

# PRESS BRAKE TOOLS

## AFH ATC Tooling Code List



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## AFH ATC Punches

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## AFH ATCダイ

### ◆ AFH-ATC Dies

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### ◆ ATC Dies

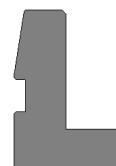
Heavy Duty AX 1V Dies	15
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#### 【SK Code for Punches】

•AFH120 Punches : SK Code is "1D" (Taper+Groove) and "ID" is marked.



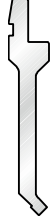
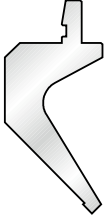
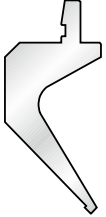
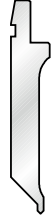




#### 【SK Code for Dies】

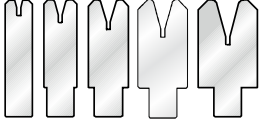
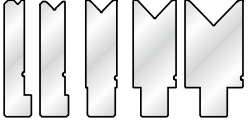

•Dies : SK Code is "1C" and "ID" is marked.



**Taper + Groove**

## AFH-ATC Punch and Die Product Line-up

Series	AFH-ATC Punches									ATC Punches
	Standard		Sash	Gooseneck		Burring No.1	Straight	Acute <b>ALP</b>	Hemming	Heavy Duty
Shape	9mm	4mm		9mm	6mm					
Profile										
Angle (R)	86° (R0.2, 0.6)	86° (R0.2, 0.6)	86° (R0.2, 0.6)	86° (R0.2, 0.6, 3.0)	86° (R0.2, 0.6)	86° (R0.2, 0.6)	86° (R0.2, 0.6)	30° (R0.2, 0.6)	30° (R0.6)	84° (R3.0)
Size(mm)	200mm Div. Total 800(200×4) Short Div. Total 500(15×2, 20×2, 25×2, 40×2, 50×2, 100×2) Ears Total 250(Right Ear 125, Left Ear 125)									

Series	AFH-ATC Dies <b>A.L.D.</b>		ATC Dies
	AFH Acute Dies	AFH Dies	Heavy Duty AX1V
Profile			
Angle	30°	86°	84°
V	4, 6, 8, 10, 12	4, 5, 6, 7, 8, 10, 12, 14, 16, 18, 20, 25	32, 40
Size(mm)	200mm Div. Total 800(200×4) Short Div. Total 500(15×2, 20×2, 25×2, 40×2, 50×2, 100×2) ※Heavy Duty AX1V Die Short Div. Total 530(20×2, 25×2, 30×2, 40×2, 50×2, 100×2)		

### Regarding listed items.

- ◆ Listed items can be ordered using catalog codes.
- ◆ Punch height is H=120 when tip radius is R0.2.  
※As tip radius becomes larger, punch height becomes shorter.
- ◆ Sectional shape of gooseneck 15mm segment differs from others.

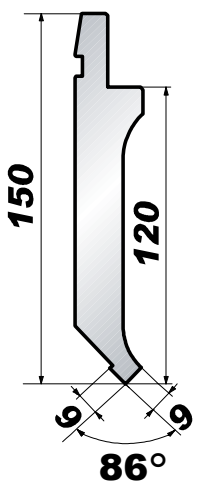
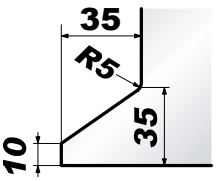
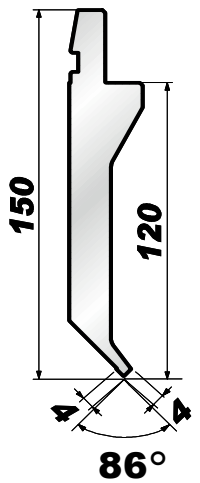
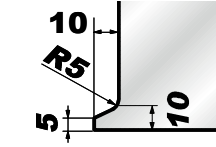
<Sectional shape of Gooseneck 15mm Segment>



edge 9mm



edge 6mm

Name / Tool Profile	Angle	Edge R	Edge Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.		
<b>Standard Punches</b>  <Ear Shape>  HRC47±2	86°	R0.2	9	1000 kN/m	171042	16.4	200mm Div.	<b>C04121</b>		
				450 kN/m		10.3	Short Div.	<b>C04221</b>		
				450 kN/m		4.9	Ears	<b>C04921</b>		
		R0.6		171046	16.4	200mm Div.	<b>C04161</b>			
					1000 kN/m	10.3	Short Div.	<b>C04261</b>		
					450 kN/m	4.9	Ears	<b>C04961</b>		
	<b>Standard Punches for Thin Type</b>  <Ear Shape>  HRC47±2	86°	R0.2	4	200 kN/m	171272	14.4	200mm Div.	<b>C27121</b>	
					100 kN/m		9.0	Short Div.	<b>C27221</b>	
					100 kN/m		4.3	Ears	<b>C27921</b>	
R0.6			171276		14.4	200mm Div.	<b>C27161</b>			
					200 kN/m	9.0	Short Div.	<b>C27261</b>		
					100 kN/m	4.3	Ears	<b>C27961</b>		

※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2、20×2、25×2、40×2、50×2、100×2 Total 500mm)

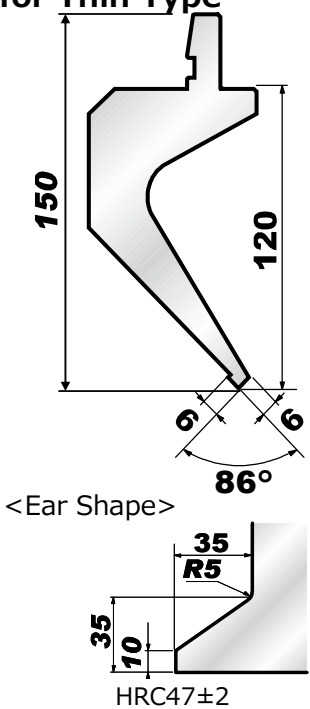
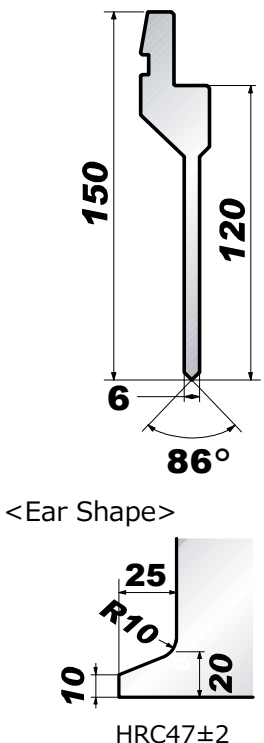
※Ears (Right Ear125、Left Ear125 Total 250mm)

Name / Tool Profile	Angle	Edge R	Edge Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.		
<p><b>Sash Punches</b></p> <p>&lt;Ear Shape&gt;</p> <p>HRC47±2</p>	86°	R0.2	8	450 kN/m	171202	11.9	200mm Div.	<b>C23121</b>		
				150 kN/m		7.4	Short Div.	<b>C23221</b>		
				150 kN/m		3.6	Ears	<b>C23921</b>		
		R0.6		450 kN/m	171206	11.9	200mm Div.	<b>C23161</b>		
				150 kN/m		7.4	Short Div.	<b>C23261</b>		
				150 kN/m		3.6	Ears	<b>C23961</b>		
	<p><b>Gooseneck Punches</b></p> <p>&lt;Ear Shape&gt;</p> <p>HRC47±2</p>	86°	R0.2	9	500 kN/m	171472	24.0	200mm Div.	<b>C47121</b>	
					450 kN/m		15.0	Short Div.	<b>C47221</b>	
					450 kN/m		5.4	Ears	<b>C47921</b>	
R0.6			500 kN/m		171476	24.0	200mm Div.	<b>C47161</b>		
			450 kN/m			15.0	Short Div.	<b>C47261</b>		
			450 kN/m			5.4	Ears	<b>C47961</b>		
R3.0		500 kN/m	171473	24.0	200mm Div.	<b>C47131</b>				
		450 kN/m		15.0	Short Div.	<b>C47231</b>				

※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

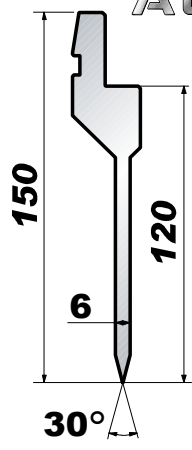
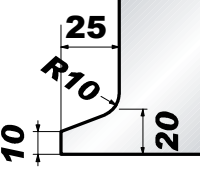
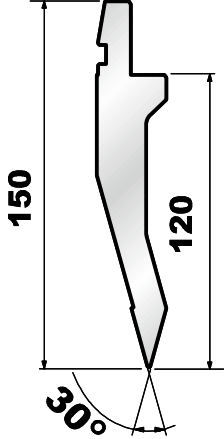
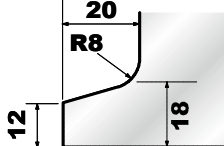
※Ears (Right Ear125, Left Ear125 Total 250mm)

Name / Tool Profile	Angle	Edge R	Edge Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.	
<b>Gooseneck Punches for Thin Type</b> 	86°	R0.2	6	350 kN/m	171462	22.3	200mm Div.	<b>C46121</b>	
				350 kN/m		14.0	Short Div.	<b>C46221</b>	
				350 kN/m		5.0	Ears	<b>C46921</b>	
		R0.6		350 kN/m	171466	22.3	200mm Div.	<b>C46161</b>	
				350 kN/m		14.0	Short Div.	<b>C46261</b>	
				350 kN/m		5.0	Ears	<b>C46961</b>	
<b>Straight Punches</b> 	86°	R0.2	-	450 kN/m	171192	9.5	200mm Div.	<b>C19121</b>	
				450 kN/m		5.9	Short Div.	<b>C19221</b>	
				120 kN/m		2.9	Ears	<b>C19921</b>	
		R0.6		450 kN/m	171196	9.5	200mm Div.	<b>C19161</b>	
				450 kN/m		5.9	Short Div.	<b>C19261</b>	
				120 kN/m		2.9	Ears	<b>C19961</b>	

※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

※Ears (Right Ear125, Left Ear125 Total 250mm)

Name / Tool Profile	Angle	Edge R	Edge Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.	
<b>Acute Punches</b>  <Ear Shape>  HRC60±2	30°	R0.2	-	450 kN/m	171132	9.3	200mm Div.	<b>C13121</b>	
						5.8	Short Div.	<b>C13221</b>	
				120 kN/m		2.8	Ears	<b>C13921</b>	
		R0.6		450 kN/m	171136	9.3	200mm Div.	<b>C13161</b>	
						5.8	Short Div.	<b>C13261</b>	
				120 kN/m		2.8	Ears	<b>C13961</b>	
<b>Hemming Punches</b>  <Ear Shape>  HRC47±2	30°	R0.6	-	1000 kN/m	171306	14.1	200mm Div.	<b>C30161</b>	
						8.8	Short Div.	<b>C30261</b>	
				300		4.2	Ears	<b>C30961</b>	

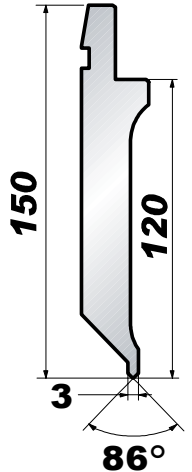
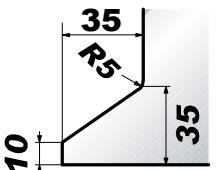
※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

※Ears (Right Ear125, Left Ear125 Total 250mm)

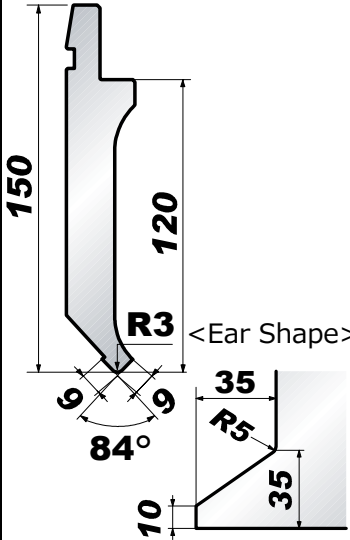
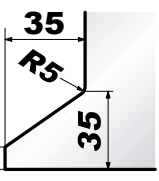
## AFH ATC Punches H=120

SK1D

Name / Tool Profile	Angle	Edge R	Edge Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.	
<b>Burring Punches No.1</b>  <Ear Shape>  HRC47±2	86°	R0.2	-	400 kN/m	171052	15.9	200mm Div.	<b>C05121</b>	
				200 kN/m		10.0	Short Div.	<b>C05221</b>	
				4.8		Ears	<b>C05921</b>		
		R0.6		400 kN/m	171056	15.9	200mm Div.	<b>C05161</b>	
				200 kN/m		10.0	Short Div.	<b>C05261</b>	
				4.8		Ears	<b>C05961</b>		

## ATC Heavy Duty Punches H=120

SK1D

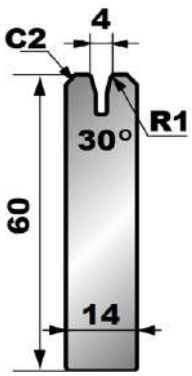
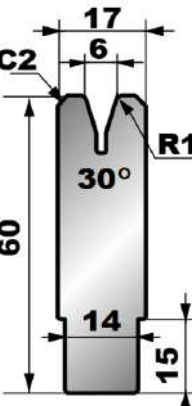
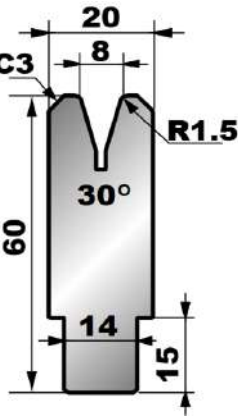
Name / Tool Profile	Angle	Edge R	Edge Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.	
<b>Standard for Heavy Duty Punches</b>  <Ear Shape>  HRC47±2	84°	R3.0	9	1000 kN/m	171063	16.4	200mm Div.	<b>C06131</b>	
				450 kN/m		10.3	Short Div.	<b>C06231</b>	
				4.9		Ears	<b>C06931</b>		

※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

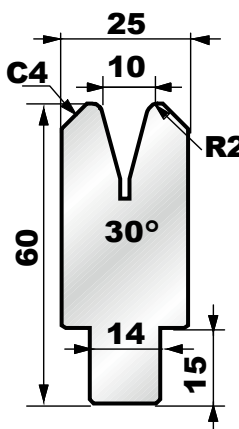
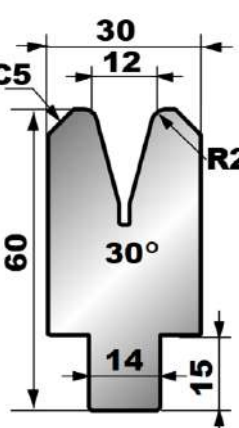
※Ears (Right Ear125, Left Ear125 Total 250mm)



Name / Tool Profile	Angle	Shoulder R	W Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.
<b>V=4</b>  HRC55	30°	R1	14	160 kN/m	172043	5.1	200mm Div.	<b>C84131</b>
						3.2	Short Div.	<b>C84231</b>
<b>V=6</b>  HRC55	30°	R1	17	180 kN/m	172063	5.9	200mm Div.	<b>C70131</b>
						3.7	Short Div.	<b>C70231</b>
<b>V=8</b>  HRC55	30°	R1.5	20	200 kN/m	172083	6.5	200mm Div.	<b>C71131</b>
						4.1	Short Div.	<b>C71231</b>

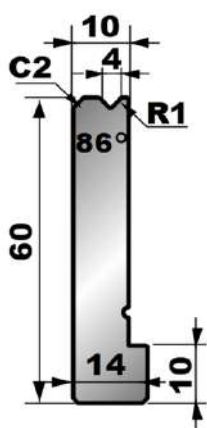
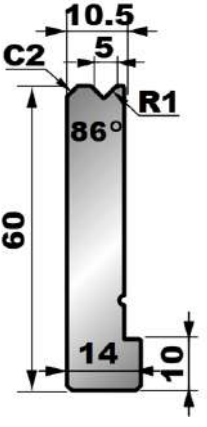
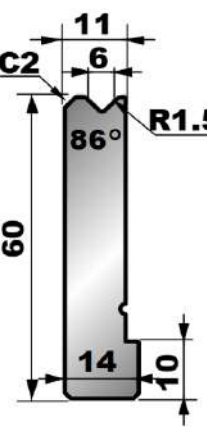
※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

Name / Tool Profile	Angle	Shoulder R	W Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.
<b>V=10</b>  HRC55	30°	R2	25	260 kN/m	172103	7.9	200mm Div.	<b>C72131</b>
						4.9	Short Div.	<b>C72231</b>
<b>V=12</b>  HRC55	30°	R2.5	30	300 kN/m	172123	8.7	200mm Div.	<b>C74131</b>
						5.5	Short Div.	<b>C74231</b>

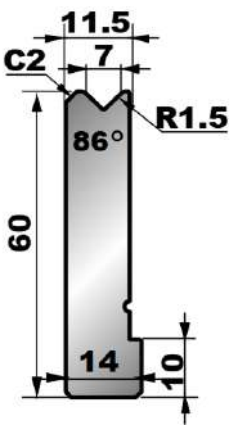
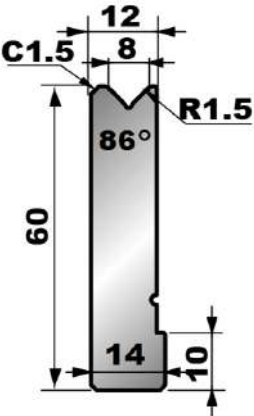
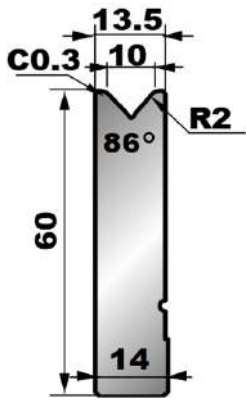
※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

Name / Tool Profile	Angle	Shoulder R	W Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.
<b>V=4</b>  HRC55	86°	R1	10	750 kN/m	172046	3.9	200mm Div.	<b>C84161</b>
						2.5	Short Div.	<b>C84261</b>
<b>V=5</b>  HRC55	86°	R1	10.5	750 kN/m	172056	4.1	200mm Div.	<b>C85161</b>
						2.6	Short Div.	<b>C85261</b>
<b>V=6</b>  HRC55	86°	R1.5	11	800 kN/m	172066	4.2	200mm Div.	<b>C70161</b>
						2.6	Short Div.	<b>C70261</b>

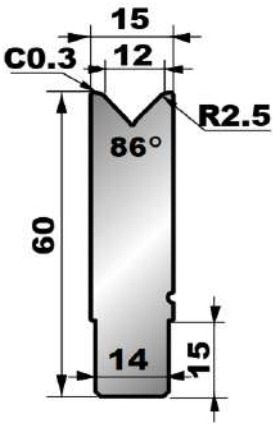
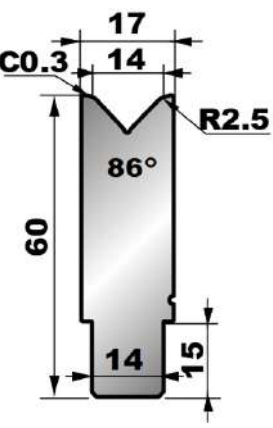
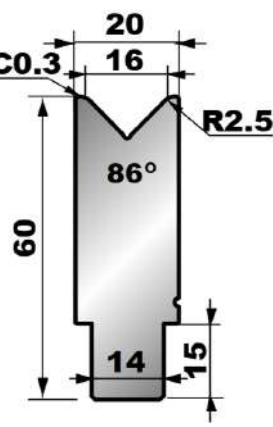
※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

Name / Tool Profile	Angle	Shoulder R	W Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.
<b>V=7</b>  HRC55	86°	R1.5	11.5	850 kN/m	172076	4.4	200mm Div.	<b>C86161</b>
						2.8	Short Div.	<b>C86261</b>
<b>V=8</b>  HRC55	86°	R1.5	12	900 kN/m	172086	4.5	200mm Div.	<b>C71161</b>
						2.8	Short Div.	<b>C71261</b>
<b>V=10</b>  HRC55	86°	R2	13.5	1000 kN/m	172106	4.9	200mm Div.	<b>C72161</b>
						3.1	Short Div.	<b>C72261</b>

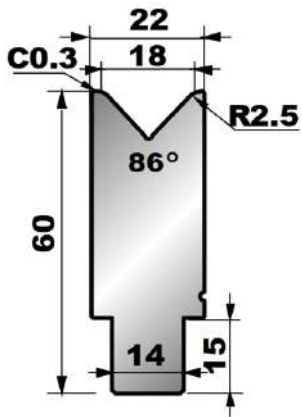
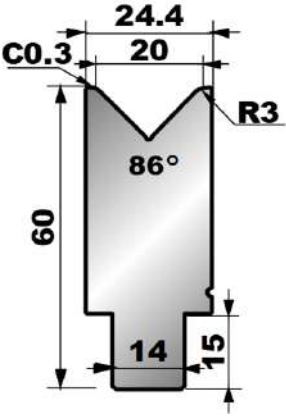
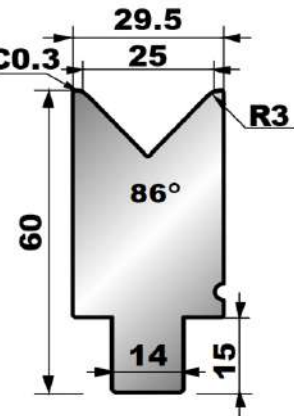
※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

Name / Tool Profile	Angle	Shoulder R	W Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.
<b>V=12</b>  HRC55	86°	R2.5	15	1000 kN/m	172126	5.3	200mm Div.	<b>C74161</b>
						3.3	Short Div.	<b>C74261</b>
<b>V=14</b>  HRC55	86°	R2.5	17	1000 kN/m	172146	5.8	200mm Div.	<b>C76161</b>
						3.6	Short Div.	<b>C76261</b>
<b>V=16</b>  HRC55	86°	R2.5	20	1000 kN/m	172166	6.5	200mm Div.	<b>C77161</b>
						4.1	Short Div.	<b>C77261</b>

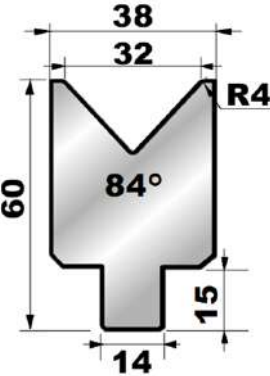
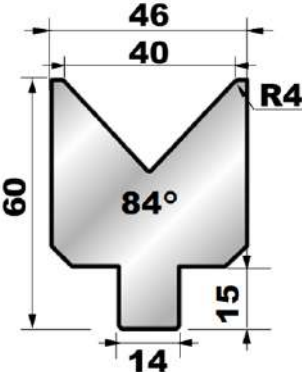
※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

Name / Tool Profile	Angle	Shoulder R	W Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.
<b>V=18</b>  HRC55	86°	R2.5	22	1000 kN/m	172186	7.0	200mm Div.	<b>C78161</b>
						4.4	Short Div.	<b>C78261</b>
<b>V=20</b>  HRC55	86°	R3	24.4	1000 kN/m	172206	7.5	200mm Div.	<b>C79161</b>
						4.7	Short Div.	<b>C79261</b>
<b>V=25</b>  HRC55	86°	R3	29.5	1000 kN/m	172256	8.5	200mm Div.	<b>C82161</b>
						5.3	Short Div.	<b>C82261</b>

※200mm Div. (200×4 Total 800mm)

※Short Div. (15×2, 20×2, 25×2, 40×2, 50×2, 100×2 Total 500mm)

Name / Tool Profile	Angle	Shoulder R	W Width	Allowable Tonnage	FEL No.	Weight (kg)	Size	Cat. No.	
<b>V=32</b>  HRC65	84°	R4	38	1000 kN/m	172324	10.2	200mm Div.	<b>C87141</b>	
						6.7	Short Div.	<b>C87241</b>	
<b>V=40</b>  HRC65	84°	R4	46	1000 kN/m	172404	11.3	200mm Div.	<b>C88141</b>	
						7.5	Short Div.	<b>C88241</b>	

※200mm Div. (200×4 Total 800mm)

※Short Div. (20×2, 25×2, 30×2, 40×2, 50×2, 100×2 Total 530mm)