

# V-SERIES BLACK DATA CHARTS

MATERIAL THICKNESS	MIN. OUTSIDE FLANGE	TON/ FT	MIN. ANGLE	PUNCH TIP REQUIRED TO ACHIEVE ANGLE	MAX OR RADIUS @ MIN. ANGLE	MAX OR RADIUS @ 90°	TONNAGE CAP/FT	T/M	KN/M
<b>MODEL 1 (INSERTS: HRC 45)</b>									
.45mm (.018")	3.0mm (.118")	1.8	34°	0.054	3.1mm (.125")	4.4mm (.175")	34	112	1100
.50mm (.020")		1.8		0.052					
.60mm (.024")		2.0		0.047					
.80mm (.030")		2.5		0.042					
.90mm (.036")		3.3		0.036					
1.0mm (.040")	3.9mm (.153")	4.0	55°	0.031	7.9mm (.276")	9.0mm (.354")	50	168	1650
1.2mm (.048")		5.8							
1.5mm (.059")	4.2mm (.165")	9							
<b>MODEL 2 (INSERTS: HRC 45)</b>									
1.9mm (.074")	8.5mm (.335")	7	42°	0.122	5.5mm (.216")	9.0mm (.354")	50	168	1650
2.9mm (.105")	8.8mm (.347")	13		0.112					
3.0mm (.118")	9.3mm (.366")	15		0.099					
3.2mm (.126")		20	0.091						
3.4mm (.135")		22	55°	0.082	7.9mm (.276")				
<b>MODEL 3 (INSERTS: HRC 58-60)</b>									
4.0mm (.157")	22.5mm (.886")	9	65°	0.078	11.5mm (.453")	20.2mm (.797")	60†	204	2000
4.75mm (.187")		26		0.094					
6.35mm (.250")		28		0.125					

Consume 60% of the insert when bending to prevent insert damage.

† Make sure the tonnage produced is safe for the application and machine. VERY high tonnage could damage the lower beam.

## V Opening and Shoulder Radius Dimensions

SHOULDER RADIUS	DESIRED ANGLE	THEORETICAL V
<b>MODEL 1</b>		
1.0mm (.040")	90°	7.2mm (0.283")
	34°	6.5mm (0.256")
<b>MODEL 2</b>		
1.3mm (.051")	90°	13.9mm (0.547")
	42°	13.3mm (0.524")
<b>MODEL 3</b>		
6.0mm (.236")	90°	33.0mm (1.299")
	65°	31.4mm (1.236")

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