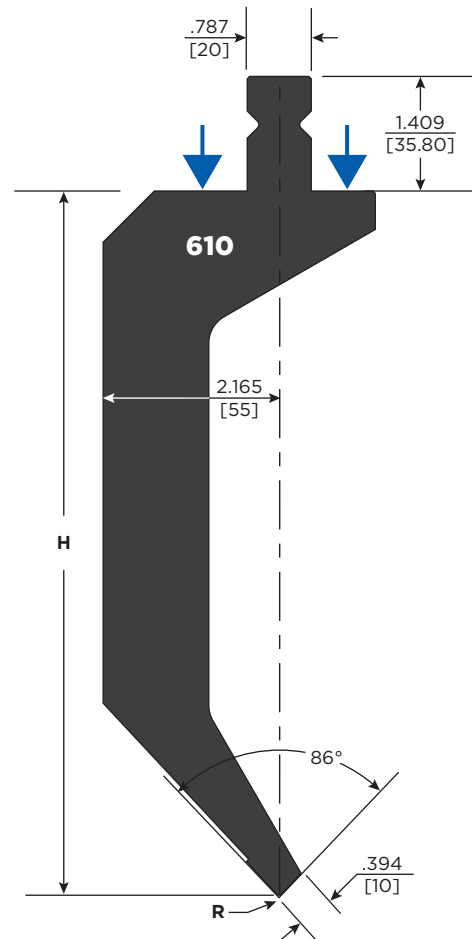


220mm FAMILY PUNCHES



86° SWAN NECK

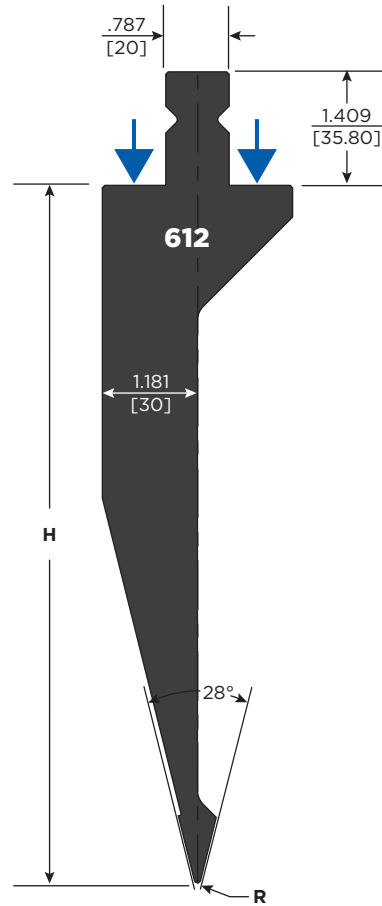
M Made To Order

↓ Indicates how tonnage is applied to punches

Part No.	Ref. 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]
SERIES 610 86° SWAN NECK										
61086010		.039 [1.0]	8.661 [220.0]	850	26 [87]					
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	OW200s	.091 [2.3]			8.622 [219.0]				
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]							
Button Options:						B5	P	CS/B5	B5	CS/B5
Approximate Gross Weight [lbs.], unboxed:						29	73	153	73	80

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

220mm FAMILY PUNCHES



28° ACUTE w/RELIEF

M Made To Order

↓ Indicates how tonnage is applied to punches

Part No.	Ref. 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]	
SERIES 612 28° ACUTE W/RELIEF											
61228010		.039 [1.0]	8.661 [220.0]	1000	31 [102]						
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	OW202s .091 [2.3]	8.488 [215.6]								
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]								
Button Options:						B3	P	CS/B3	B3	CS/B3	
Approximate Gross Weight [lbs.], unboxed:						22	54	114	54	60	

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

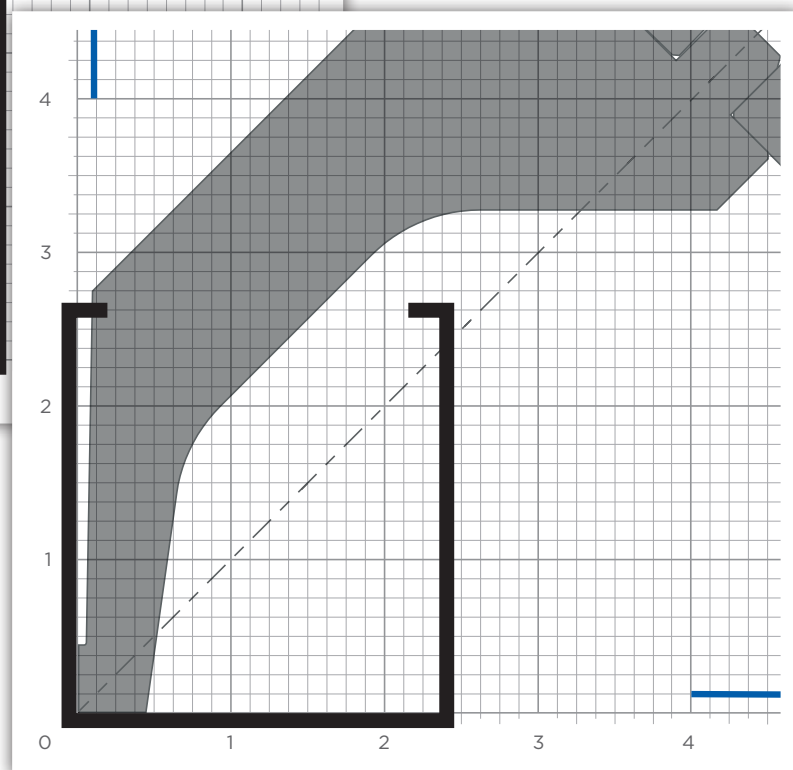
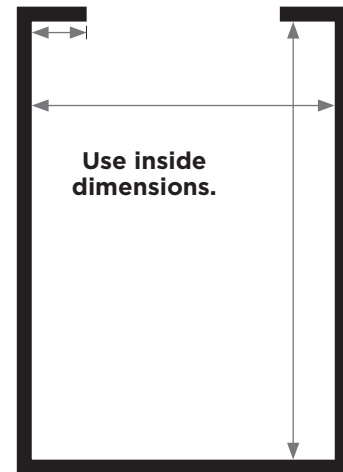
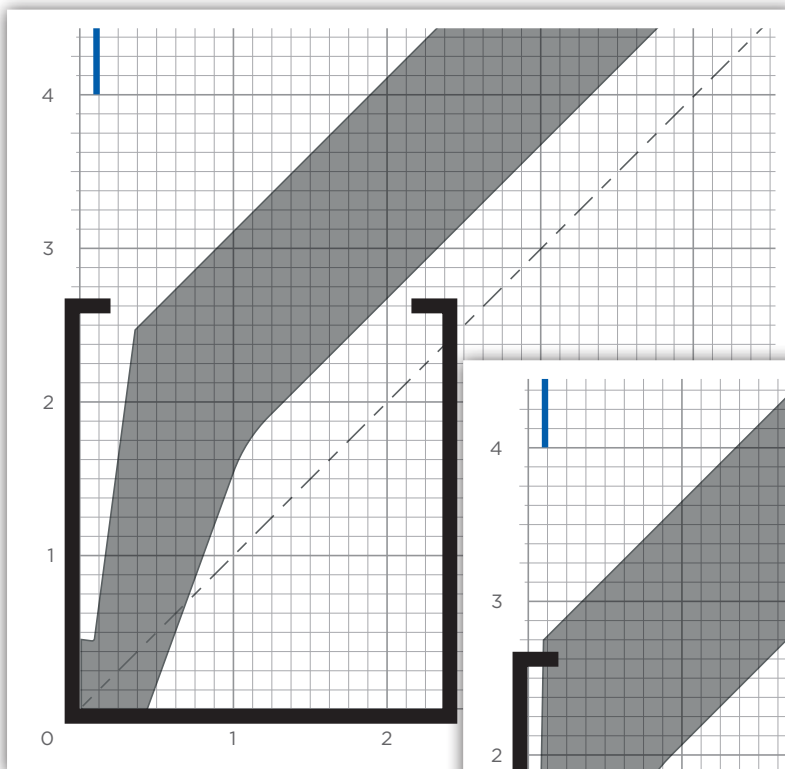
PUNCHES

HOW TO USE A BEND LIMIT GRAPH

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

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

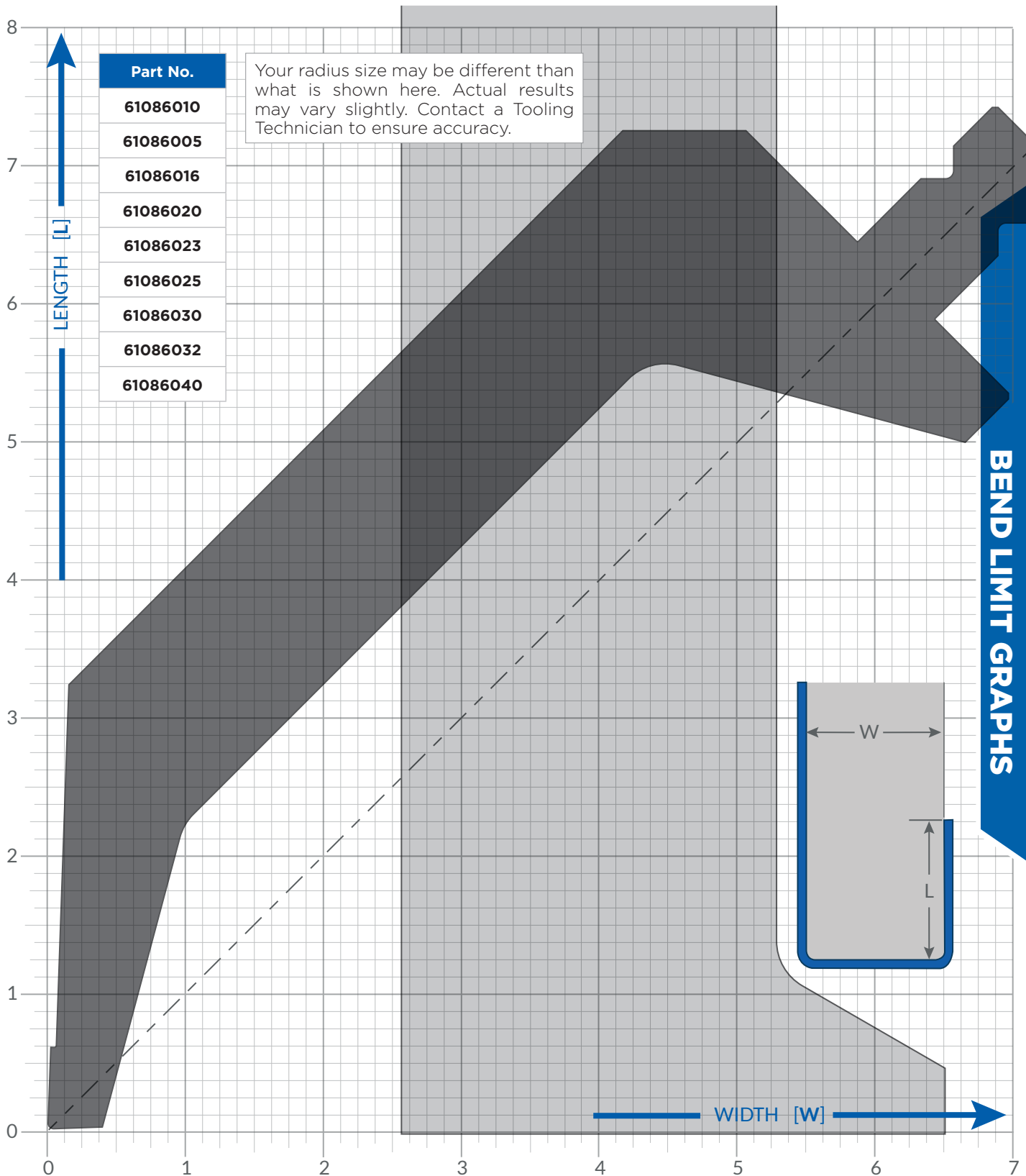
This application works.



This application doesn't work.

 Watch the video on our YouTube Channel!

610 86° SWAN NECK PUNCH



612 28° ACUTE WITH RELIEF PUNCH

