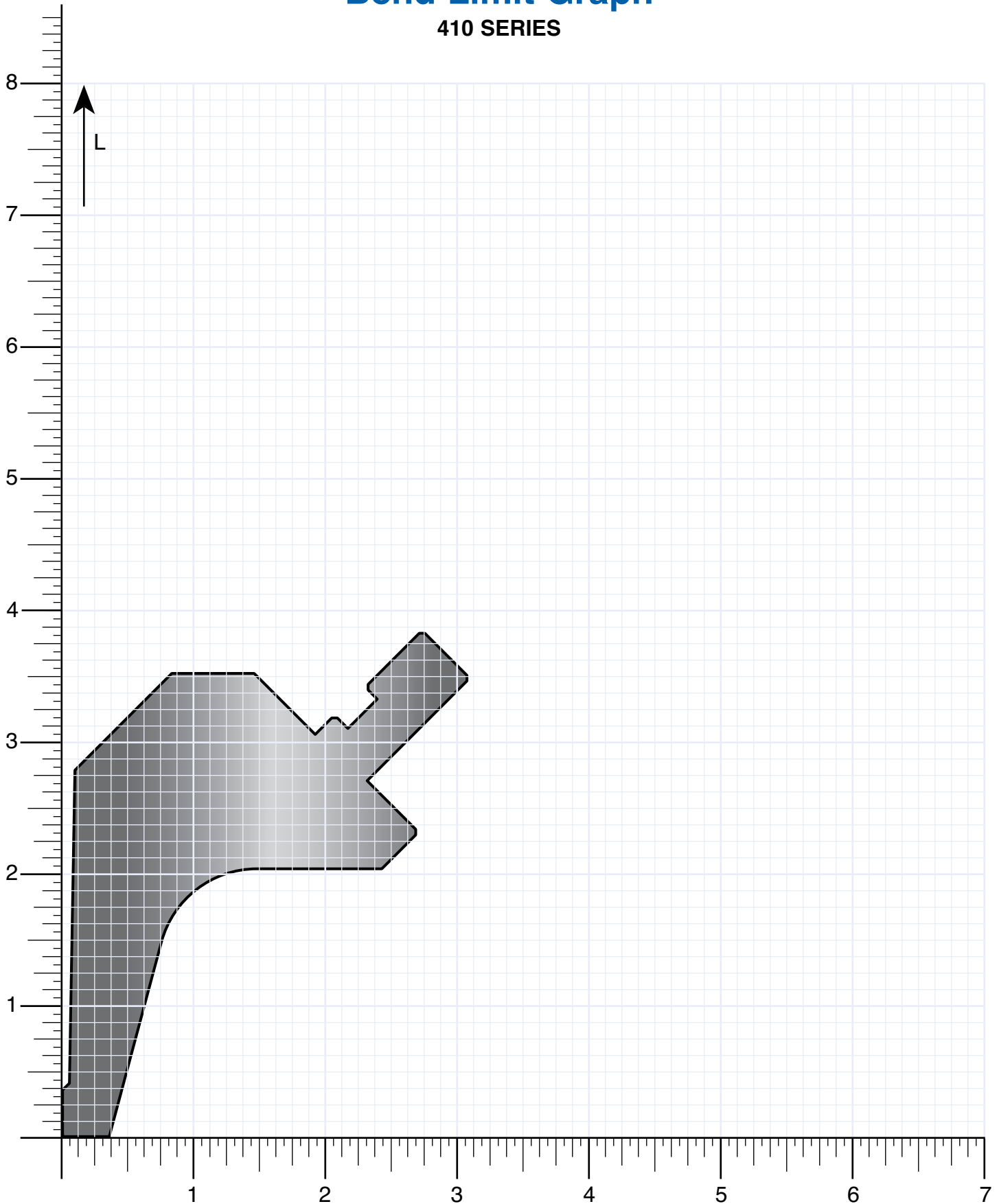
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Bend Limit Graph

410 SERIES



Product Details – page 3

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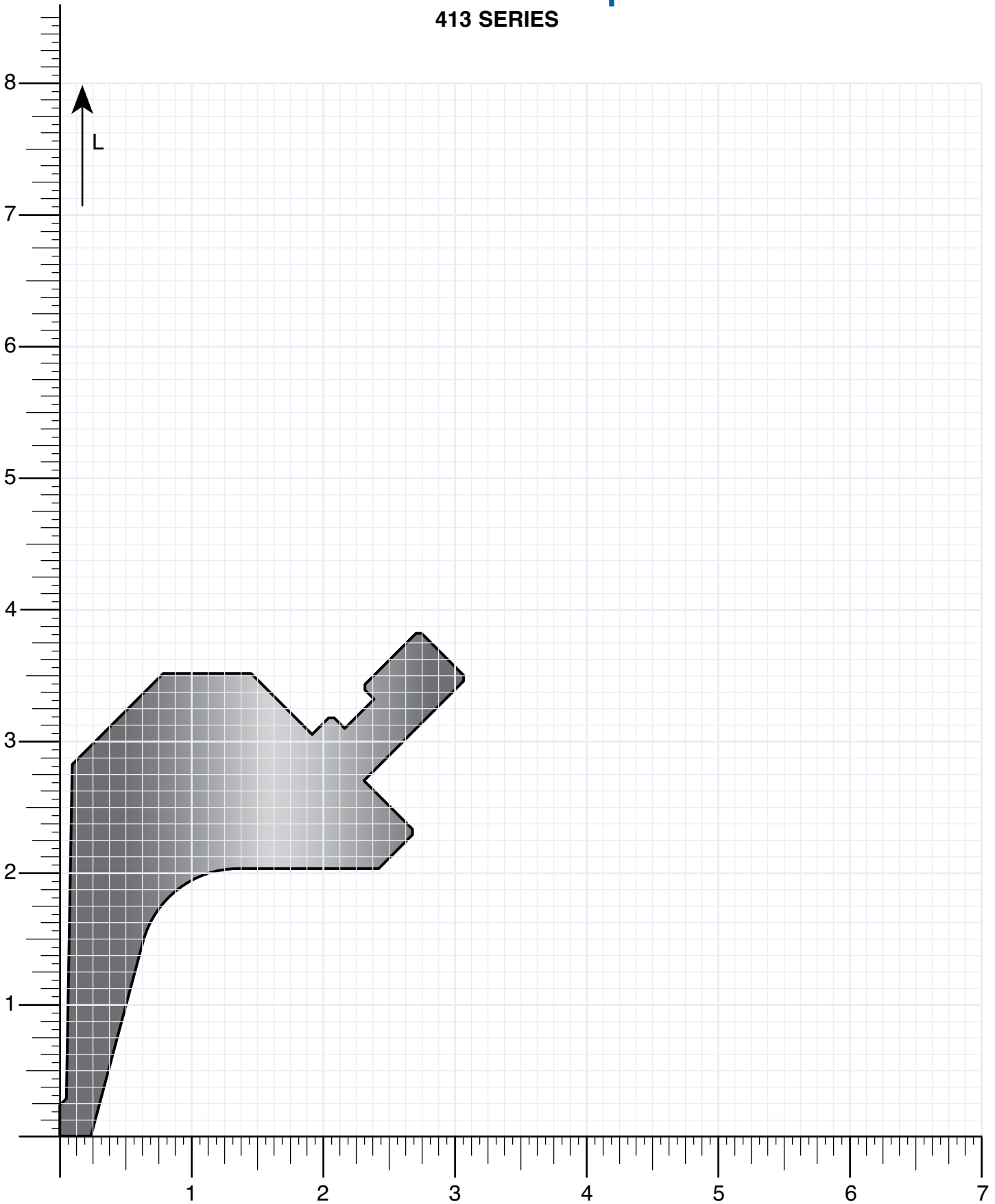
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Bend Limit Graph

413 SERIES



Product Details – page 4



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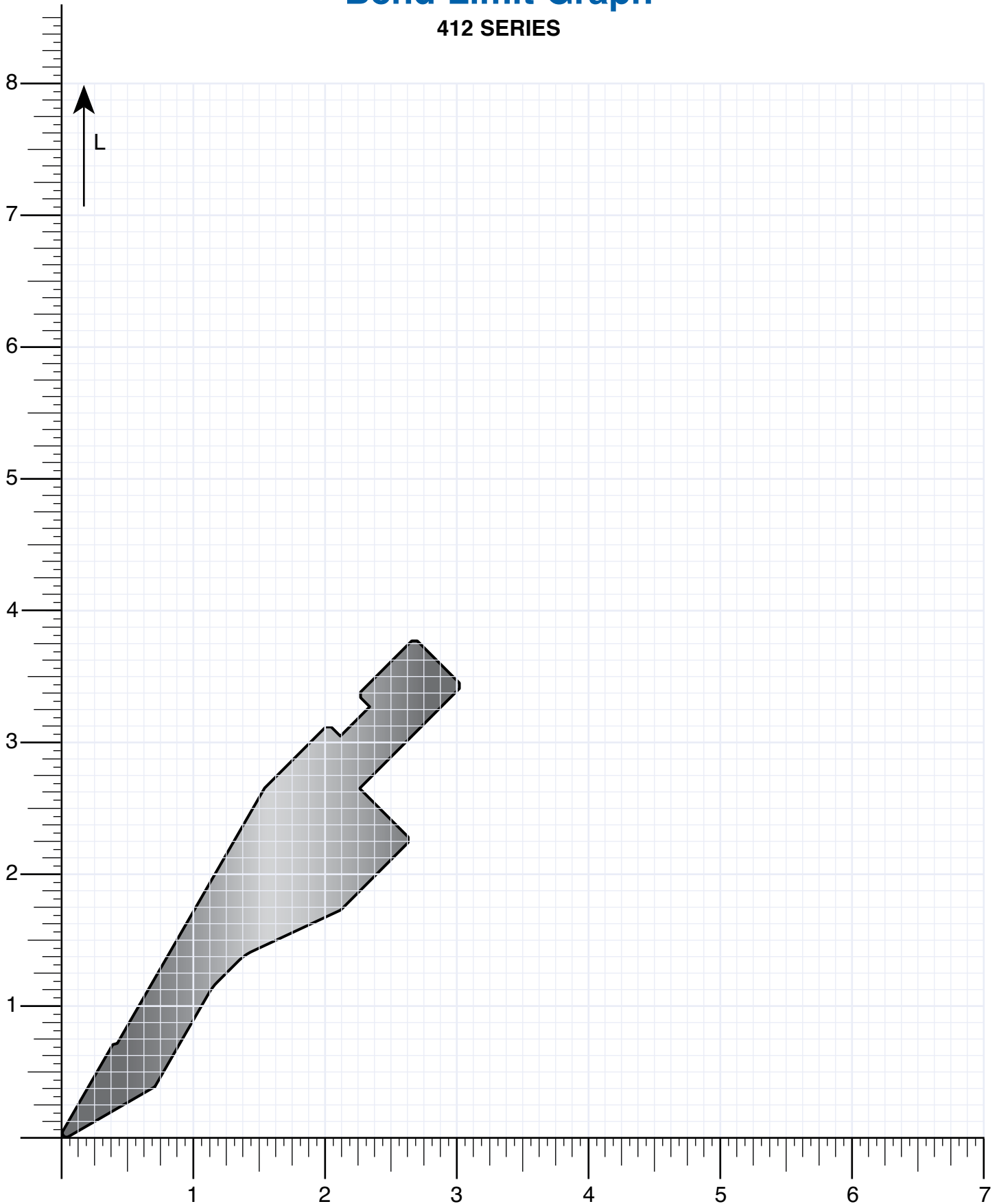
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Bend Limit Graph

412 SERIES



Product Details – page 4

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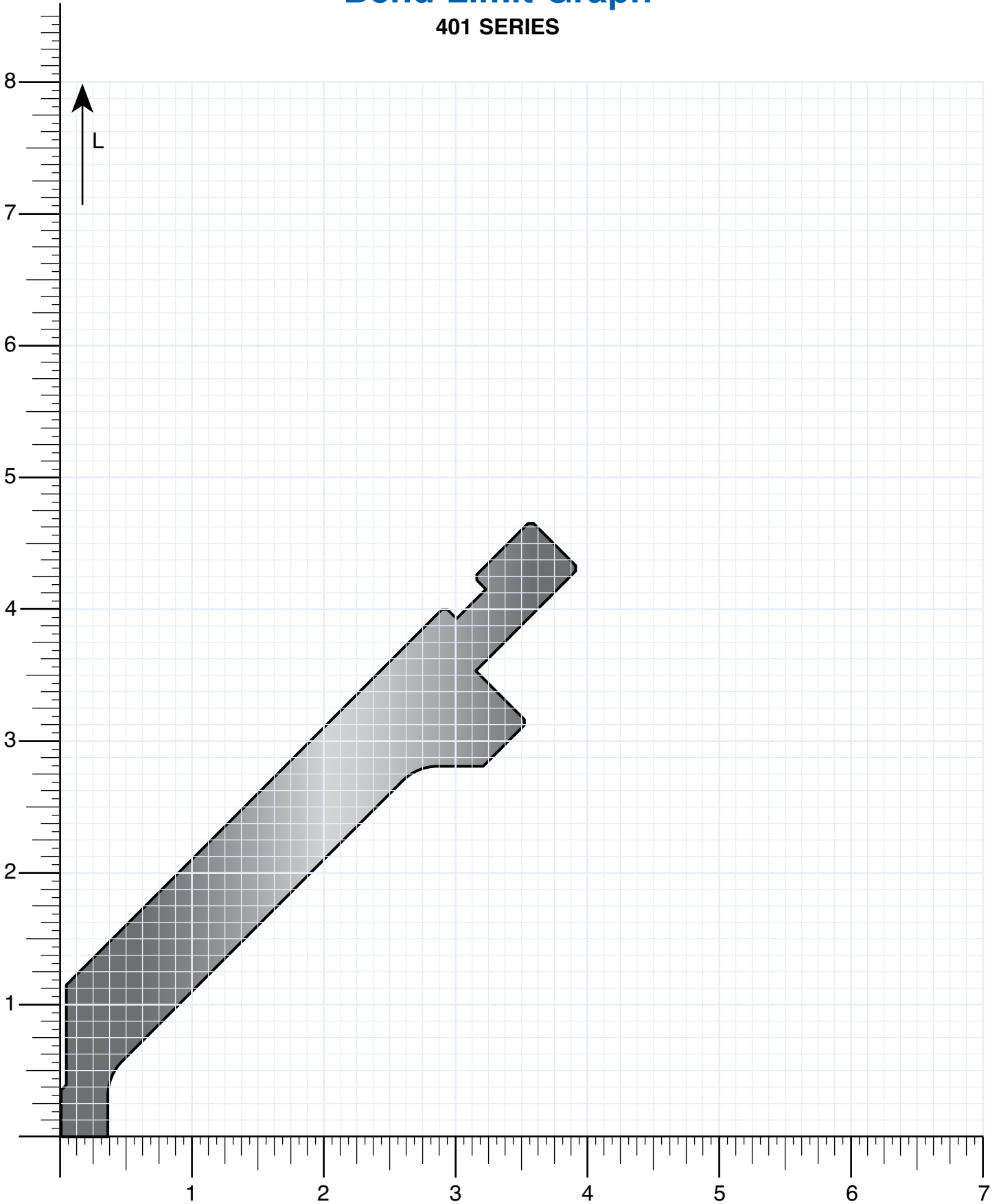
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pressbrake@wilsontool.com



Bend Limit Graph

401 SERIES



Product Details – page 5



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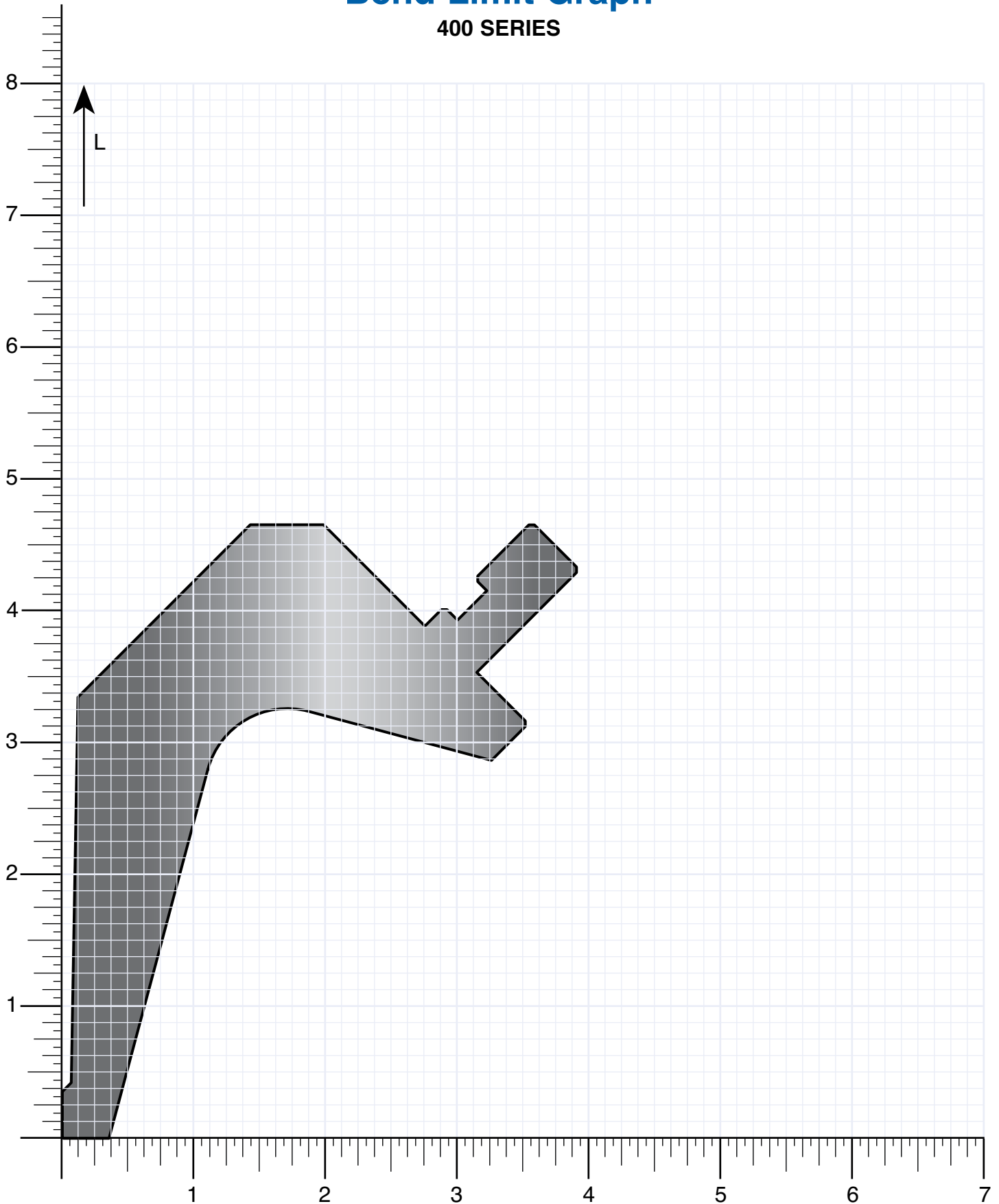
Toll Free U.S.A. & Canada
Tel: 800-445-4518
Fax: 800-539-4590

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Bend Limit Graph

400 SERIES



Product Details – page 5

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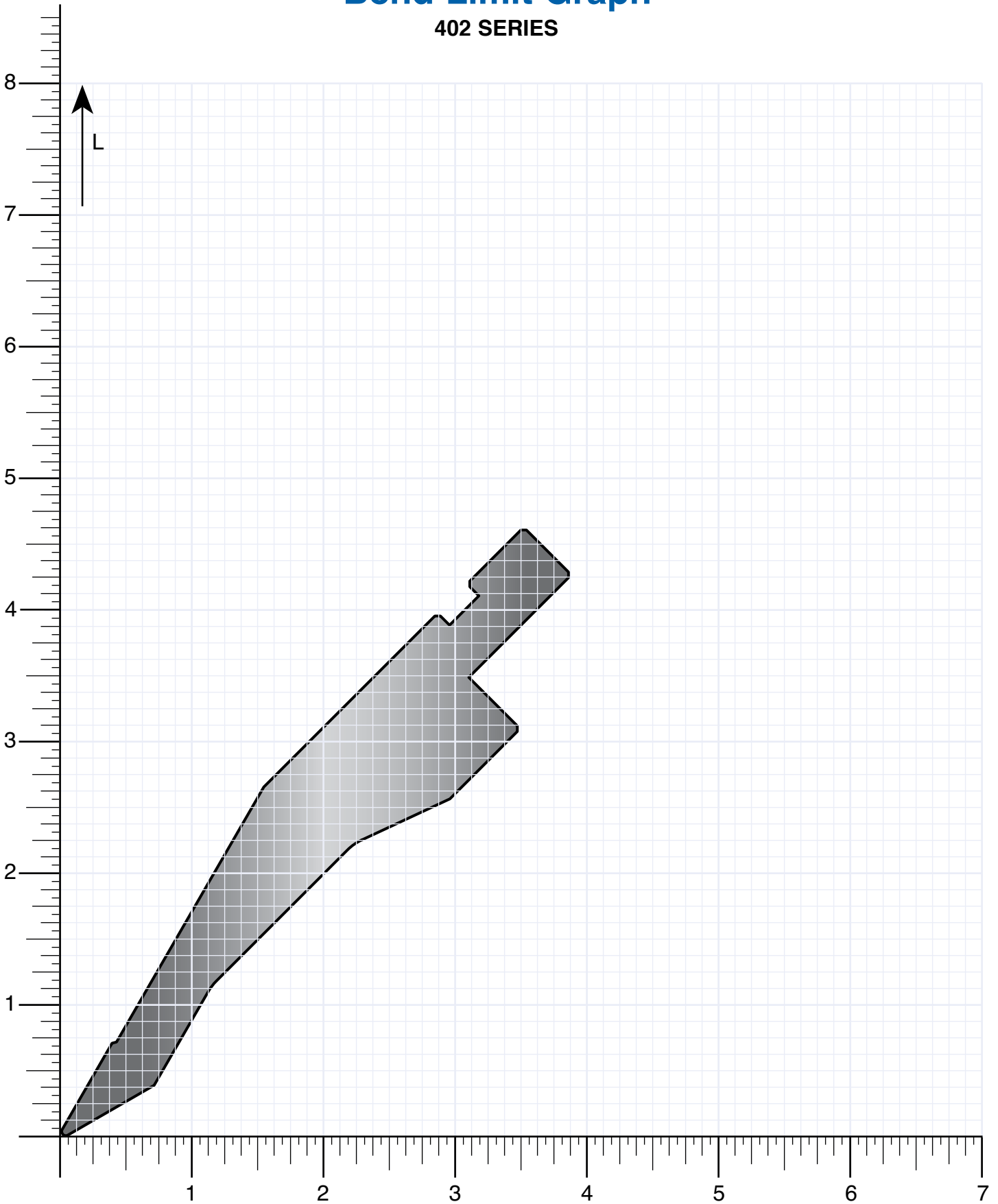
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pressbrake@wilsontool.com



Bend Limit Graph

402 SERIES



Product Details – page 6



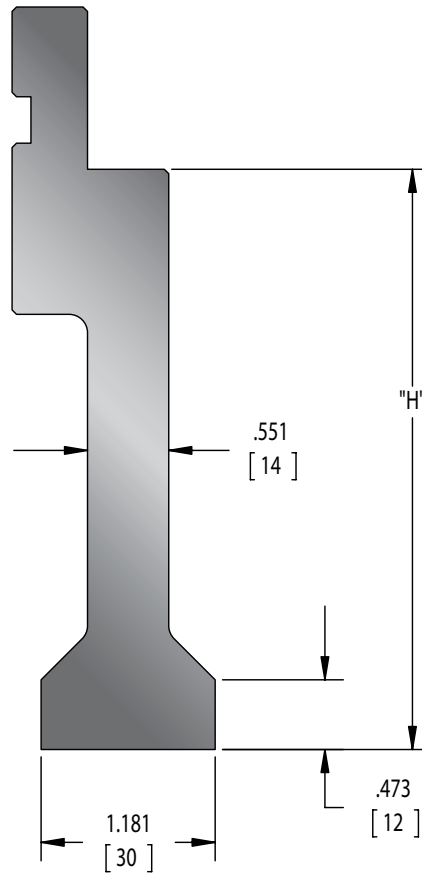
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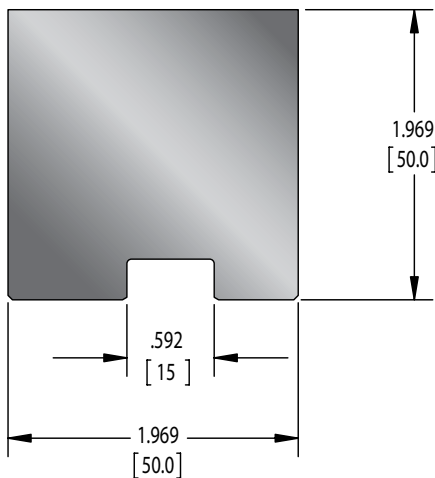
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Staged Flattening Punch & Die

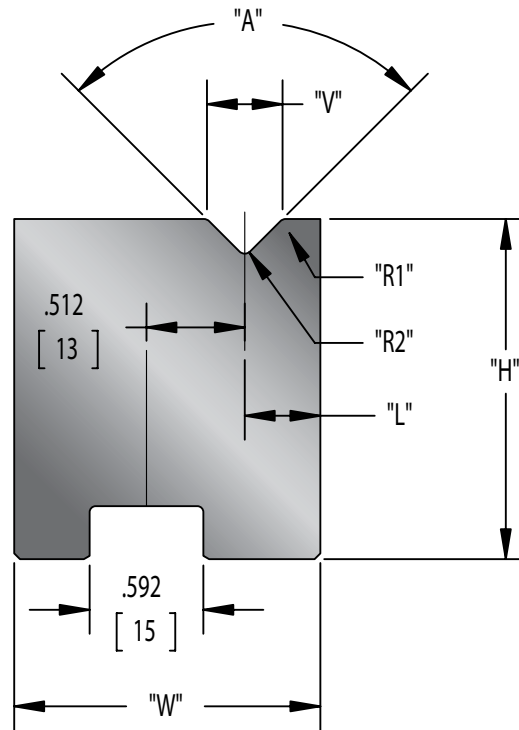


FLATTENING PUNCH						
CATALOG NUMBER	STAGING FAMILY	H HEIGHT inch [mm]	MAX TONS feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
41400000	90mm	3.150 [80.0]	30 [100]			
40400000	120mm	3.937 [100.0]	30 [100]			



FLATTENING DIE				
CATALOG NUMBER	MAX TONS feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
42312	30 [100]			

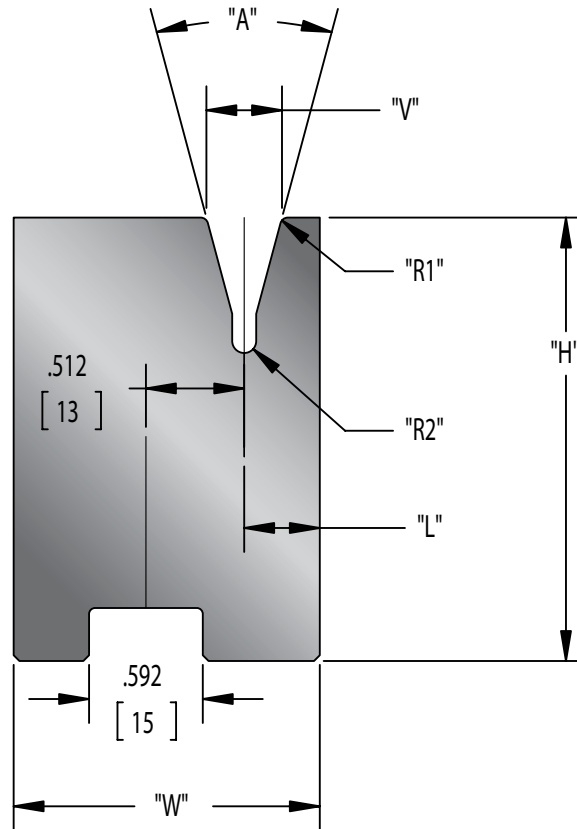
Staged Dies – 88° & 90°



QC STAGED 88° & 90° DIES

CATALOG NUMBER	V V OPENING inch [mm]	A ANGLE	R1 SH. RADIUS inch [mm]	R2 V RADIUS inch [mm]	L inch [mm]	W WIDTH inch [mm]	H HEIGHT inch [mm]	MAX TONS feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
45090006	.236 [6.0]	90	.024 [0.6]	.008 [0.2]	.394 [10.0]	1.594 [40.5]	1.693 [43.0]	30 [100]			
45090008	.315 [8.0]	90	.031 [0.8]	.008 [0.2]	.394 [10.0]	1.594 [40.5]	1.732 [44.0]	30 [100]			
45090010	.394 [10.0]	90	.039 [1.0]	.008 [0.2]	.394 [10.0]	1.594 [40.5]	1.772 [45.0]	30 [100]			
45090012	.472 [12.0]	90	.039 [1.0]	.008 [0.2]	.492 [12.5]	1.693 [43.0]	1.811 [46.0]	30 [100]			
45088006	.236 [6.0]	88	.024 [0.6]	.008 [0.2]	.394 [10.0]	1.594 [40.5]	1.697 [43.1]	30 [100]			
45088008	.315 [8.0]	88	.031 [0.8]	.008 [0.2]	.394 [10.0]	1.594 [40.5]	1.738 [44.1]	30 [100]			
45088010	.394 [10.0]	88	.039 [1.0]	.008 [0.2]	.394 [10.0]	1.594 [40.5]	1.779 [45.2]	30 [100]			
45088012	.472 [12.0]	88	.039 [1.0]	.008 [0.2]	.492 [12.5]	1.693 [43.0]	1.819 [46.2]	30 [100]			
45088016	.630 [16.0]	88	.059 [1.5]	.008 [0.2]	.591 [15.0]	1.791 [45.5]	1.901 [48.3]	30 [100]			
45088020	.787 [20.0]	88	.079 [2.0]	.008 [0.2]	.591 [15.0]	1.791 [45.5]	1.983 [50.4]	30 [100]			
45088024	.945 [24.0]	88	.098 [2.5]	.008 [0.2]	.689 [17.5]	1.890 [48.0]	2.064 [52.4]	30 [100]			
45088030	1.181 [30.0]	88	.118 [3.0]	.008 [0.2]	.886 [22.5]	2.087 [53.0]	2.186 [55.5]	30 [100]			

Staged Dies – 30°



QC STAGED 30° DIES											
CATALOG NUMBER	V V OPENING inch [mm]	A ANGLE	R1 SH. RADIUS inch [mm]	R2 V RADIUS inch [mm]	L inch [mm]	W WIDTH inch [mm]	H HEIGHT inch [mm]	MAX TONS feet [meter]	LT 32.87 [835mm]	ST 16.34 [415mm]	XT Sectionalized
45030006	.236 [6.0]	30	.024 [0.6]	.063 [1.6]	.394 [10.0]	1.594 [40.5]	2.016 [51.2]	30 [100]			
45030008	.315 [8.0]	30	.039 [1.0]	.063 [1.6]	.394 [10.0]	1.594 [40.5]	2.163 [54.9]	30 [100]			
45030010	.394 [10.0]	30	.039 [1.0]	.063 [1.6]	.394 [10.0]	1.594 [40.5]	2.310 [58.7]	23 [77]			
45030012	.472 [12.0]	30	.039 [1.0]	.063 [1.6]	.492 [12.5]	1.693 [43.0]	2.456 [62.4]	20 [67]			
45030016	.630 [16.0]	30	.063 [1.6]	.094 [2.4]	.591 [15.0]	1.791 [45.5]	2.750 [69.9]	18 [60]			
45030020	.787 [20.0]	30	.079 [2.0]	.094 [2.4]	.689 [17.5]	1.890 [48.0]	3.044 [77.3]	15 [50]			
45030024	.945 [24.0]	30	.098 [2.5]	.094 [2.4]	.787 [20.0]	1.988 [50.5]	3.338 [84.8]	15 [50]			

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Fax: 001-800-544-2096

Website & Email
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pressbrake@wilsontool.com



Wilson Express Clamping System™



43815 (replaces 43015)	
For Conventional Press Brakes With Wedge	

Front Clamp Plates	2
Front & Back Clamp Plates	4



43817 (replaces 43017)	
Z1 Series With Wedge	

Front Clamp Plates	2
Front & Back Clamp Plates	4



43818 (replaces 43018)	
Z2 Series With Wedge	

Front Clamp Plates	2
Front & Back Clamp Plates	4



43819 (replaces 43019)	
For Trumpf Press Brakes With Wedge	

Front Clamp Plates	2
Front & Back Clamp Plates	4



Wilson Express Clamping System™



43031	
For Mitsubishi Toyokoki HYB Series Press Brakes	
Front Clamp Plates	2
Front & Back Clamp Plates	4



43033	
For Mitsubishi Toyokoki APB Series Press Brakes	
Front Clamp Plates	2
Front & Back Clamp Plates	4

Express Clamp Torque Wrench Kit

Cat. No. 08002, 08003, 43726, 06793, 06795



CATALOG NUMBER	COMPONENT	PRICE
8002	Complete Kit	

Kit includes: Case, 2 Pivots, Wrench & 2 Hex Tips

CATALOG NUMBER	COMPONENT	PRICE
8003	Case	
43726	Pivot	
6793	Wrench	
6795	Hex Tip	



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Wilson Press Brake Tooling Cabinet

Cat. No. 90007



Features:

- Solid steel construction
- Mobile base with heavy duty casters with a rated capacity of 3600 pounds
- Three 7" drawers capable of holding five punches each
- Two 2" drawers capable of holding five dies each
- 15 "U" Channel Separaters
- Punches are held upright in custom steel U-channels to prevent damage to tips and mounting tongues
- Dies are separated by custom U-channels to prevent damage to V-openings
- Individual latches on all drawers
- Safety interlock to prevent the opening of more than one drawer at a time
- Full width handles with end caps and paper labeling strips with clear protective label covers
- Retainer top with rubber mat
- Cabinet dimensions: 42" high, 40-1/4" wide, 22-1/2" deep



CATALOG NUMBER	PRICE
90007	

Urethane Rolls

Cat. No. 42530 and 42531



100' Urethane Rolls For Mark-Free Bending

CATALOG NUMBER	DIMENSIONS	PRICE
42530	.015 [0.4] x 6" [152]	
42531	.030 [0.8] x 6" [152]	

Note: Urethane dies are also available for mark-free bending. Contact application sales desk for pricing and lead times.

AIR BENDING FORCE CHART INCH

STANDARD FORMULAS FOR SELECTING A V-OPENING

MATERIAL THICKNESS: .105" OR LESS = T x 6
 .120" - .313" = T x 8
 .375" - .500" = T x 10
 .625" & THICKER = T x 12

MATERIAL THICKNESS: .036" - .437" = T x 8
 .500" & THICKER = T x 10

NOTE: The above formulas are for reference only. For more specific information, please refer to the chart below.

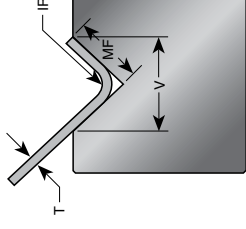
	V (°)	0.250	0.313	0.375	0.500	0.625	0.750	0.875	1.000	1.125	1.250	1.500	2.000	2.500	3.000	3.500	4.000	5.000
*MF		0.180	0.225	0.270	0.360	0.450	0.540	0.630	0.720	0.810	0.900	1.080	1.440	1.800	2.159	2.519	2.879	3.599
IR		0.042	0.052	0.063	0.084	0.104	0.125	0.146	0.167	0.188	0.209	0.251	0.334	0.418	0.501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

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

The bending force (tonnage) figures listed above are based on mild steel with a tensile strength of 45-50 kilograms per square millimeter. To calculate the approximate bending force (tonnage) requirements for other materials, please use the multipliers listed.

Note: * Based on bending to an included angle of 88 degrees. This dimension will increase when bending to an included angle of less than 88 degrees.

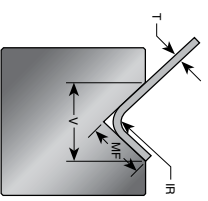
Soft Brass.....Tons Per Meter x 50%
 Soft Aluminum.....Tons Per Meter x 50%
 Heat Treated Aluminum Alloys.....Tons Per Meter x 100%
 Stainless Steel.....Tons Per Meter x 150%



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

AIR BENDING FORCE CHART
METRIC



NOTE: The above formulas are for reference only. For more specific information, please refer to the chart below.

THICKNESS	3	4	6	7	8	10	12	14	16	18	20	22	25	32	40	50	63	80	100	125	160	200	250	
V (mm)	3	4	6	7	8	10	12	14	16	18	20	22	25	32	40	50	63	80	100	125	160	200	250	
*MF	2.2	2.8	4.2	4.9	5.6	7.0	8.6	10.1	11.5	13.0	14.4	*15.8	18	24.0	30.0	37.5	47.3	60.0	75.0	96.3	123.2	154.0	192.5	
IR	0.5	0.7	1.0	1.2	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.2	5.3	6.7	8.3	10.5	13.3	16.7	20.8	26.7	33.3	41.7	
0.5mm	5.2	4.5	2.8																					
0.6mm		6.0	4.2	3.3	3.2																			
0.8mm			8.0	7.2	5.6	4.4																		
1.0mm				11.0	10.0	9.0	7.0	5.5																
1.2mm					14.0	13.2	10.8	8.4	7.5	6.6														
1.4mm						15.4	14.0	12.6	9.8	8.8														
1.6mm							17.6	16.0	14.4	11.2	10.0	8.8												
2.0mm								22.0	20.0	18.0	16.0	14.0	12.5	11.0										
2.3mm									25.3	23.0	20.7	18.4	16.1	14.4	12.7									
2.6mm										28.6	26.0	23.4	20.8	18.2	14.3									
3.0mm											33.0	30.0	28.53	21.0	16.5									
3.2mm												35.2	31.9	22.4	17.6	14.4								
3.5mm													38.5	28.0	21.9	15.8	14.0							
4.0mm														44.0	36.0	28.0	22.0	18.0						
4.5mm															45.0	36.0	28.1	20.3						
5.0mm																55.0	45.0	35.0	26.3	22.5				
6.0mm																	60.0	54.0	37.5	31.5	24.0			
7.0mm																		56.0	43.8	31.5	24.0			
9.0mm																			72.0	56.3	40.5			
10.0mm																			90.0	70.0	52.5	45.0		
12.0mm																				108.0	84.0	63.0	54.0	
16.0mm																					144.0	112.0	84.0	72.0
19.0mm																						152.0	118.8	99.8
22.0mm																							176.0	137.5
25.0mm																								225.0
30.0mm																								270.0

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

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Note: * Based on bending to an included angle of 88 degrees. This dimension will increase when bending to an included angle of less than 88 degrees.

- Soft Brass.....Tons Per Meter x 50%
- Soft Aluminum.....Tons Per Meter x 50%
- Heat Treated Aluminum Alloys.....Tons Per Meter x 100%
- Stainless Steel.....Tons Per Meter x 150%

Terms of Sale

ORDER

Minimum order is \$50.00

CREDIT REQUIREMENTS

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

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ORDER CANCELLATION

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

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

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