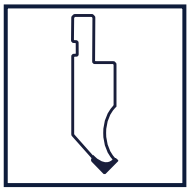
MORGAN RUSHWORTH
SINCE 1872

SELMACH™
MACHINERY

Making Metal Work

Pressbrake Tooling

Goose Neck Top Tool



EURO 1010/A/85/0.8
EURO 1010/A/85/0.8/105
40527
40528

4-Way Vee Die Bottom Tool

EURO 2009
1061
1062
1071
1081

5-Way Vee Die Bottom Tool

40529
40530
40531

6-Way Vee Die Bottom Tool

AB6 3-4
AB6 5-6
AB6 7-8
AB6 9-10
AB6 11-12
AB6 16

MODEL	GOOSE NECK TOP TOOL REFERENCE	TOP TOOL OVERALL HEIGHT	BOTTOM TOOL REFERENCE	BOTTOM TOOL NO. OF VEE'S	BOTTOM TOOL VEE SIZES	BOTTOM TOOL OVERALL SIZE
		mm			mm	mm
PBS CNC Range						
1250/40 - 4100/160	1010/A/85/0.8	96.5	2009	4	16, 22, 35, 50	60 x 60
3100/200 - 4100/240	1010/A/85/0.8/105	135	2009	4	16, 22, 35, 50	60 x 60
3700/300, 4100/300	1010/A/85/0.8/105	135	AB6 11-12	6	12, 15, 26, 50, 80, 125	145 x 145
3100/300	1010/A/85/0.8/105	135	AB6 16	6	20, 25, 40, 80, 100, 170	200 x 200
PBXS CNC Range						
1250/40 - 6100/160	1010/A/85/0.8	96.5	2009	4	16, 22, 35, 50	60 x 60
3100/120 - 6100/240	1010/A/85/0.8/105	135	2009	4	16, 22, 35, 50	60 x 60
3100/160, 3700/200, 4100/200, 6100/300	1010/A/85/0.8/105	135	AB6 7-8	6	10, 12, 20, 30, 50, 80	100 x 100
3100/200, 3100/240, 3700/240, 4100/240, 6100/380	1010/A/85/0.8/105	135	AB6 9-10	6	12, 15, 26, 40, 60, 100	125 x 125
3700/300, 4100/300, 6100/440, 6100/500	1010/A/85/0.8/105	135	AB6 11-12	6	12, 15, 26, 50, 80, 125	145 x 145
3100/300, 4100/440, 6100/600	1010/A/85/0.8/105	135	AB6 16	6	20, 25, 40, 80, 100, 170	200 x 200
PBXL CNC Range						
1600/40 - 6000/500	1010/A/85/0.8	96.5	2009	4	16, 22, 35, 50	60 x 60
	1010/A/85/0.8/105	135	AB6 11-12	6	12, 15, 26, 50, 80, 125	145 x 145
	1010/A/85/0.8/105	135	AB6 16	6	20, 25, 40, 80, 100, 170	200 x 200
PB NC Range						
1250/40, 2100/40, 2600/60, 3100/90	1010/A/85/0.8	96.5	AB6 3-4	6	8, 10, 15, 20, 26, 40	70 x 70
2600/90, 3100/120, 3700/160, 4100/160	1010/A/85/0.8	96.5	AB6 5-6	6	10, 12, 16, 26, 40, 60	90 x 90
3100/160	1010/A/85/0.8	96.5	AB6 7-8	6	10, 12, 20, 30, 50, 80	100 x 100
4100/200	1010/A/85/0.8/105	135	AB6 7-8	6	10, 12, 20, 30, 50, 80	100 x 100
3100/200, 3700/200, 3700/240, 4100/240	1010/A/85/0.8/105	135	AB6 9-10	6	12, 15, 26, 40, 60, 100	125 x 125
3100/240, 4100/300	1010/A/85/0.8/105	135	AB6 11-12	6	12, 15, 26, 50, 80, 125	145 x 145
3100/300	1010/A/85/0.8/105	135	AB6 16	6	20, 25, 40, 80, 100, 170	200 x 200
PBH Range						
1020/100, 1020/150	40527	190	40529	5	10, 20, 30, 40, 65	95 x 95
1520/100, 1520/150	40528	190	40530	5	10, 20, 30, 40, 65	95 x 95

Advanced Tooling

The following pages detail the various types and technical drawings of the standard range of pressbrake tooling available from Selmach Machinery.

Goose neck top tools are particularly useful for double bend 'U' shape brackets to avoid the leg from the first bend colliding with the top tool.

The **35 degree tools** are designed for over bending requirements as well as for the first stage bending for safe edge tooling.

Segmented tooling allows for return bending and is necessary for box making after the corners have first been notched.

The **bull nose tooling** is ideal for bending thicker materials as the tonnes per meter rating is very high.

The chart below indicates the tonnage required for various bending operations and includes a quick calculation formula.

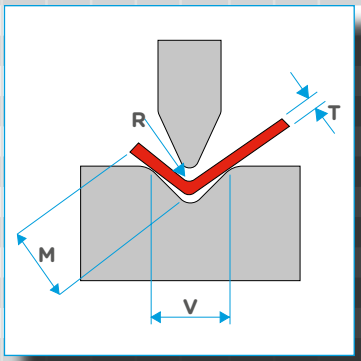
Machine Features

- Standard Euro style top & bottom tools
- Hemming tools for producing safe edges
- Joggle tools for small return bends
- Radius tools
- 835mm and 415mm sections
- Segmented top tools with horns for box folding
- Segmented bottom tools
- Bespoke tooling service
- Intermediates and security clamps

TONNAGE CALCULATOR

T = Steel thickness (mm) R = Internal radius of bend (mm) M = Minimum return bend (mm) V = Bottom die Vee width (mm) L = Bending length (mm)

T mm	0.7	0.8	1	1.3	1.6	2	2.7	3	3.3	4	5	5.5	6.5	7	8	10	11	13	16	19	21	23	24.5	26	28	32	41	48	R (mm)
	2.8	3.5	4	6	7	9	11	13	14	17	22	24	28	31	35	42	90	56	70	80	90	100	105	110	130	140	170	200	M (mm)
	4	5	6	8	10	12	15	18	20	25	30	35	40	45	50	60	70	80	100	120	130	140	150	160	180	200	250	300	V (mm)
0.5	4	3	2	2																									Ton/m
0.6	5	4	3.5	3	2																								Ton/m
0.8		8	7	5	4	2																							Ton/m
1.0			10	8	6	5	4																						Ton/m
1.2				10	8	6	5	4																					Ton/m
1.5					13	12	9	7	7																				Ton/m
1.8						16	13	11	10	8																			Ton/m
2.0							16	14	12	10	8																		Ton/m
2.5								21	20	15	12	11																	Ton/m
3.0									27	22	18	15	13																Ton/m
3.5										29	24	21	18	16															Ton/m
4.0											32	27	24	21	19														Ton/m
4.5												35	30	27	24	20													Ton/m
5.0													37	33	30	25	21												Ton/m
6.0														48	43	36	31	27											Ton/m
7.0															58	49	42	37	29										Ton/m
8.0																64	55	48	42	32									Ton/m
10																	85	75	60	50	46								Ton/m
12																		107	86	72	66	61							Ton/m
13																			101	84	76	72	67						Ton/m
14																				98	90	84	78	73					Ton/m
15																					103	96	90	84	75				Ton/m
16																						109	102	95	85	76			Ton/m
18																							129	120	107	97	77		Ton/m
20																								149	132	119	95	80	Ton/m
25																									207	186	149	124	Ton/m
30																										268	215	179	Ton/m

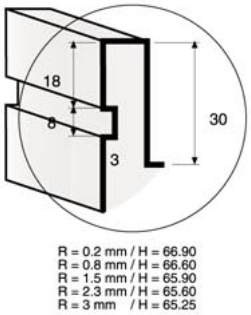


Tonnage Calculator

$$\text{Tonnes} = \frac{1.42 \times S \times T^2 \times L}{1000 \times V}$$

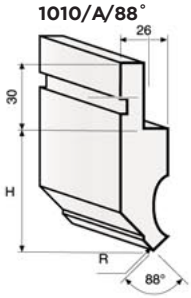
S= Tensile Strength (kg/mm²)
Mild Steel = 45
Stainless Steel = 60
Aluminium = 30

1010/A/88°



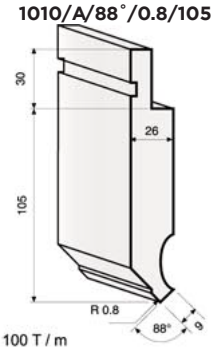
R = 0.2 mm / H = 66.90
R = 0.8 mm / H = 66.60
R = 1.5 mm / H = 65.90
R = 2.3 mm / H = 65.60
R = 3 mm / H = 65.25

1010/A/88°



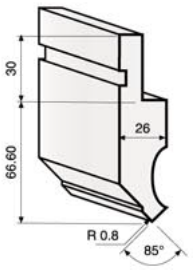
100 T / m

1010/A/88°/0.8/105



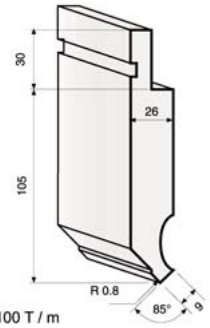
100 T / m

1010/A/85°/0.8



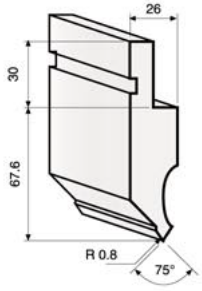
100 T / m

1010/A/85°/0.8/105



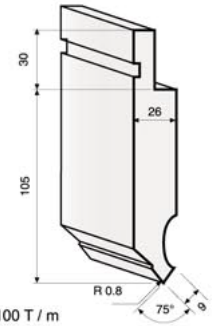
100 T / m

1010/A/75°/0.8



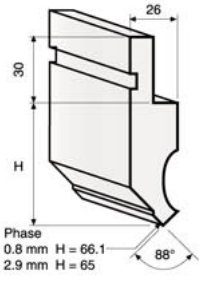
100 T / m

1010/A/75°/0.8



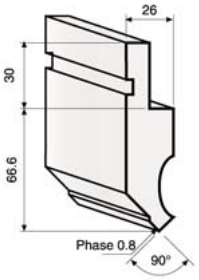
100 T / m

1010/88°



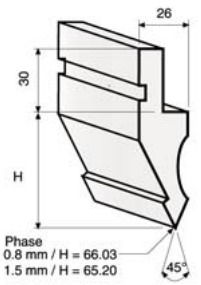
100 T / m

1010/90°/0.8



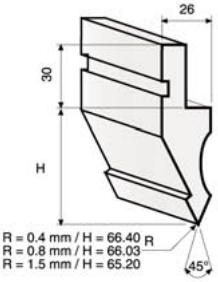
100 T / m

1011/45°



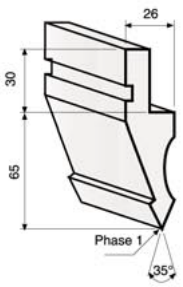
70 T / m

1011/A/45°



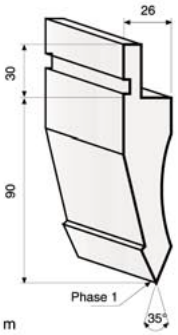
70 T / m

3864/35°/1



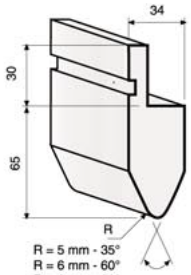
50 T / m

1012/35°/1



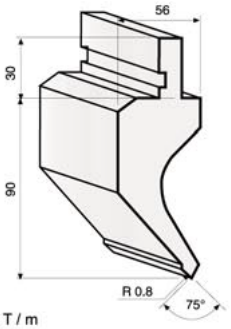
50 T / m

1013



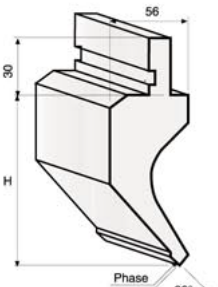
100 T / m

1014/A/75°/0.8



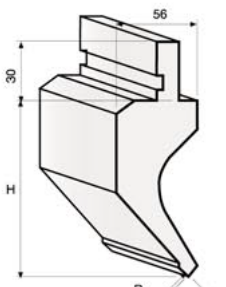
50 T / m

1014/88°



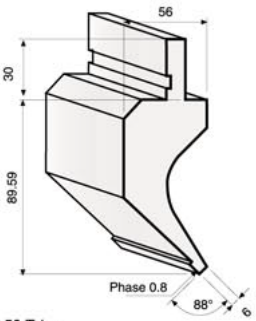
50 T / m

1014/A/88°



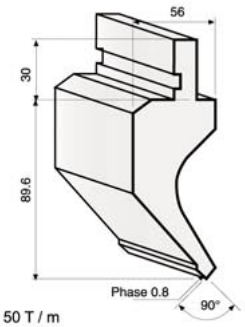
50 T / m

1014/88°/0.8/6



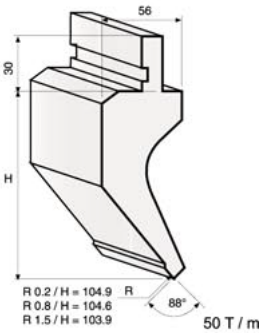
50 T / m

1014/90°/0.8



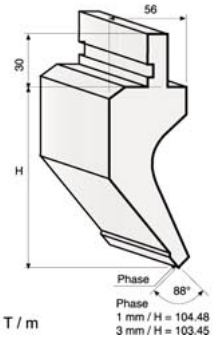
50 T / m

1015/A/88°



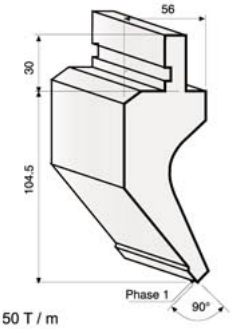
50 T / m

1015/88°



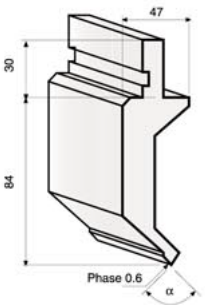
50 T / m

1015/90°/1



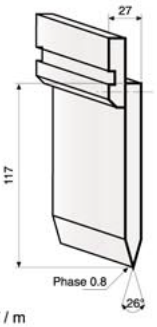
50 T / m

1016/A/0.6



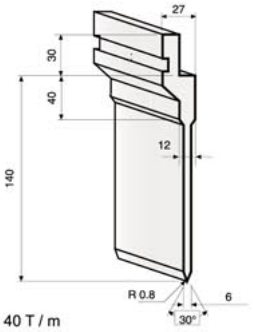
15 T / m

1017/26°/0.8



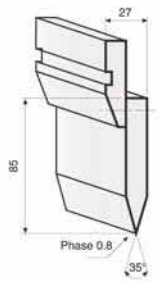
50 T / m

1017/A/30°/0.8/W



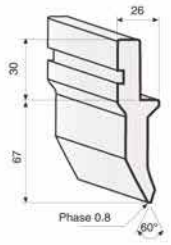
40 T / m

1017/35˚/0.8



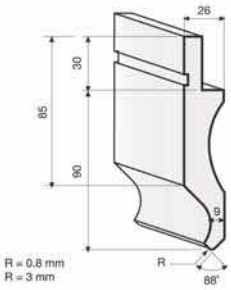
50 T / m

1018/60˚/0.8



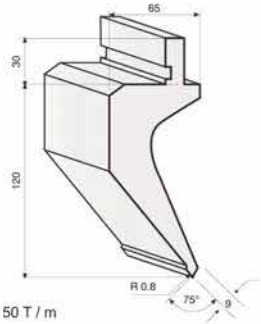
50 T / m

1019/A/88˚



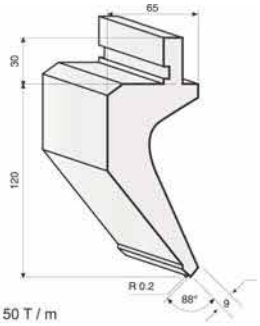
50 T / m

1020/A/75˚/0.8



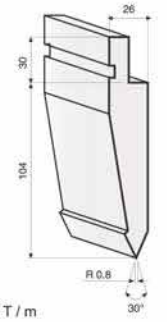
50 T / m

1020/A/88˚/0.2



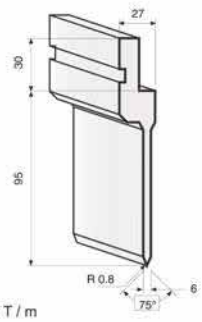
50 T / m

1021/A/30˚/0.8



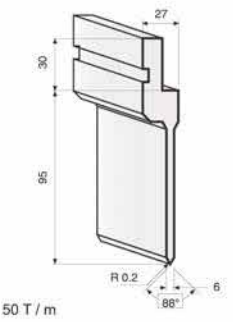
100 T / m

1022/A/75˚/0.8



50 T / m

1022/A/88˚/0.2



50 T / m

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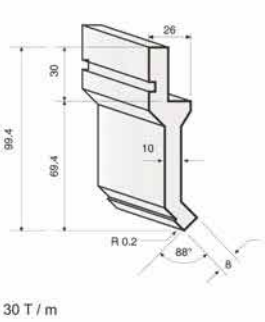
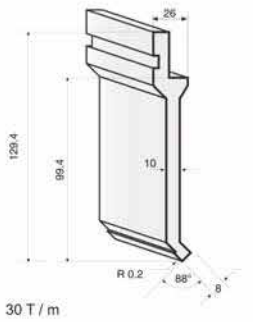


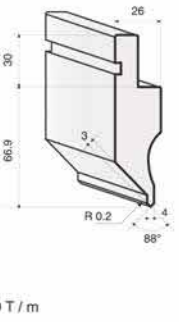
30 T / m

1024/A/88˚/0.2



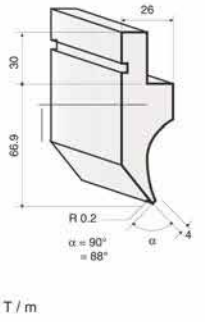
30 T / m

1025/A/88˚/0.2



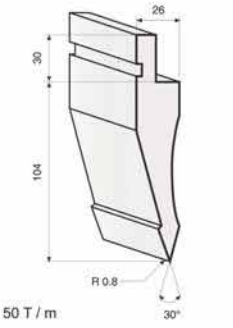
40 T / m

1026/A/0.2



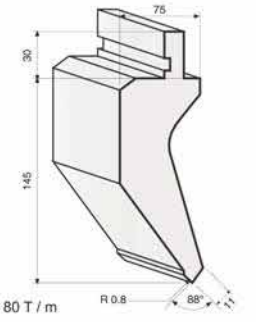
20 T / m

1027/A/30˚/0.8



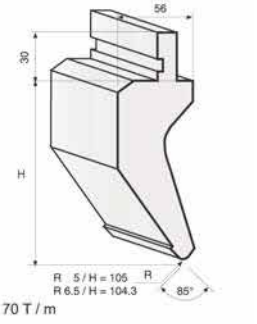
50 T / m

1028/A/88˚/0.8



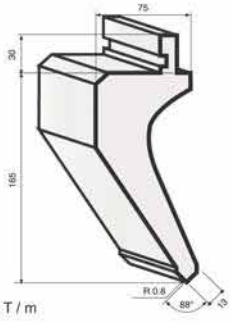
80 T / m

1029/A/85˚



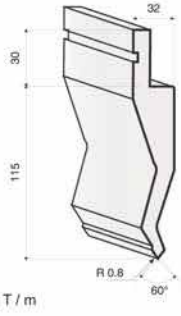
70 T / m

1030/A/88˚/0.8



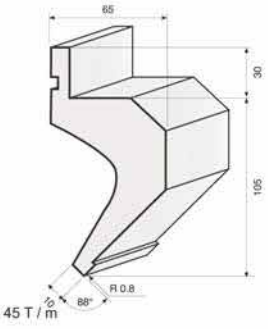
60 T / m

1031/A/60˚/0.8



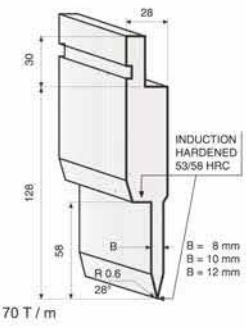
60 T / m

1032/A/88˚/0.8



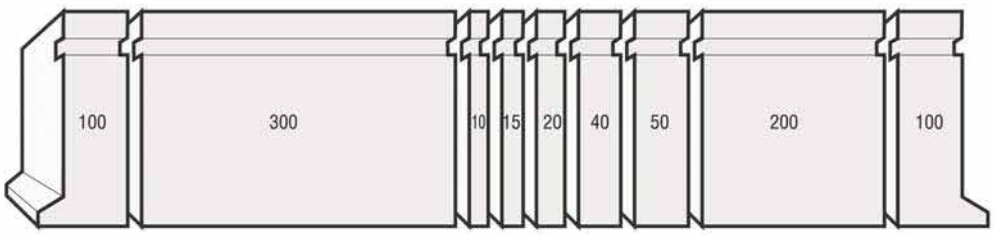
45 T / m

1033/A/28˚/0.6

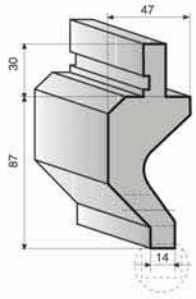


70 T / m

SECTIONS



4003



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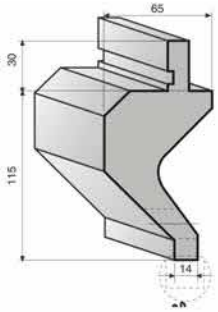
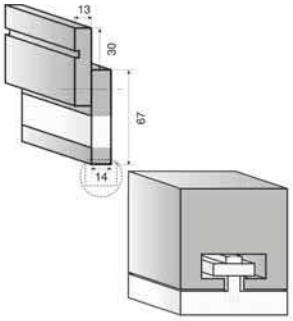
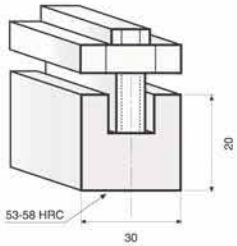


4005

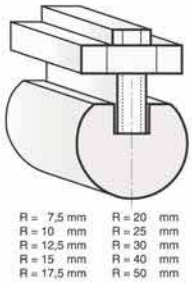


4002



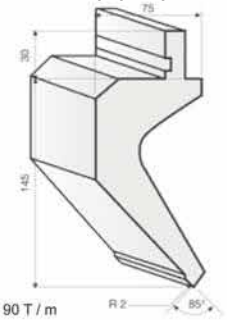
100 T / m

4009R



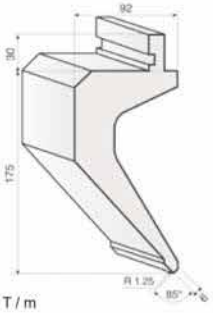
100 T / m

1034/A/85˚/2



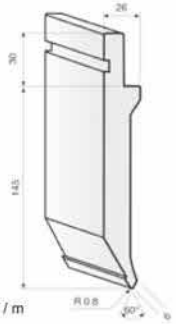
90 T / m

1035/A/85˚/1.251



90 T / m

036/A/60˚/0.81



70 T / m

037/A/60˚/21

100 T / m

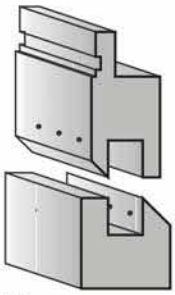
038/A/26˚/0.8

100 T / m

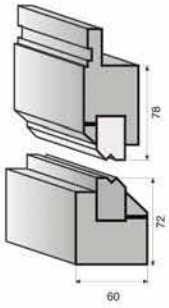
1039/A/26˚/1.5

100 T / m

3006



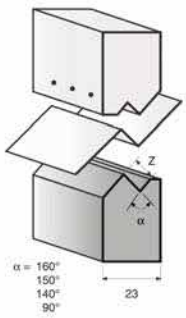
100 T / m



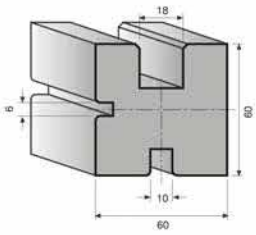
30 T / m

3007

3007	Z (mm)	3007	Z (mm)
160¡	1,0	90¡	5,0
160¡	1,5	90¡	5,5
150¡	2,0	90¡	6,0
140¡	2,5	90¡	6,5
90¡	3,0	90¡	7,0
90¡	3,5	90¡	7,5
90¡	4,0	90¡	8,0
90¡	4,5		

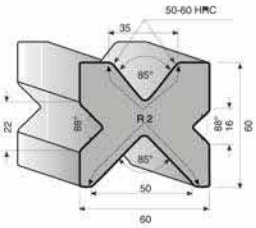


2008



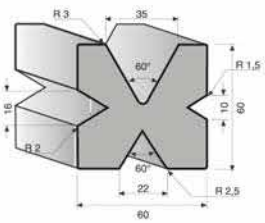
100 T / m

2009



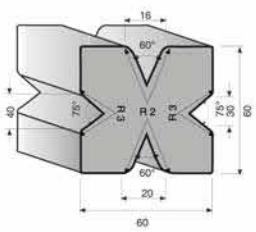
100 T / m

2009/60˚



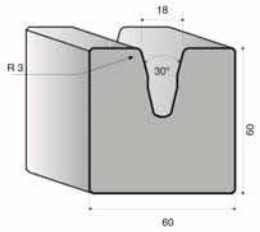
80 T / m

2009 SPEC



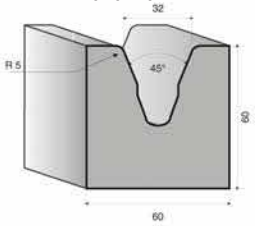
30 T / m

2011/A/18/30˚



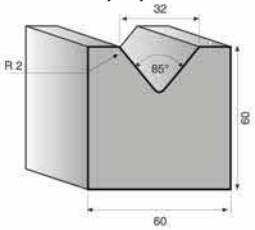
80 T / m

2011/A/32/45˚2



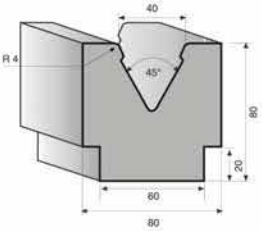
40 T / m

011/32/85˚



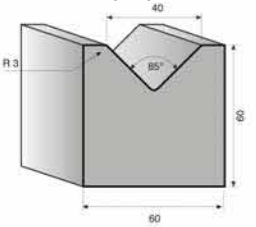
100 T / m

2011/40/45˚2



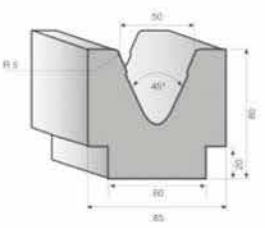
100 T / m

011/40/85˚



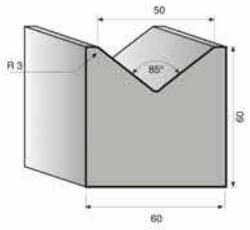
100 T / m

2011/50/45˚



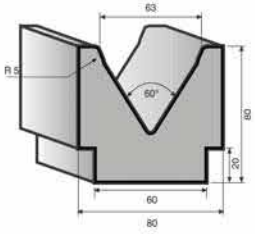
100 T / m

2011/50/85˚



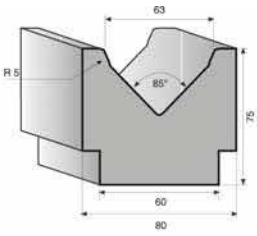
100 T / m

2011/63/60˚2



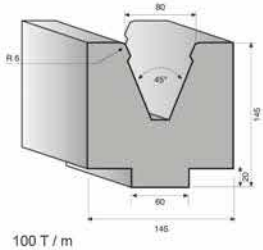
100 T / m

011/A/63/85˚



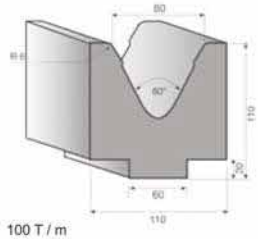
100 T / m

2011/80/45˚2



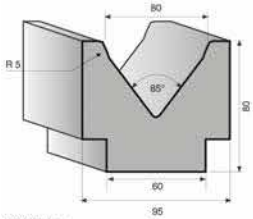
100 T / m

011/80/60˚



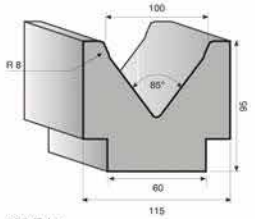
100 T / m

2011/80/85˚2



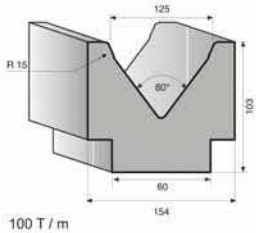
100 T / m

011/100/85˚2



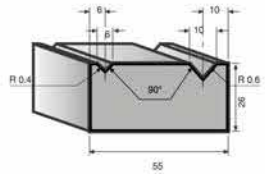
100 T / m

011/125/80˚2



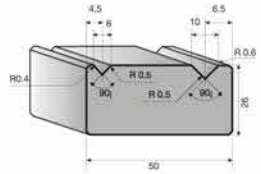
100 T / m

012/90/88˚



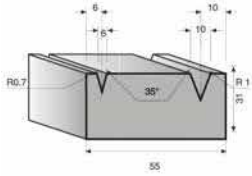
100 T / m

2012/60˚



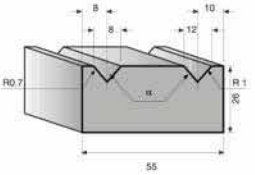
80 T / m

2012/35˚



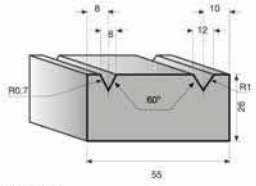
30 T / m

2013/90/88˚



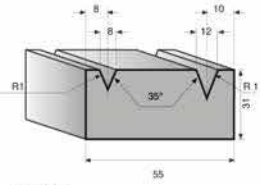
100 T / m

2013/60˚



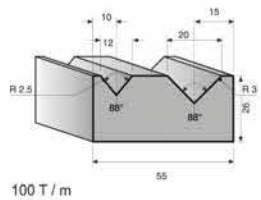
80 T / m

2013/35˚



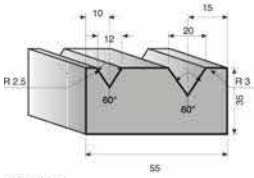
30 T / m

2014/88˚



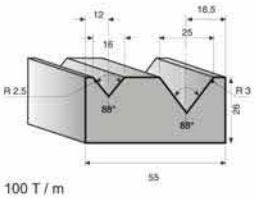
100 T / m

2014/60˚



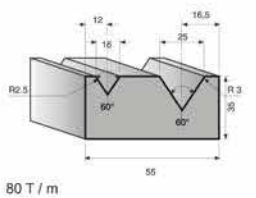
80 T / m

2015/88˚



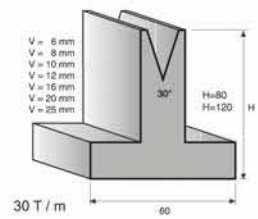
100 T / m

2015/60˚



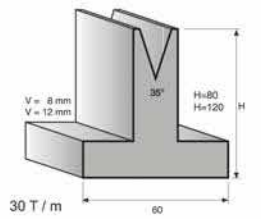
80 T / m

2030/30˚



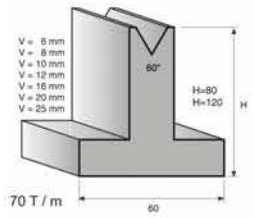
30 T / m

2035/35˚



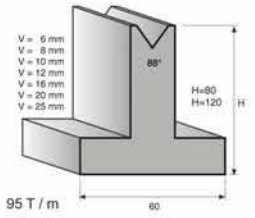
30 T / m

2060/60˚



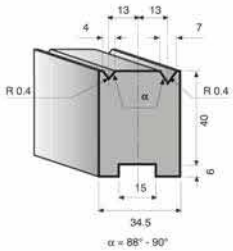
70 T / m

2088/88˚

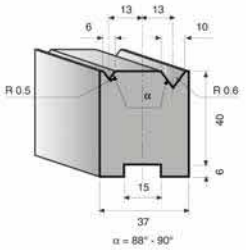


95 T / m

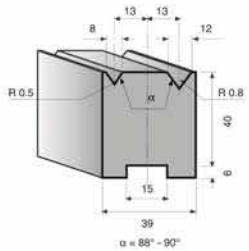
2019



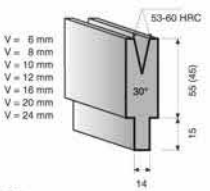
2020



2021

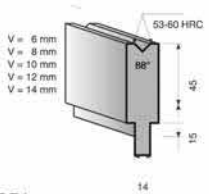


2130/A/30˚



30 T / m

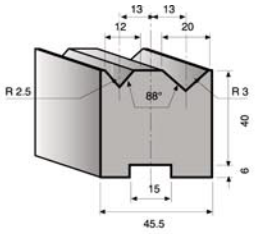
2188/A/88˚



95 T / m

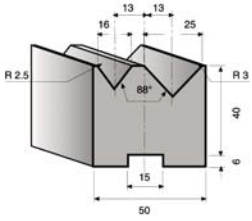
SECTIONS

2022

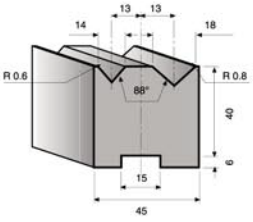


100 T / m

2023

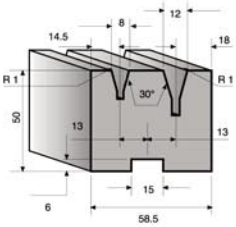


2024



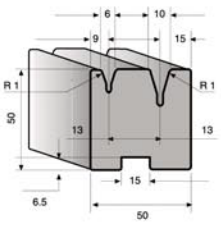
100 T / m

2025



30 T / m

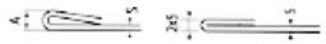
2026



30 T / m

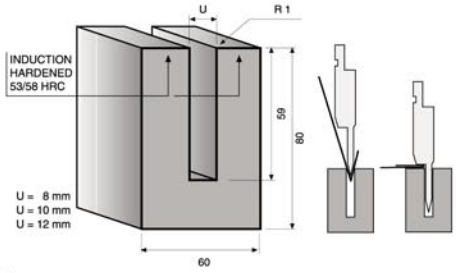
BENDING CHART°

Acc.R.45 Kg/mmq



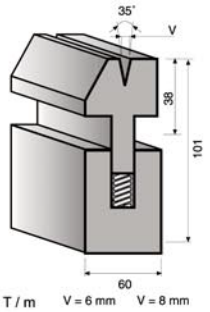
S mm	A mm	Ton/M	2xS	Ton/M
0,6	3	9	1,2	23
0,8	3	12	1,6	32
1	3,5	15	2	40
1,25	3,5	17	2,5	50
1,5	4,6	22	3	63
2	5,5	30	4	80
2,5	6,5	55	5	90
3	8	70	6	100

3000



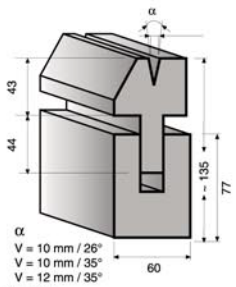
50 T / m

3001/35°/B



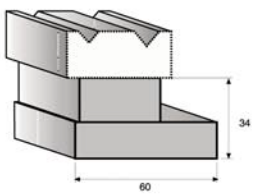
60 T / m V = 6 mm V = 8 mm

3001



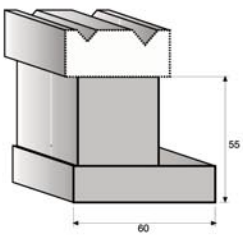
100 T / m

4006



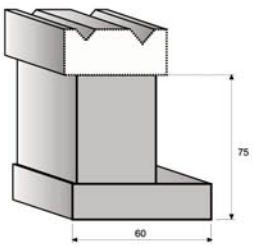
100 T / m

4007



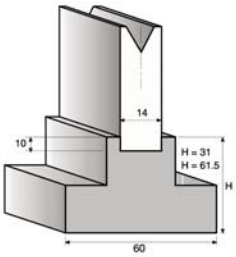
100 T / m

4008



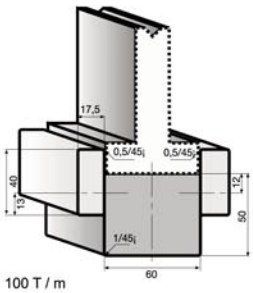
100 T / m

4017



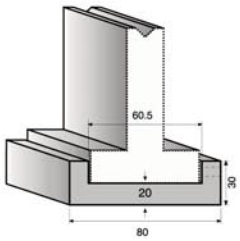
100 T / m

4018



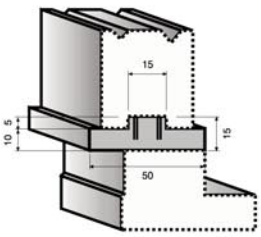
100 T / m

4016



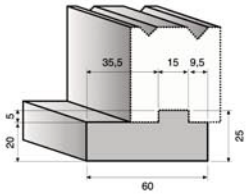
100 T / m

4010



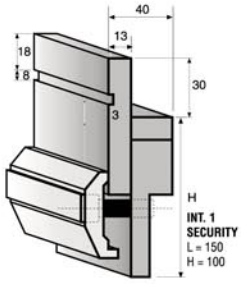
100 T / m

4011

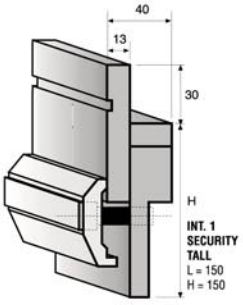


100 T / m

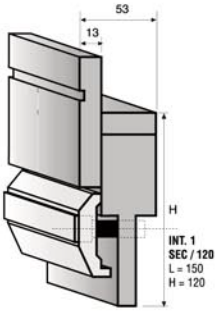
Int1 Security



Int1 Security TalII



nt1 Security 120



Security Clamps