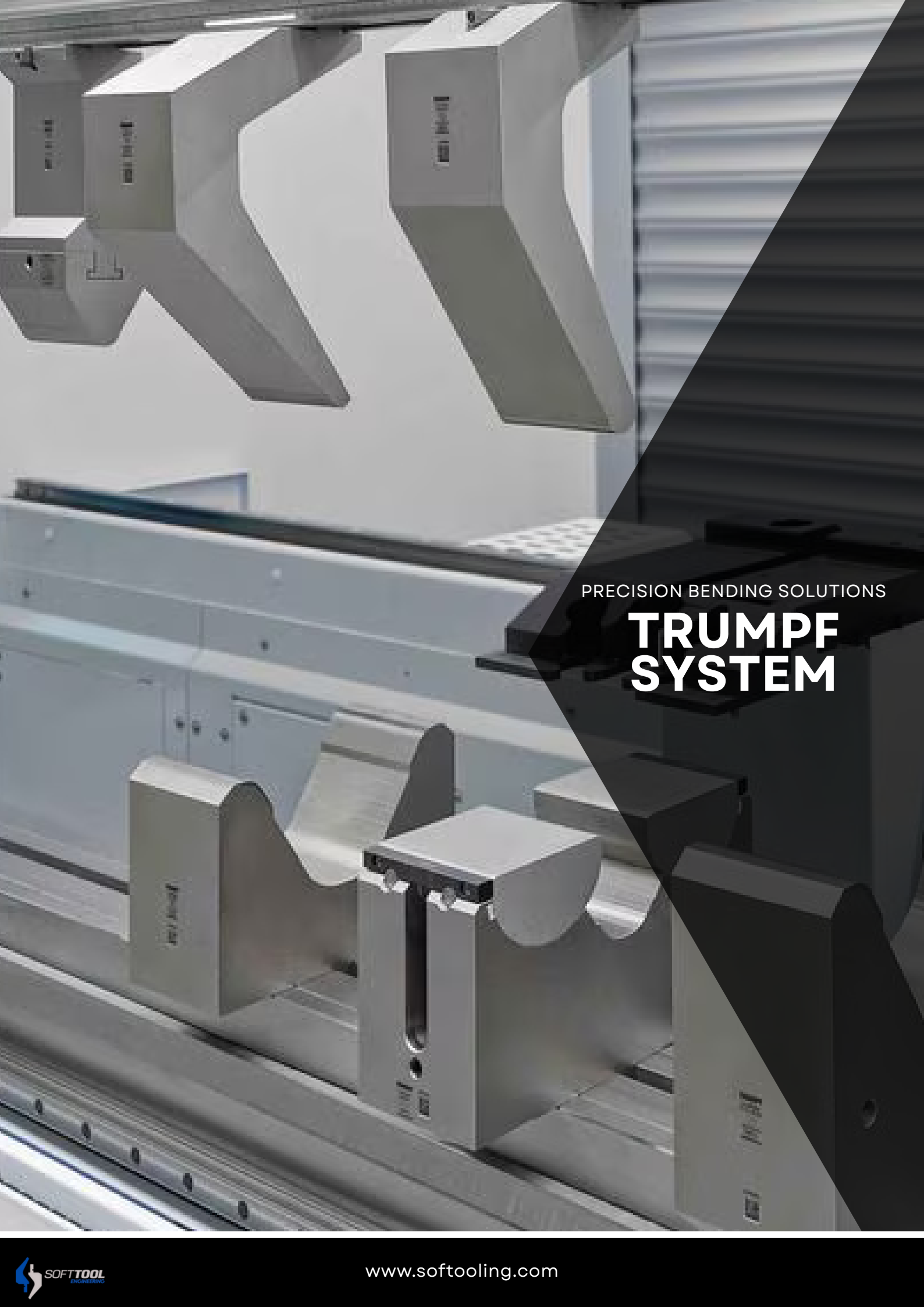




PRECISION BENDING SOLUTIONS

TRUMPF SYSTEM

PRESS BRAKE TOOLS

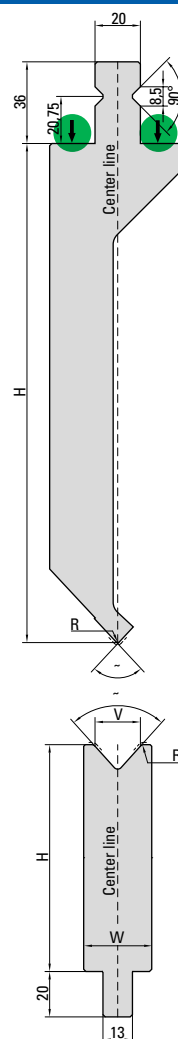
STE-SYSTEM TRUMPF

Explanation	54 – 55
Punches/top tools	
Simple Clamp	56
Safety pins.	56
Flexible modification.	57
Insertion of a steel insert	57
Punches/top tools H = 120 mm	58 – 59
Punches/top tools H = 140 mm	59
Punches/top tools H = 158 mm	60 – 61
Punches/top tools H = 220 mm	62 – 64
Punch/top tool H = 240 mm	64
Punch/top tool H = 300 mm	65
Punch/top tool distance pieces, H = 100 mm.	66
Punch/top tool distance pieces, H = 150 mm	66
Punch/top tool distance piece, H = 220 mm	66
Dies	
86° Dies, H = 100 mm	67
84° Dies, H = 100 mm	68 – 69
80° Dies, H = 100 mm	70 – 71
80° Dies, H = 120 mm	71
60° Die, H = 120 mm	71
30° Dies, H = 100 mm	72 – 73
30° Dies, H = 100 mm, R = 3,0	74
86° Dies, H = 150 mm	75
84° Dies, H = 150 mm	76
80° Dies, H = 150 mm	77
30° Dies, H = 150 mm	77 – 78
Screwable flattening die H = 100 mm	79
Screwable flattening die H = 150 mm	79
Flattening punches/top tools and flattening dies	80 – 81
Die heightenings	81

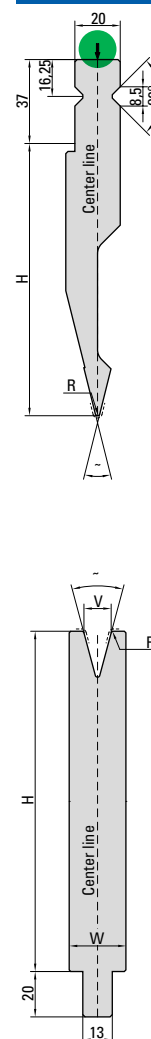
Quality and precision

- ▶ Optimum materials
 - 42 CrMo4, tempered to 1100 – 1200 N/mm²
 - C45, tempered to 800 – 850 N/mm²
 - C45, 650 – 800 N/mm²
- ▶ Bending radius/intake radii hardened up to 54 – 60 HRC
- ▶ Precision ground
- ▶ Guaranteed exchangeability and parallelism
- ▶ Punch/top tool clampings in two different models
 - Simple Clamp at segments < 12,5 kg
 - Safety Pin at segments > 12,5 kg
- ▶ Self centering
- ▶ Usable on both sides
- ▶ Tool marking with all technical information

Force on shoulder



Force on head



Tool lengths

PUNCHES/TOP TOOLS WITH SIMPLE CLAMP

Length 500 mm



Length 300 mm



Length 200 mm

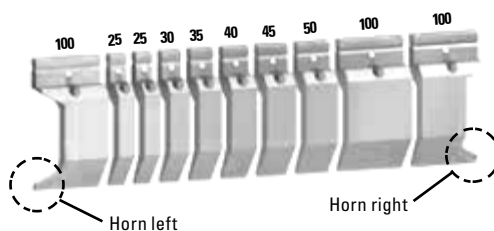


Length 100 mm



Length 550 mm sectionalized

- ▶ Sectionalized punches/top tools are delivered as a complete set
- ▶ 10 Segments, with horn extension left and right



Simple Clamp

PUNCHES/TOP TOOLS WITH SAFETY PINS

Length 500 mm



Length 300 mm



Length 200 mm

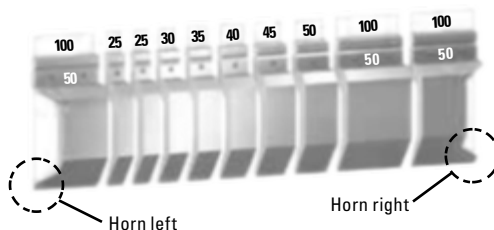


Length 100 mm



Length 550 mm sectionalized

- ▶ Sectionalized punches/top tools are delivered as a complete set
- ▶ 10 Segments, with horn extension left and right



Safety pin

DIES

Length 500 mm



Length 300 mm



Length 200 mm

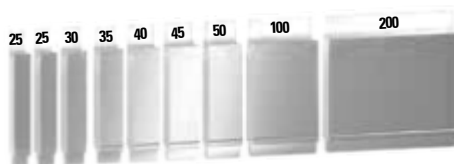


Length 100 mm



Length 550 mm sectionalized

- ▶ Sectionalized dies are delivered as a complete set
- ▶ 9 Segments



STE-INFO

Create your own individual tool lengths set for punches/top tools and dies!
Offers for sets 1050 / 2050 / 3050 / 4050 mm, contact us!

Simple Clamp

ADVANTAGES

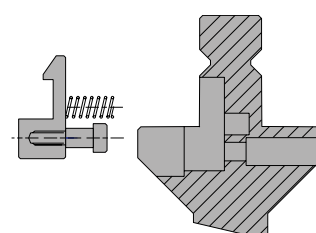
- **Vertical** tool change for segments **up to 12,5 kg**
- Less set-up time
- Easy handling



Set consists of screw, spring and Simple Clamp

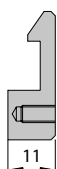


Vertical tool change



70.714		24h
Set		0,012 kg

Suitable for punches/top tools
15.010 / 15.310 / 15.610



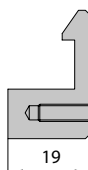
70.715		24h
Set		0,014 kg

Suitable for punches/top tools
15.320 / 15.620



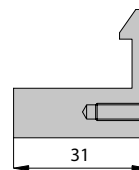
70.716		24h
Set		

Suitable for punches/top tools
15.330 / 15.335 / 15.630 / 15.635
15.755 / 15.902 / 15.904 / 15.905



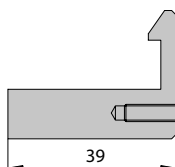
70.717		24h
Set		

Suitable for punches/top tools
15.450 / 15.710 / 15.720
15.730 / 15.750 / 15.760



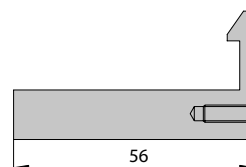
70.718		24h
Set		

Suitable for punches/top tools
15.370 / 15.480 / 15.670 / 15.680



70.719		24h
Set		

Suitable for punches/top tools
15.380 / 15.700 / 15.800



Safety pins

ADVANTAGES

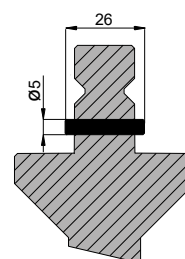
- **Horizontal** tool change for segments **more than 12,5 kg**
- Favorable purchase price (in comparison with Simple Clamp)
- Hardened Safety pins on demand



Safety pins



Horizontal tool change



70.130	
10 pieces	0,16 kg

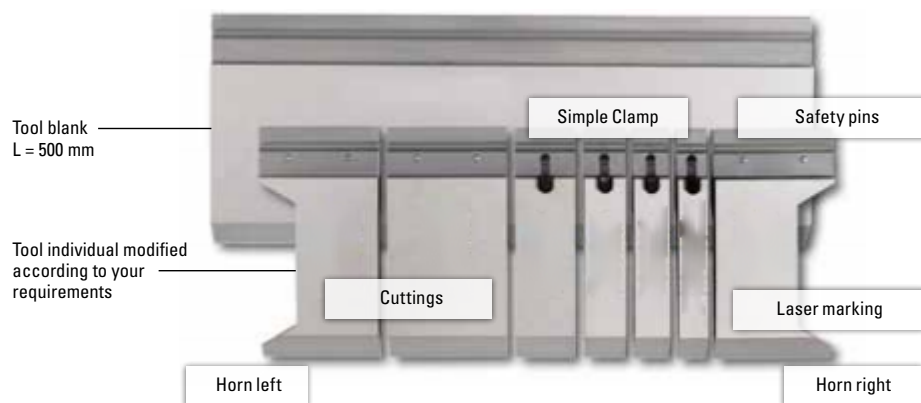
Hardened

70.140	
10 pieces	0,16 kg

Flexible modification

PUNCHES/TOP TOOLS

- Special cuttings
- Individual horn extensions
- Insertion of Simple Clamp
- Insertion of Safety pins
- Laser marking



DIES

- Special cuttings
- Laser marking

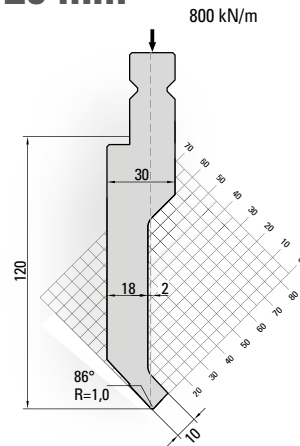


Punches/top tools H = 120 mm

15.330

Simple Clamp

500 mm	12,0 kg
300 mm	7,2 kg
200 mm	4,8 kg
100 mm	2,4 kg
550 mm sectionalized	13,2 kg



Further radii

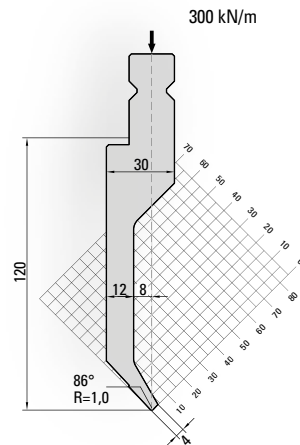
R (mm)	H (mm)
0,5	119,8
2,0	119,2
2,5	119,0
3,0	118,8
4,0	118,2
5,0	117,7
6,0	117,2

15.335

24h

Simple Clamp

500 mm	9,9 kg
300 mm	6,0 kg
200 mm	4,0 kg
100 mm	2,0 kg
550 mm sectionalized	11,0 kg



Further radii

R (mm)	H (mm)
0,5	119,8
2,0	119,2
2,5	119,0
3,0	118,8

15.370

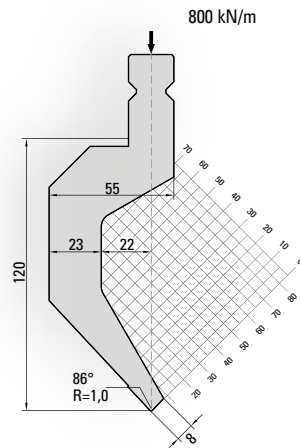
24h

Safety pins

500 mm	14,5 kg
--------	---------

Simple Clamp

300 mm	8,7 kg
200 mm	5,8 kg
100 mm	2,9 kg
550 mm sectionalized	16,0 kg



Further radii

R (mm)	H (mm)
0,5	119,8
2,0	119,2
2,5	119,0
3,0	118,7
4,0	118,3
5,0	117,8
6,0	117,3

15.380

24h

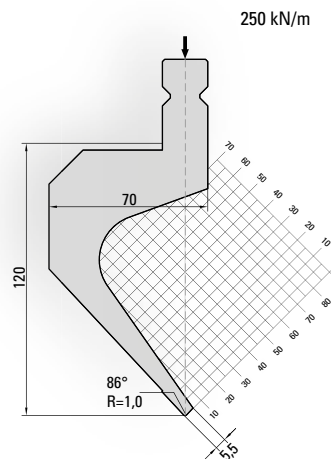
Safety pins

500 mm	15,4 kg
--------	---------

kg

Simple Clamp

300 mm	9,3 kg
200 mm	6,2 kg
100 mm	3,1 kg
550 mm sectionalized	17,0 kg



Further radii

R (mm)	H (mm)
0,5	119,8
2,0	119,2
2,5	119,0
3,0	118,7
4,0	118,3

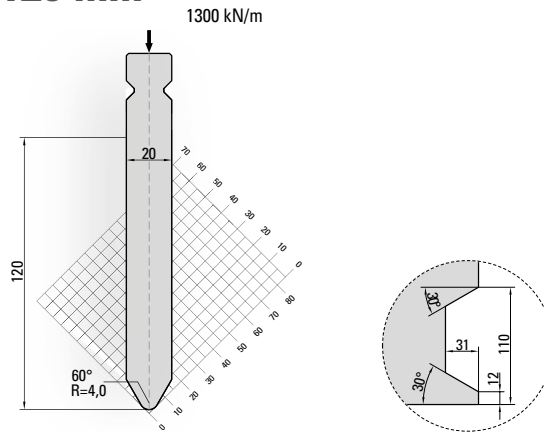
Punches/top tools H = 120 mm

15.310

24h

Simple Clamp

500 mm	12,0 kg
300 mm	7,2 kg
200 mm	4,8 kg
100 mm	2,4 kg
550 mm sectionalized	13,2 kg


Further radii

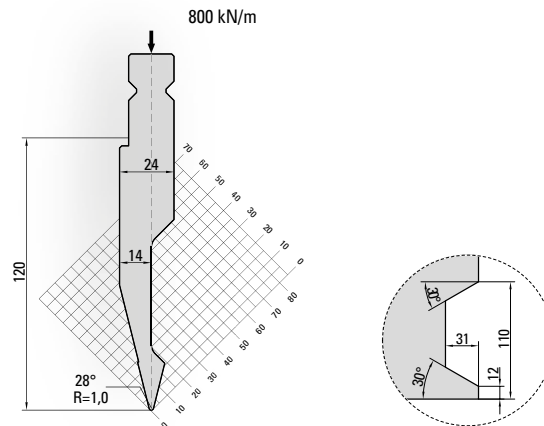
R (mm)	
2,0	119,8
2,5	119,8
3,0	119,8
5,0	118,8
6,0	117,6

15.320

24h

Simple Clamp

500 mm	10,0 kg
300 mm	6,0 kg
200 mm	4,0 kg
100 mm	2,0 kg
550 mm sectionalized	11,0 kg


Further radii

R (mm)	H (mm)
0,5	119,8
2,0	116,0
2,5	114,4
3,0	112,8
4,0	109,8

Punches/top tools H = 140 mm

15.480

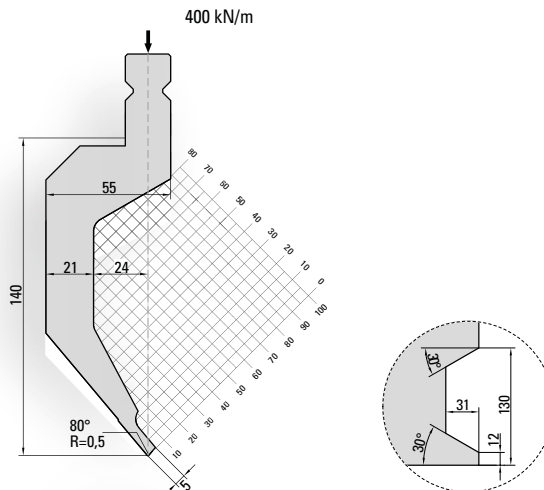
24h

Safety pins

500 mm	15,3 kg
--------	---------

Simple Clamp

300 mm	9,3 kg
200 mm	6,2 kg
100 mm	3,1 kg
550 mm sectionalized	17,0 kg


Further radii

R (mm)	
1,0	139,4
2,0	138,8
2,5	138,5
3,0	138,2

15.450

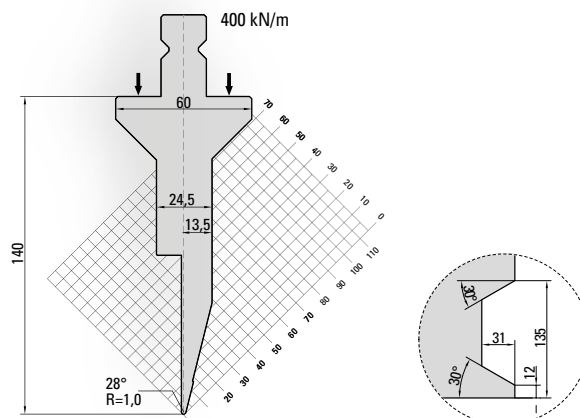
24h

Safety pins

500 mm	14,5 kg
--------	---------

Simple Clamp

300 mm	8,7 kg
200 mm	5,8 kg
100 mm	2,9 kg
550 mm sectionalized	16,0 kg


Further radii

R (mm)	
0,5	139,8

Punches/top tools H = 158 mm

15.630

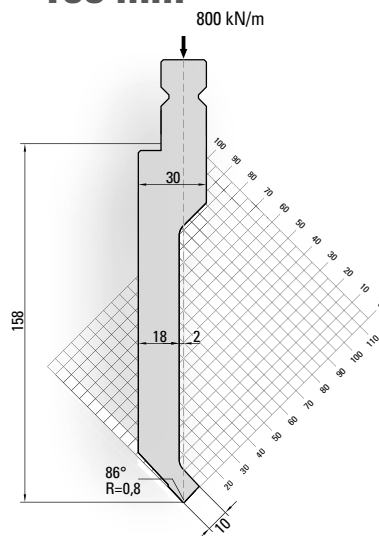
24h

Safety pins

500 mm	15,0 kg
--------	---------

Simple Clamp

300 mm	9,0 kg
200 mm	6,0 kg
100 mm	3,0 kg
550 mm sectionalized	16,5 kg



Further radii

R (mm)	
0,5	157,8
1,0	157,6
2,0	157,2
2,5	157,0
3,0	156,7
4,0	156,3
5,0	155,8
6,0	155,3

15.635

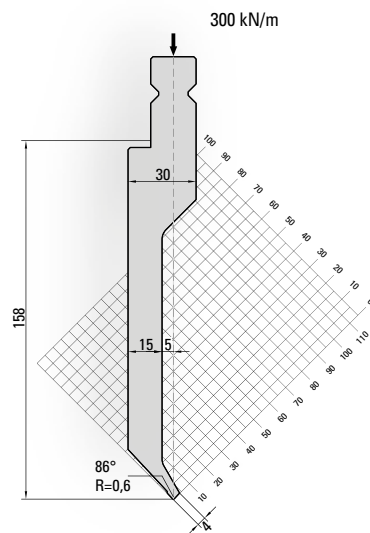
24h

Safety pins

500 mm	13,5 kg
--------	---------

Simple Clamp

300 mm	8,1 kg
200 mm	5,4 kg
100 mm	2,7 kg
550 mm sectionalized	14,9 kg



Further radii

R (mm)	
0,5	157,8
1,0	157,6
2,0	157,2
2,5	157,0
3,0	156,7

15.670

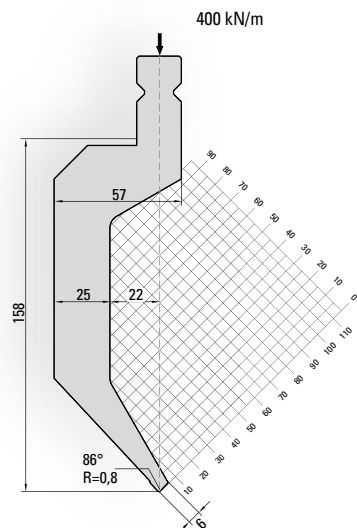
24h

Safety pins

500 mm	19,0 kg
--------	---------

Simple Clamp

300 mm	11,4 kg
200 mm	7,6 kg
100 mm	3,8 kg
550 mm sectionalized	20,9 kg



Further radii

R (mm)	H (mm)
0,5	157,8
1,0	157,6
2,0	157,2
2,5	157,0
3,0	156,7
4,0	156,3
5,0	155,8

Punches/top tools H = 158 mm

15.680

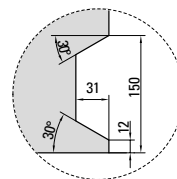
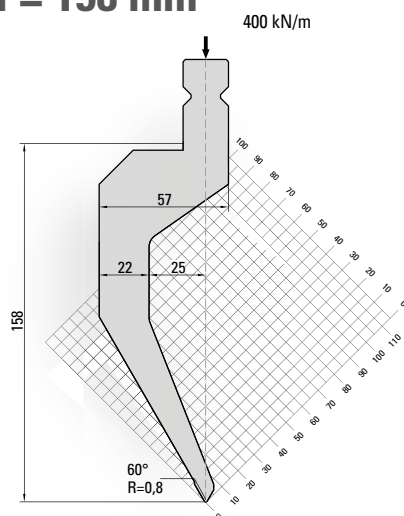
24h

Safety pins

500 mm	17,5 kg
--------	---------

Simple Clamp

300 mm	10,5 kg
200 mm	7,0 kg
100 mm	3,5 kg
550 mm sectionalized	19,3 kg



Further radii

R (mm)	H (mm)
0,5	157,8
1,0	157,4
2,0	156,4
2,5	155,9
3,0	155,4

15.610

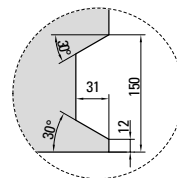
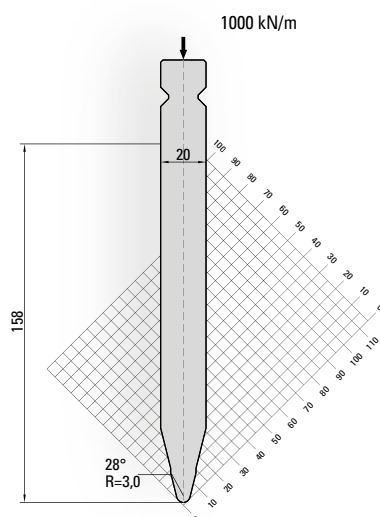
24h

Safety pins

500 mm	14,0 kg
--------	---------

Simple Clamp

300 mm	8,4 kg
200 mm	5,6 kg
100 mm	2,8 kg
550 mm sectionalized	15,4 kg



Further radii

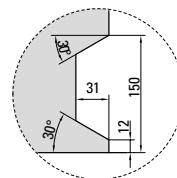
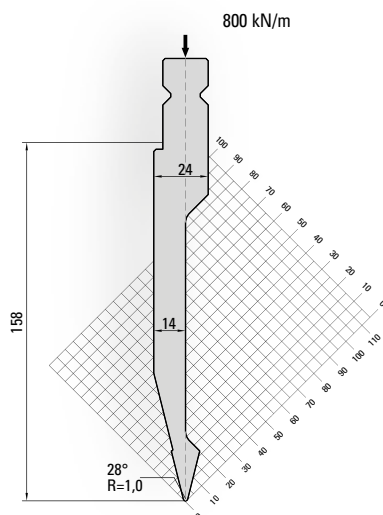
R (mm)	H (mm)
0,5	157,8
1,0	157,8
2,0	157,8
2,5	157,8
4,0	154,0
5,0	150,8

15.620

24h

Simple Clamp

500 mm	11,5 kg
300 mm	6,9 kg
200 mm	4,6 kg
100 mm	2,3 kg
550 mm sectionalized	12,7 kg



Further radii

R (mm)	H (mm)
0,5	157,8
2,0	154,0
2,5	152,4
3,0	150,8
4,0	147,8

Punches/top tools H = 220 mm

800 kN/m

15.710

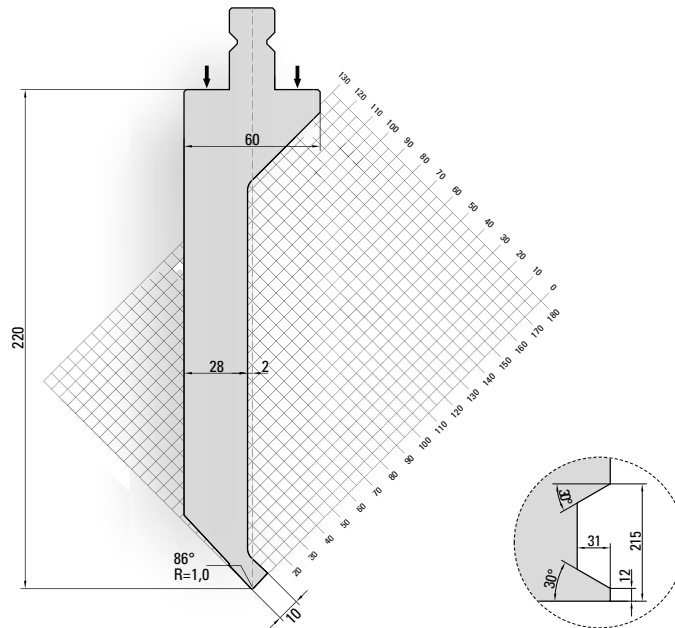
24h

Safety pins

500 mm	28,5 kg
300 mm	17,1 kg

Simple Clamp

200 mm	11,4 kg
100 mm	5,7 kg
550 mm sectionalized	31,4 kg



Further radii

R (mm)	H (mm)
0,5	219,8
2,0	219,2
2,5	218,7
3,0	218,5
4,0	218,3
5,0	217,8
6,0	217,5

800 kN/m

15.700

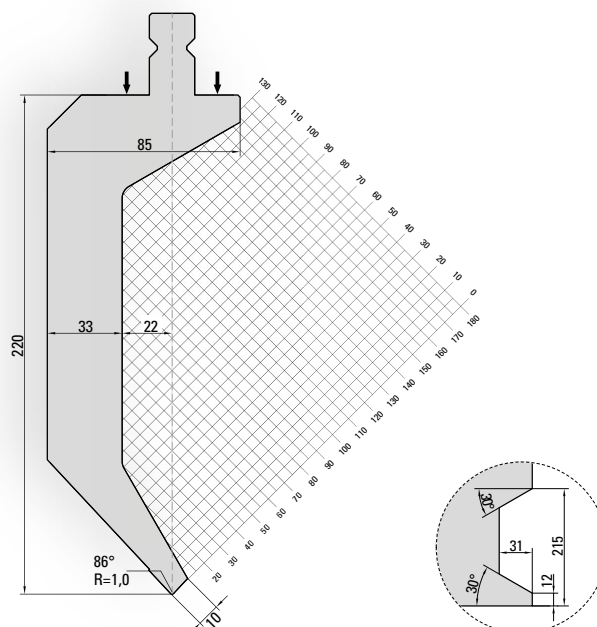
24h

Safety pins

500 mm	33,5 kg
300 mm	20,1 kg
200 mm	13,4 kg

Simple Clamp

100 mm	6,7 kg
550 mm sectionalized	36,9 kg



Further radii

R (mm)	H (mm)
0,5	219,8
2,0	219,2
2,5	218,7
3,0	218,5
4,0	218,3
5,0	217,8
6,0	217,5

STE-INFO

Punches/top tools STE-System WILA type I (chapter 3) and STE-System LVD type I (chapter 4) can also be used in a clamping STE-System Trumpf!

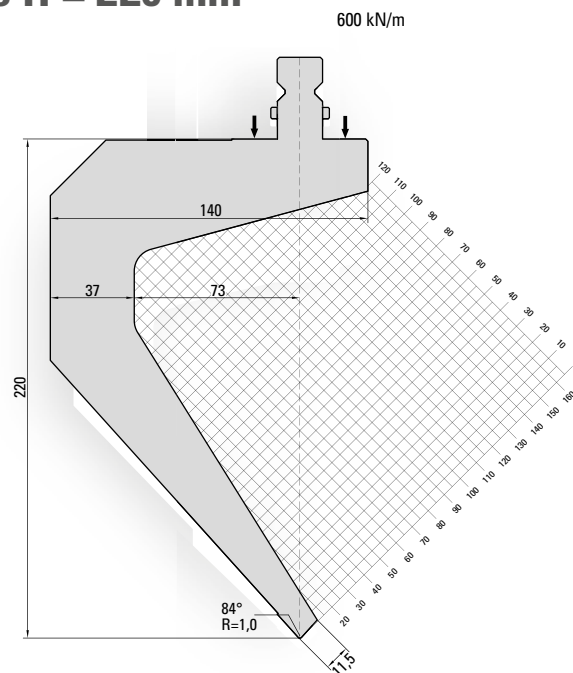
Punches/top tools H = 220 mm

15.790

24h

Safety pins

200 mm	17,6 kg
100 mm	8,8 kg
550 mm sectionalized	48,4 kg



Further radii

R (mm)	
0,5	219,8
2,0	219,2
2,5	218,7
3,0	218,5
4,0	218,3
5,0	217,8
6,0	217,5

15.730

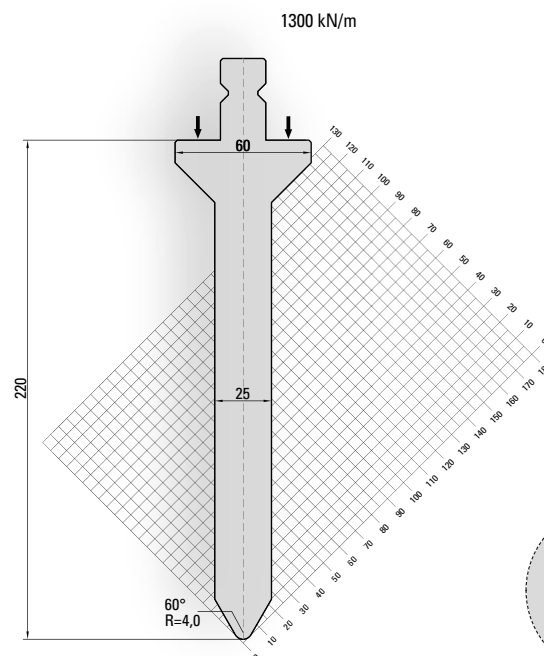
24h

Safety pins

500 mm	26,0 kg
300 mm	15,6 kg

Simple Clamp

200 mm	10,4 kg
100 mm	5,2 kg
550 mm sectionalized	28,6 kg



Further radii

R (mm)	
2,0	219,8
2,5	219,8
3,0	219,8
5,0	218,6
6,0	217,6

Punch/top tool H = 220 mm

15.800

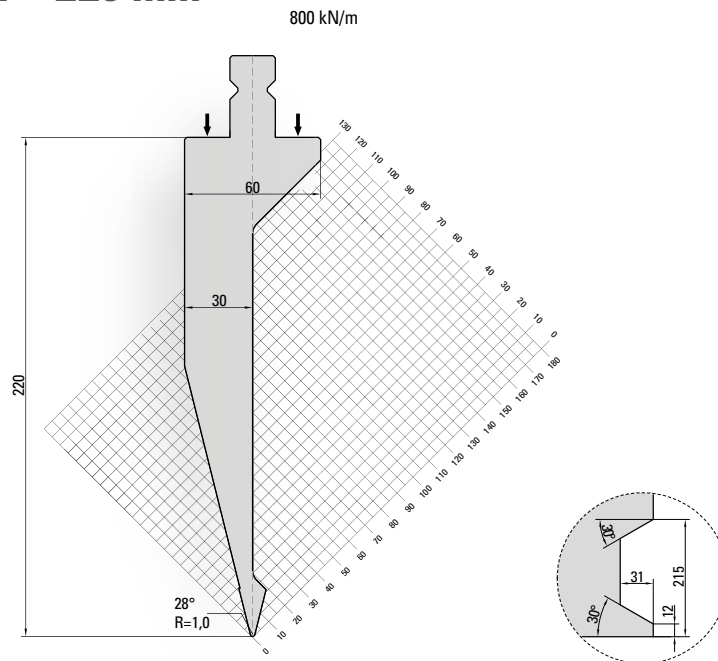
23h

Safety pins

500 mm	25,0 kg
300 mm	15,0 kg

Simple Clamp

200 mm	10,0 kg
100 mm	5,0 kg
550 mm sectionalized	27,5 kg



Further radii

R (mm)	H (mm)
0,5	219,8
2,0	216,0
2,5	214,0
3,0	212,8
4,0	209,8

Punch/top tool H = 240 mm

15.720

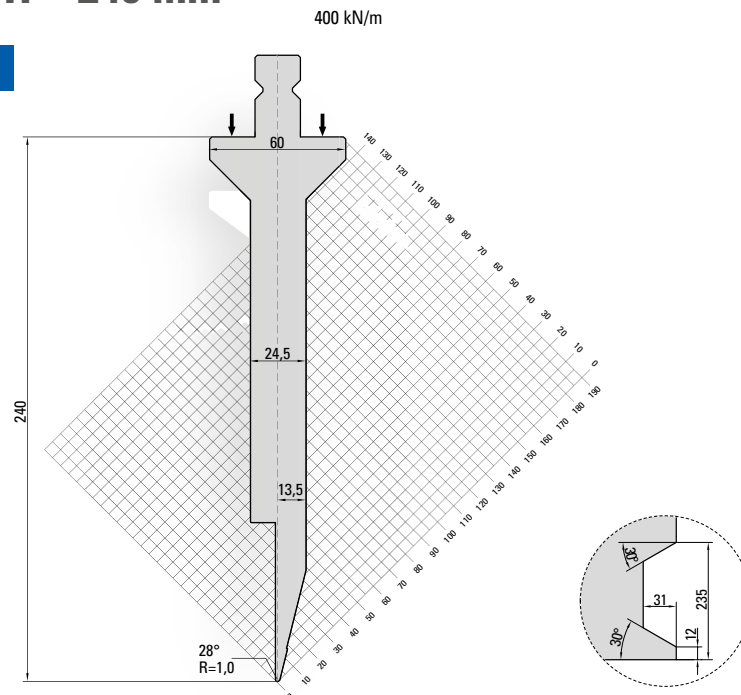
24h

Safety pins

500 mm	24,0 kg
300 mm	14,4 kg

Simple Clamp

200 mm	9,6 kg
100 mm	4,8 kg
550 mm sectionalized	26,4 kg



Further radii

R (mm)	H (mm)
0,5	239,8

Punch/top tool H = 300 mm

15.800

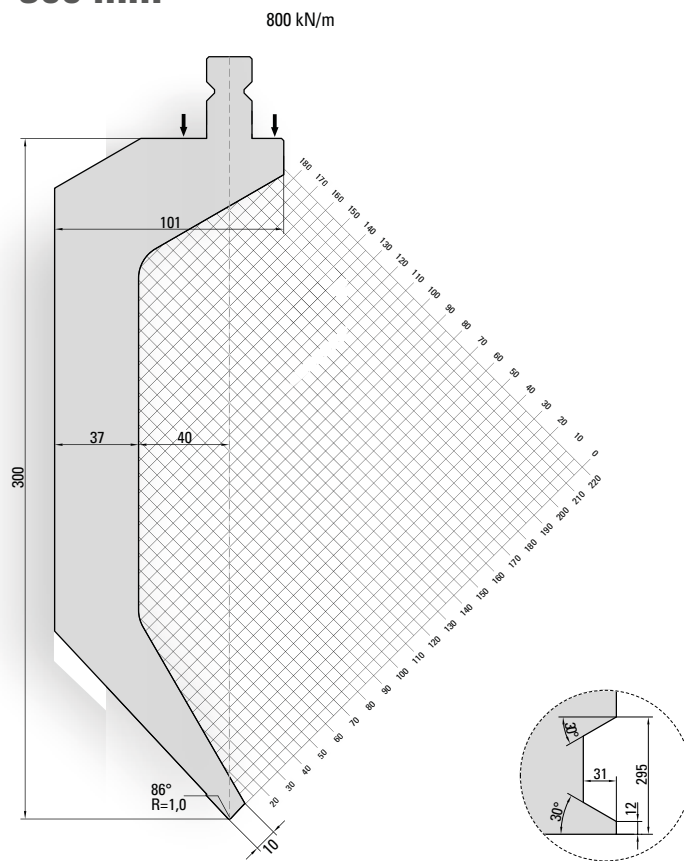
24h

Safety pins

200 mm	19,6 kg
--------	---------

Simple Clamp

100 mm	9,8 kg
550 mm sectionalized	53,9 kg



Further radii

R (mm)	H (mm)
0,5	299,8
2,0	299,2
2,5	298,7
3,0	298,5
4,0	298,3
5,0	297,8
6,0	297,5

STE-INFO

Punches/top tools STE-System WILA type I (chapter 3) and STE-System LVD type I (chapter 4) can also be used in a clamping STE-System Trumpf!

Punch/top tool distance pieces, H = 100 mm

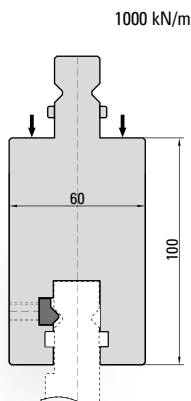
50.410

24h

Safety pins

150 mm

6,9 kg



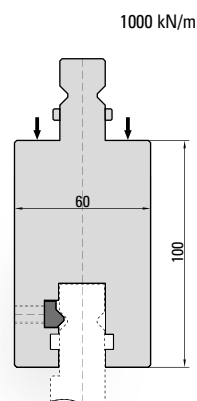
50.415

24h

Safety pins

50 mm

2,3 kg



Punch/top tool distance pieces, H = 150 mm

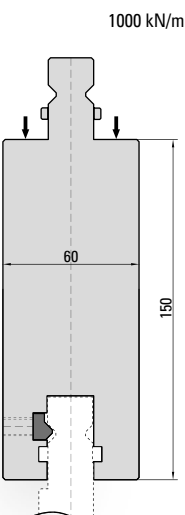
50.440

24h

Safety pins

150 mm

10,5 kg



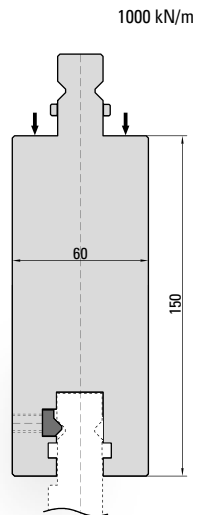
50.445

24h

Safety pins

50 mm

3,5 kg



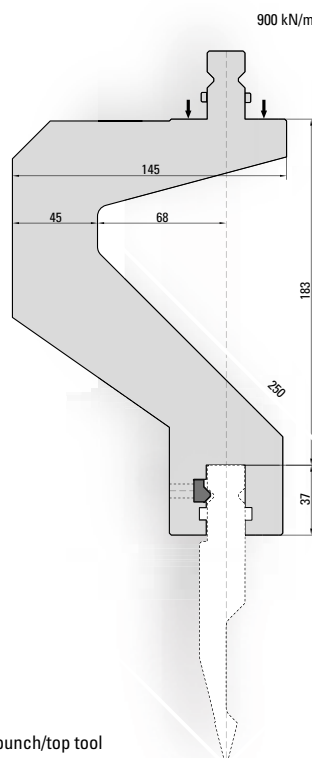
Punch/top tool distance piece, H = 220 mm

50.503

Safety pins

200 mm

24,5 kg

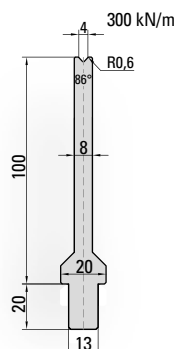


Example with punch/top tool
15.320

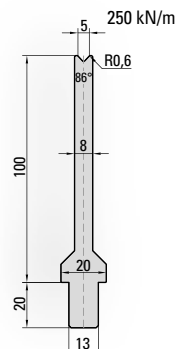
86° Dies, H = 100 mm

25.100
24h

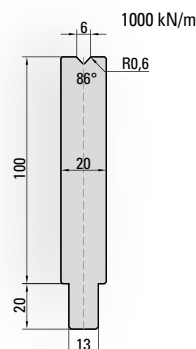
500 mm	4,5 kg
300 mm	2,7 kg
200 mm	1,8 kg
100 mm	0,9 kg
550 mm sectionalized	5,0 kg


25.350
24h

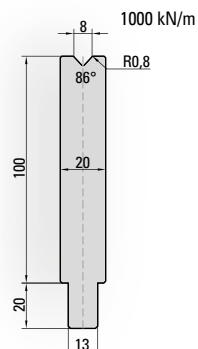
500 mm	4,5 kg
300 mm	2,7 kg
200 mm	1,8 kg
100 mm	0,9 kg
550 mm sectionalized	5,0 kg


25.101
24h

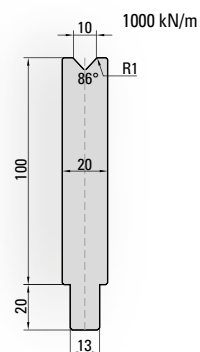
500 mm	9,0 kg
300 mm	5,4 kg
200 mm	3,6 kg
100 mm	1,8 kg
550 mm sectionalized	9,9 kg


25.102
24h

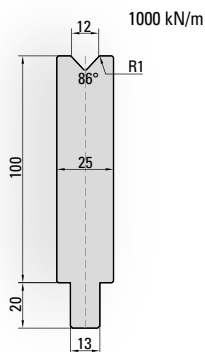
500 mm	9,0 kg
300 mm	5,4 kg
200 mm	3,6 kg
100 mm	1,8 kg
550 mm sectionalized	9,9 kg


25.103
24h

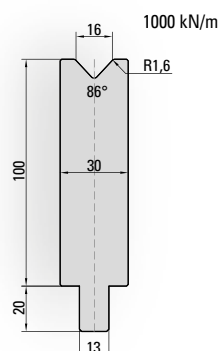
500 mm	9,0 kg
300 mm	5,4 kg
200 mm	3,6 kg
100 mm	1,8 kg
550 mm sectionalized	9,9 kg


25.104
24h

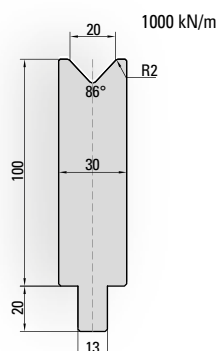
500 mm	10,5 kg
300 mm	6,3 kg
200 mm	4,2 kg
100 mm	2,1 kg
550 mm sectionalized	11,6 kg


25.105
24h

500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg


25.106
24h

500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg

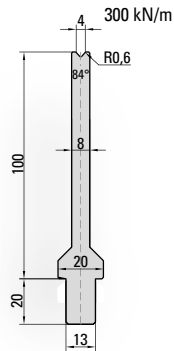


84° Dies, H = 100 mm

25.200

24h

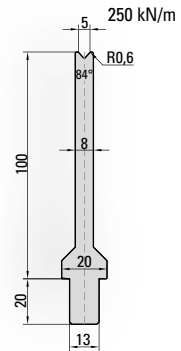
500 mm	4,5 kg
300 mm	2,7 kg
200 mm	1,8 kg
100 mm	0,9 kg
550 mm sectionalized	5,0 kg



25.300

24h

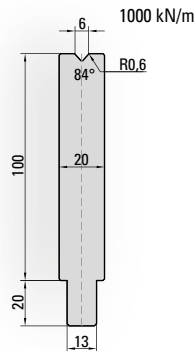
500 mm	4,5 kg
300 mm	2,7 kg
200 mm	1,8 kg
100 mm	0,9 kg
550 mm sectionalized	5,0 kg



25.201

24h

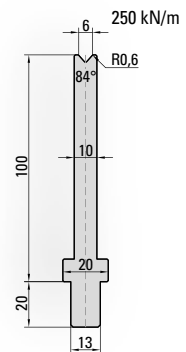
500 mm	9,0 kg
300 mm	5,4 kg
200 mm	3,6 kg
100 mm	1,8 kg
550 mm sectionalized	9,9 kg



25.301

24h

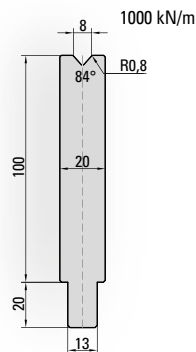
500 mm	5,5 kg
300 mm	3,3 kg
200 mm	2,2 kg
100 mm	1,1 kg
550 mm sectionalized	6,0 kg



25.202

24h

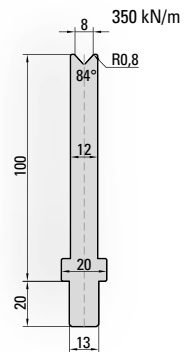
500 mm	9,0 kg
300 mm	5,4 kg
200 mm	3,6 kg
100 mm	1,8 kg
550 mm sectionalized	9,9 kg



25.302

24h

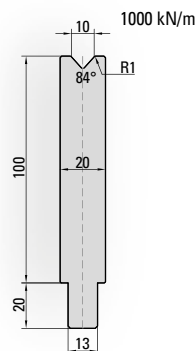
500 mm	6,0 kg
300 mm	3,6 kg
200 mm	2,4 kg
100 mm	1,2 kg
550 mm sectionalized	6,6 kg



25.203

24h

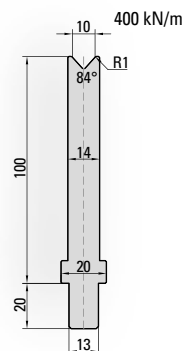
500 mm	9,0 kg
300 mm	5,4 kg
200 mm	3,6 kg
100 mm	1,8 kg
550 mm sectionalized	9,9 kg



25.303

24h

500 mm	6,5 kg
300 mm	3,9 kg
200 mm	2,6 kg
100 mm	1,3 kg
550 mm sectionalized	7,2 kg

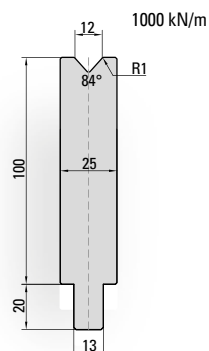


84° Dies, H = 100 mm

25.204

24h

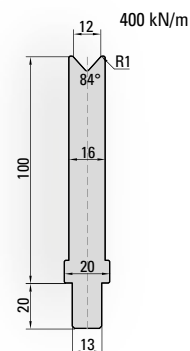
500 mm	10,5 kg
300 mm	6,3 kg
200 mm	4,2 kg
100 mm	2,1 kg
550 mm sectionalized	11,6 kg



25.304

24h

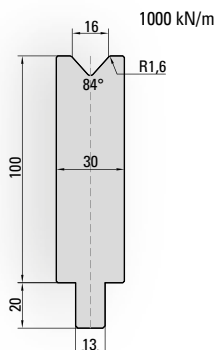
500 mm	7,0 kg
300 mm	4,2 kg
200 mm	2,8 kg
100 mm	1,4 kg
550 mm sectionalized	7,7 kg



25.205

24h

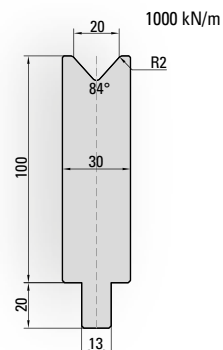
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg



25.206

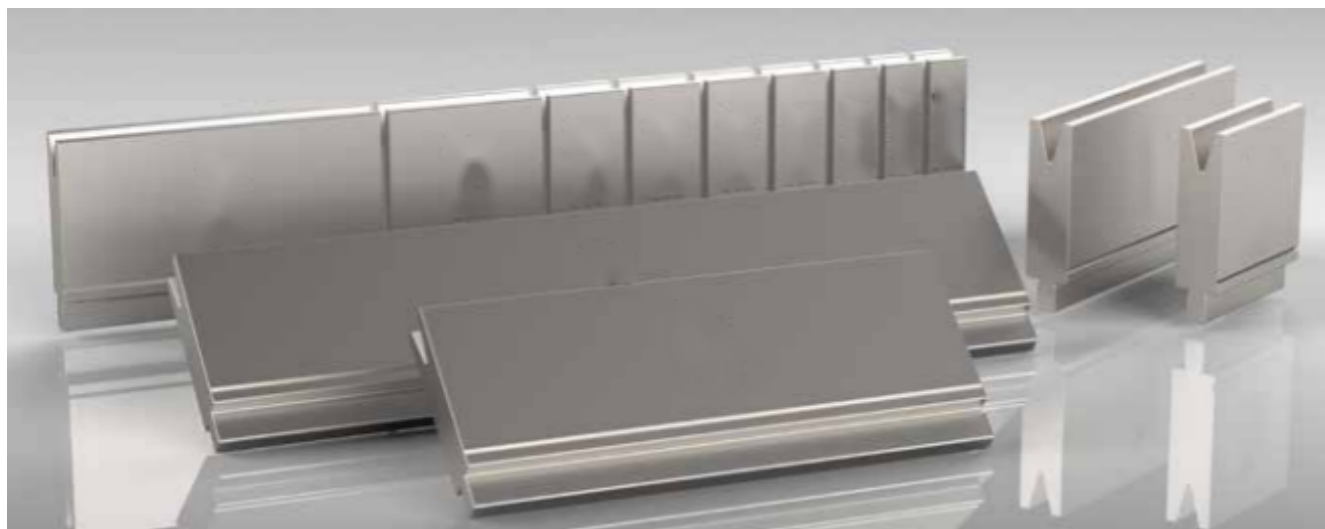
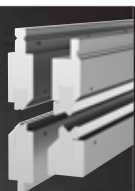
24h

500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg



STE-Z-TOOL HOLDERS AND Z-TOOL INSERTS Z 1,0 – 15,0

see chapter09



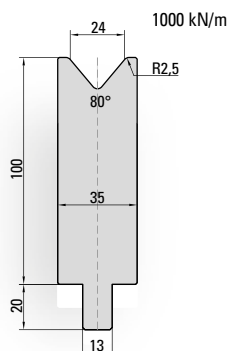
Tool lengths STE-System Trumpf

80° Dies, H = 100 mm

25.207

24h

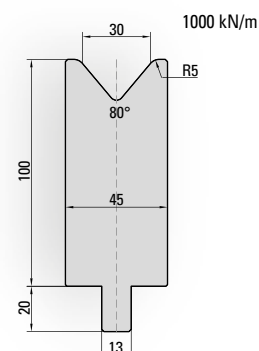
500 mm	14,0 kg
300 mm	8,4 kg
200 mm	5,6 kg
100 mm	2,8 kg
550 mm sectionalized	15,4 kg



25.208

24h

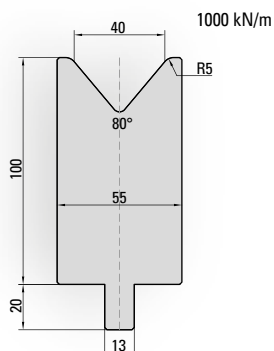
500 mm	17,5 kg
300 mm	10,5 kg
200 mm	7,0 kg
100 mm	3,5 kg
550 mm sectionalized	19,3 kg



25.209

24h

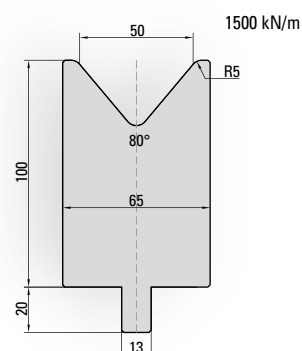
500 mm	20,5 kg
300 mm	12,3 kg
200 mm	8,2 kg
100 mm	4,1 kg
550 mm sectionalized	22,6 kg



25.210

24h

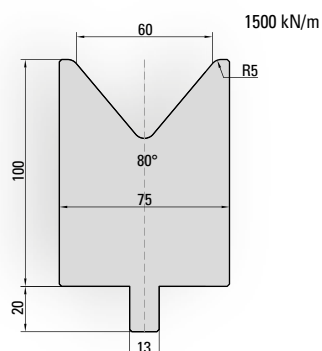
500 mm	23,0 kg
300 mm	13,8 kg
200 mm	9,2 kg
100 mm	4,6 kg
550 mm sectionalized	25,3 kg



25.111

24h

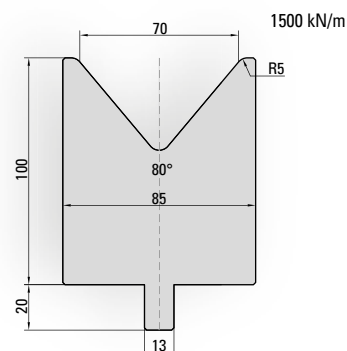
500 mm	26,0 kg
300 mm	15,6 kg
200 mm	10,4 kg
100 mm	5,2 kg
550 mm sectionalized	28,6 kg



25.112

24h

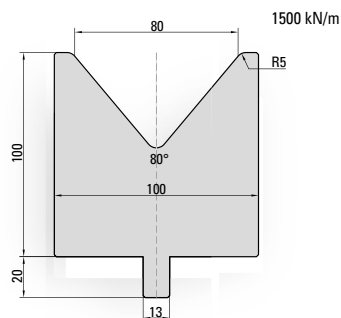
500 mm	28,0 kg
300 mm	16,8 kg
200 mm	11,2 kg
100 mm	5,6 kg
550 mm sectionalized	30,8 kg



80° Die, H = 100 mm

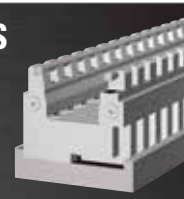
25.113
24h

500 mm	32,0 kg
300 mm	19,2 kg
200 mm	12,8 kg
100 mm	6,4 kg
550 mm sectionalized	35,2 kg



STE-ADJUSTABLE DIES

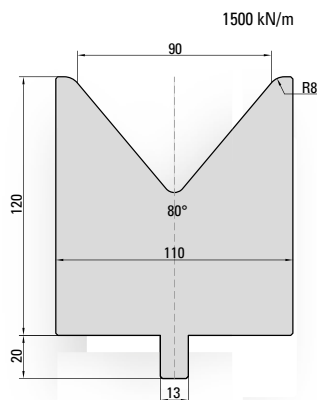
see chapter 11



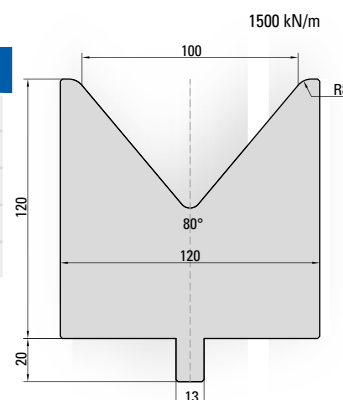
80° Dies, H = 120 mm

25.114
24h

500 mm	42,5 kg
300 mm	25,5 kg
200 mm	17,0 kg
100 mm	8,5 kg
550 mm sectionalized	46,8 kg


25.115
24h

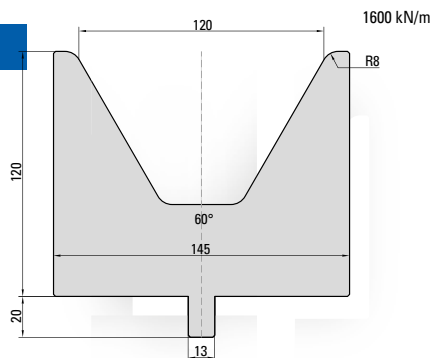
500 mm	44,5 kg
300 mm	26,7 kg
200 mm	17,8 kg
100 mm	8,9 kg
550 mm sectionalized	49,0 kg



60° Die, H = 120 mm

25.116
24h

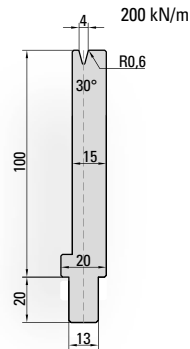
500 mm	45,5 kg
300 mm	27,3 kg
200 mm	18,2 kg
100 mm	9,1 kg
550 mm sectionalized	50,0 kg



30° Dies, H = 100 mm

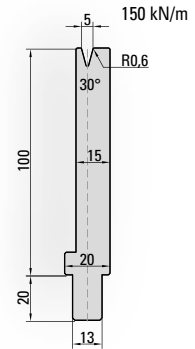
25.400

500 mm		7,0 kg
300 mm		4,2 kg
200 mm		2,8 kg
100 mm		1,4 kg
550 mm sectionalized		7,7 kg



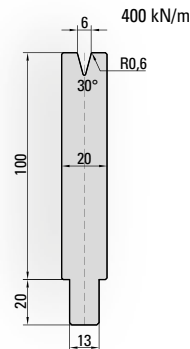
25.500

500 mm		7,0 kg
300 mm		4,2 kg
200 mm		2,8 kg
100 mm		1,4 kg
550 mm sectionalized		7,7 kg



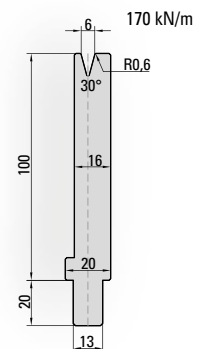
25.401

500 mm		9,0 kg
300 mm		5,4 kg
200 mm		3,6 kg
100 mm		1,8 kg
550 mm sectionalized		9,9 kg



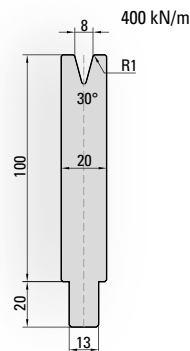
25.501

500 mm		7,5 kg
300 mm		4,5 kg
200 mm		3,0 kg
100 mm		1,5 kg
550 mm sectionalized		8,3 kg



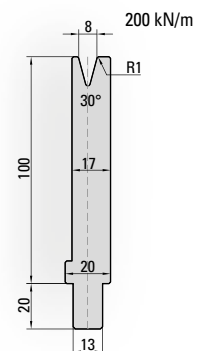
25.402

500 mm		9,0 kg
300 mm		5,4 kg
200 mm		3,6 kg
100 mm		1,8 kg
550 mm sectionalized		9,9 kg



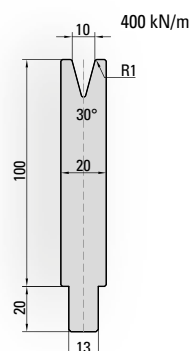
25.502

500 mm		7,5 kg
300 mm		4,5 kg
200 mm		3,0 kg
100 mm		1,5 kg
550 mm sectionalized		8,3 kg



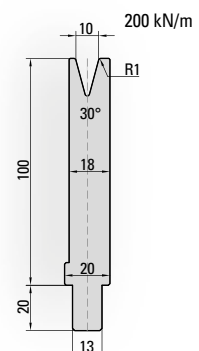
25.403

500 mm		9,0 kg
300 mm		5,4 kg
200 mm		3,6 kg
100 mm		1,8 kg
550 mm sectionalized		9,9 kg



25.503

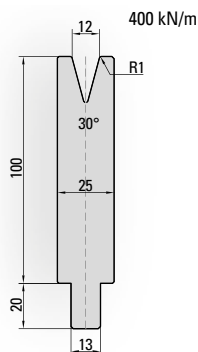
500 mm		8,0 kg
300 mm		4,8 kg
200 mm		3,2 kg
100 mm		1,6 kg
550 mm sectionalized		8,8 kg



30° Dies, H = 100 mm

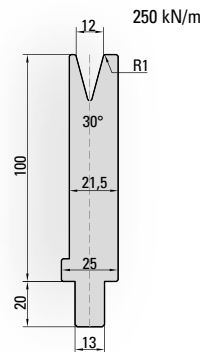
25.404

500 mm	10,0 kg
300 mm	6,0 kg
200 mm	4,0 kg
100 mm	2,0 kg
550 mm sectionalized	11,0 kg



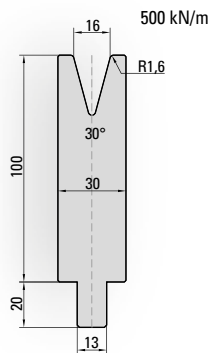
25.504

500 mm	
300 mm	5,4 kg
200 mm	3,6 kg
100 mm	1,8 kg
550 mm sectionalized	9,9 kg



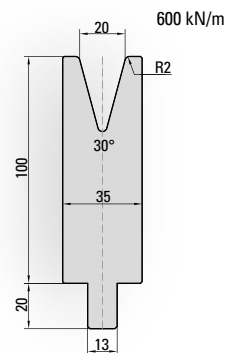
25.405

500 mm	12,0 kg
300 mm	7,2 kg
200 mm	4,8 kg
100 mm	2,4 kg
550 mm sectionalized	13,2 kg



25.406

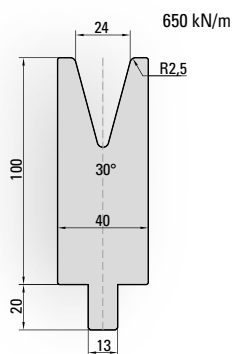
500 mm	13,0 kg
300 mm	7,8 kg
200 mm	5,2 kg
100 mm	2,6 kg
550 mm sectionalized	14,3 kg



25.407

24h

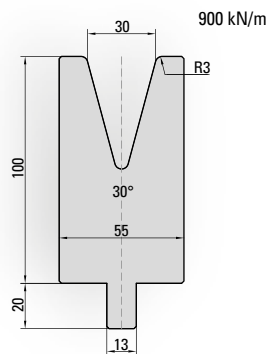
500 mm	14,5 kg
300 mm	8,7 kg
200 mm	5,8 kg
100 mm	2,9 kg
550 mm sectionalized	16,0 kg



25.408

24h

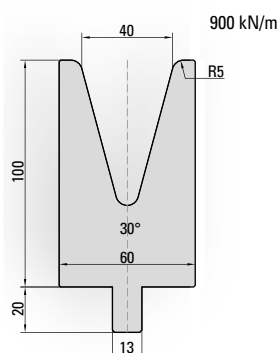
500 mm	19,0 kg
300 mm	11,4 kg
200 mm	7,6 kg
100 mm	3,8 kg
550 mm sectionalized	20,9 kg



25.409

24h

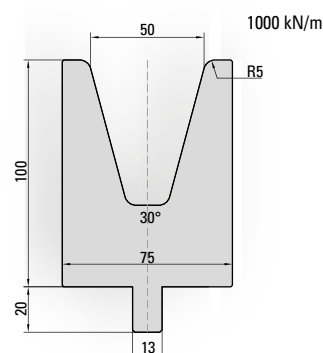
500 mm	18,5 kg
300 mm	11,1 kg
200 mm	7,4 kg
100 mm	3,7 kg
550 mm sectionalized	20,4 kg



25.410

24h

500 mm	21,5 kg
300 mm	12,9 kg
200 mm	8,6 kg
100 mm	4,3 kg
550 mm sectionalized	23,7 kg



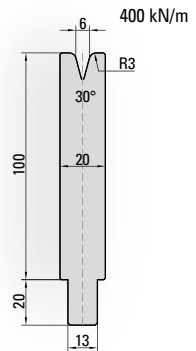
30° Dies, H = 100 mm, R = 3,0

ADVANTAGES

- Reduces marks on bended sheets
- Applicable for foil-coated sheets

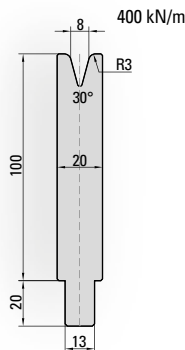
25.421

500 mm		9,0 kg
300 mm		5,4 kg
200 mm		3,6 kg
100 mm		1,8 kg
550 mm sectionalized		9,9 kg



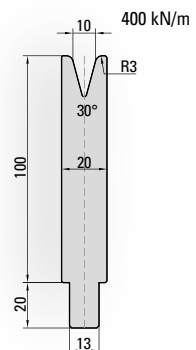
25.422

500 mm		9,0 kg
300 mm		5,4 kg
200 mm		3,6 kg
100 mm		1,8 kg
550 mm sectionalized		9,9 kg



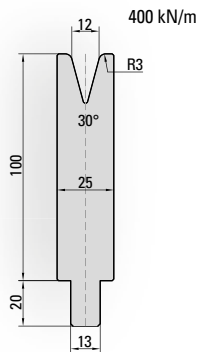
25.423

500 mm		8,5 kg
300 mm		5,1 kg
200 mm		3,4 kg
100 mm		1,7 kg
550 mm sectionalized		9,4 kg



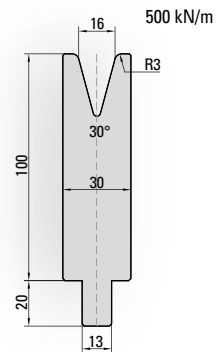
25.424

500 mm		10,0 kg
300 mm		6,0 kg
200 mm		4,0 kg
100 mm		2,0 kg
550 mm sectionalized		11,0 kg



25.425

500 mm		12,0 kg
300 mm		7,2 kg
200 mm		4,8 kg
100 mm		2,4 kg
550 mm sectionalized		13,2 kg



Drill hole 70.800 in 30° die 25.402

STE-INFO

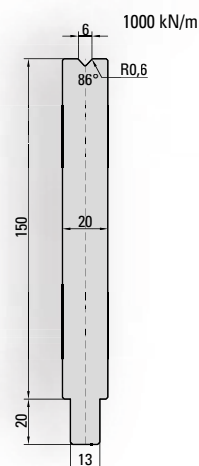


Dies with this symbol can be used with an additional drill hole 70.800 with screwable flattening die 60.120 - further information see page 79!

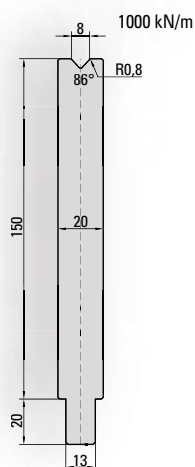
86° Dies, H = 150 mm



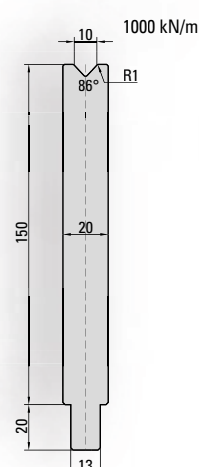
25.601	24h
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg



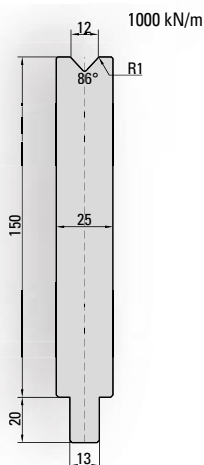
25.602	24h
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg



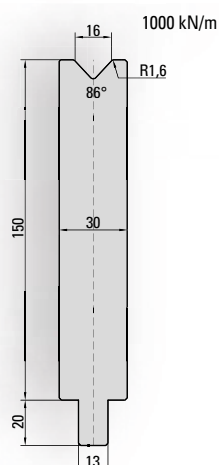
25.603	24h
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg



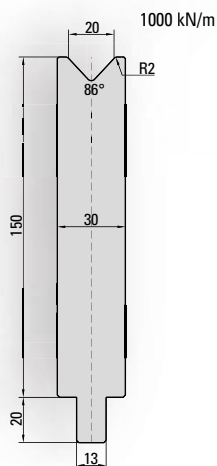
25.604	24h
500 mm	15,5 kg
300 mm	9,3 kg
200 mm	6,2 kg
100 mm	3,1 kg
550 mm sectionalized	17,1 kg



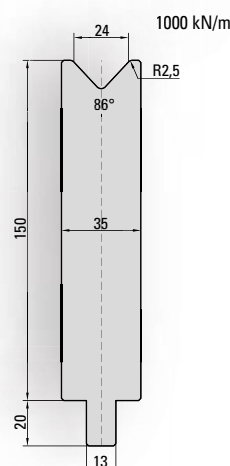
25.605	24h
500 mm	18,0 kg
300 mm	10,8 kg
200 mm	7,2 kg
100 mm	3,6 kg
550 mm sectionalized	19,8 kg



25.606	24h
500 mm	18,0 kg
300 mm	10,8 kg
200 mm	7,2 kg
100 mm	3,6 kg
550 mm sectionalized	19,8 kg



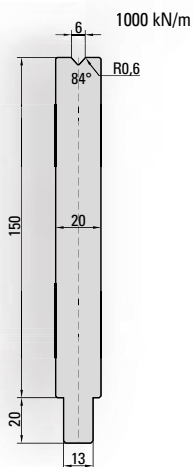
25.607	24h
500 mm	21,0 kg
300 mm	12,6 kg
200 mm	8,4 kg
100 mm	4,2 kg
550 mm sectionalized	23,1 kg



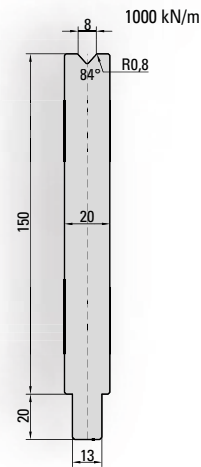
84° Dies, H = 150 mm

25.621
24h

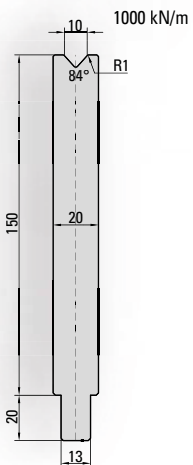
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg


25.622
24h

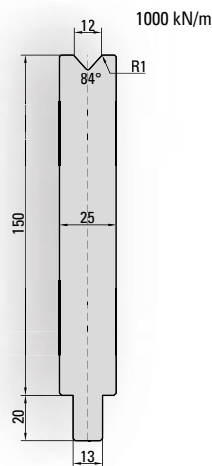
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg


25.623
24h

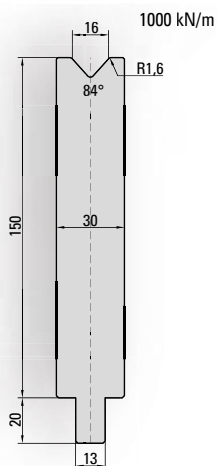
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg


25.624
24h

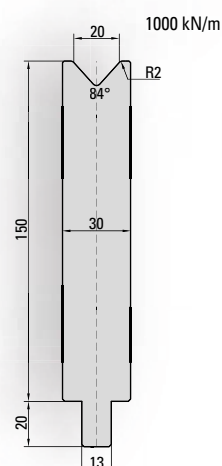
500 mm	15,5 kg
300 mm	9,3 kg
200 mm	6,2 kg
100 mm	3,1 kg
550 mm sectionalized	17,1 kg


25.625
24h

500 mm	18,0 kg
300 mm	10,8 kg
200 mm	7,2 kg
100 mm	3,6 kg
550 mm sectionalized	19,8 kg


25.626
24h

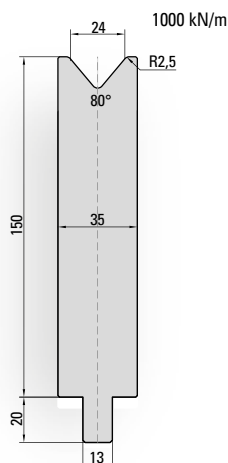
500 mm	18,0 kg
300 mm	10,8 kg
200 mm	7,2 kg
100 mm	3,6 kg
550 mm sectionalized	19,8 kg



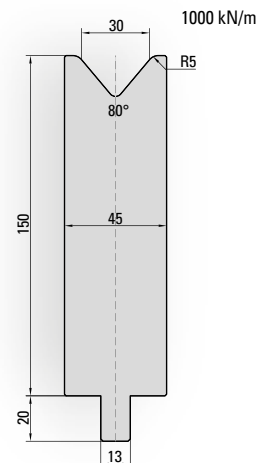
80° Dies, H = 150 mm

25.627
24h

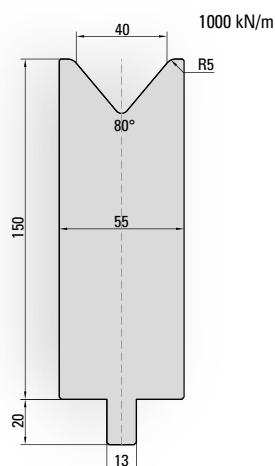
500 mm	21,0 kg
300 mm	12,6 kg
200 mm	8,4 kg
100 mm	4,2 kg
550 mm sectionalized	23,1 kg


25.628
24h

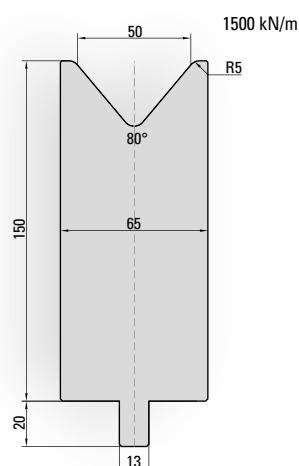
500 mm	26,0 kg
300 mm	15,6 kg
200 mm	10,4 kg
100 mm	5,2 kg
550 mm sectionalized	28,6 kg


25.629
24h

500 mm	31,0 kg
300 mm	18,6 kg
200 mm	12,4 kg
100 mm	6,2 kg
550 mm sectionalized	34,1 kg


25.630
24h

500 mm	36,0 kg
300 mm	21,6 kg
200 mm	14,4 kg
100 mm	7,2 kg
550 mm sectionalized	39,6 kg

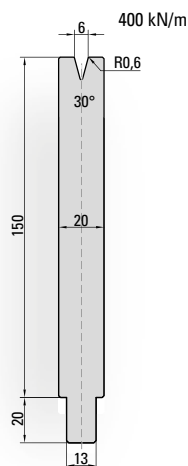


30° Dies, H = 150 mm

25.901

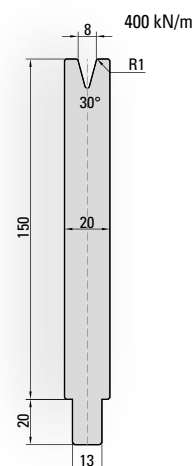
500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg

60.130


25.902

500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg

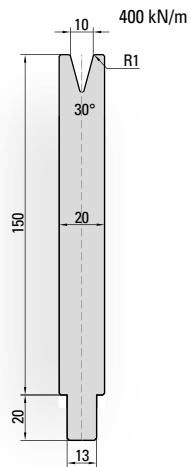
60.130



30° Dies, H = 150 mm

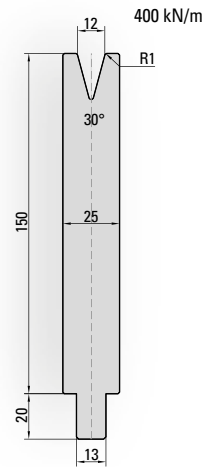
25.903

500 mm	12,5 kg
300 mm	7,5 kg
200 mm	5,0 kg
100 mm	2,5 kg
550 mm sectionalized	13,8 kg



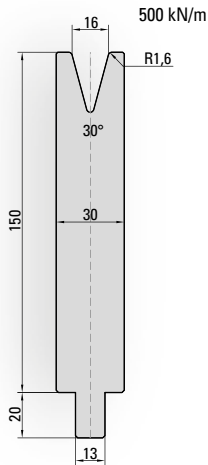
25.904

500 mm	15,0 kg
300 mm	9,0 kg
200 mm	6,0 kg
100 mm	3,0 kg
550 mm sectionalized	16,5 kg



25.905

500 mm	17,5 kg
300 mm	10,5 kg
200 mm	7,0 kg
100 mm	3,5 kg
550 mm sectionalized	19,3 kg



STE-INFO

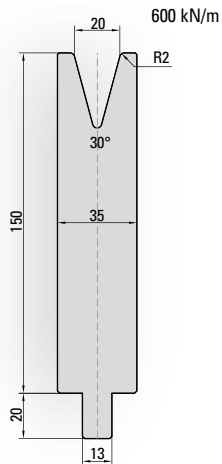


Dies with this symbol can be used with an additional drill hole 70.810 with screwable flattening die 60.130 - further information see page 79!

25.906

24h

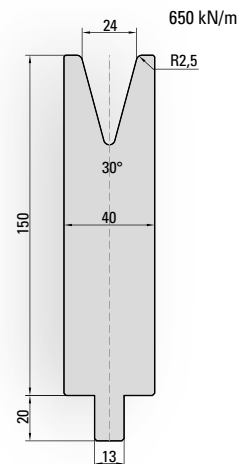
500 mm	20,0 kg
300 mm	12,0 kg
200 mm	8,0 kg
100 mm	4,0 kg
550 mm sectionalized	22,0 kg



25.907

24h

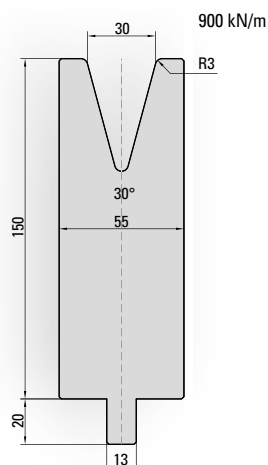
500 mm	22,5 kg
300 mm	13,5 kg
200 mm	9,0 kg
100 mm	4,5 kg
550 mm sectionalized	24,8 kg



25.908

24h

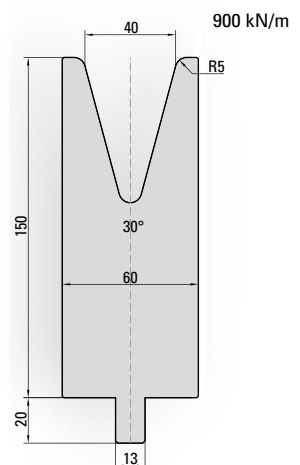
500 mm	30,0 kg
300 mm	18,0 kg
200 mm	12,0 kg
100 mm	6,0 kg
550 mm sectionalized	33,0 kg



25.909

24h

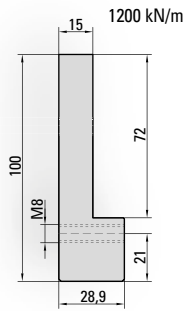
500 mm	30,0 kg
300 mm	18,0 kg
200 mm	12,0 kg
100 mm	6,0 kg
550 mm sectionalized	33,0 kg



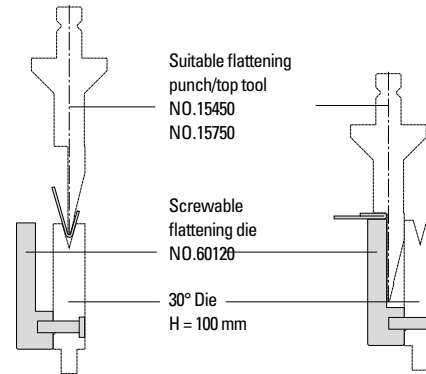
Screwable flattening die H = 100 mm

60.120 24h

500 mm		7,5 kg
300 mm		4,5 kg
200 mm		3,0 kg
100 mm		1,5 kg
550 mm sectionalized		8,3 kg



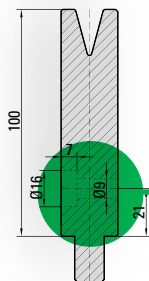
EXAMPLE OF USE



Only usable with i-axis displacement

70.800

500 mm	
300 mm	
200 mm	
100 mm	
550 mm sectionalized	



Drill hole in the die for the use of screwable flattening die NO. 60.120

STE-INFO

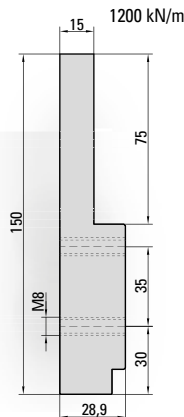


Suitable 30° dies H = 100 mm
see page 72 – 74

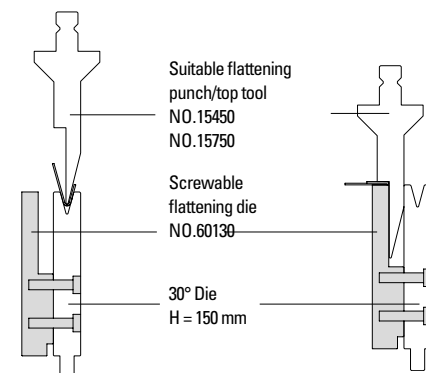
Screwable flattening die H = 150 mm

60.130 24h

500 mm		13,0 kg
300 mm		7,8 kg
200 mm		5,2 kg
100 mm		2,6 kg
550 mm sectionalized		14,3 kg



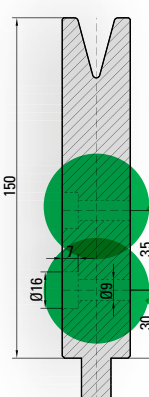
EXAMPLE OF USE



Only usable with i-axis displacement

70.810

500 mm	
300 mm	
200 mm	
100 mm	
550 mm sectionalized	



Drill holes in the die for the use of screwable flattening die NO. 60.130

STE-INFO



Suitable 30° dies H = 150 mm
see page 77 – 78

Flattening punches/top tools and flattening dies

15.902

24h

Safety pins

500 mm 14,0 kg

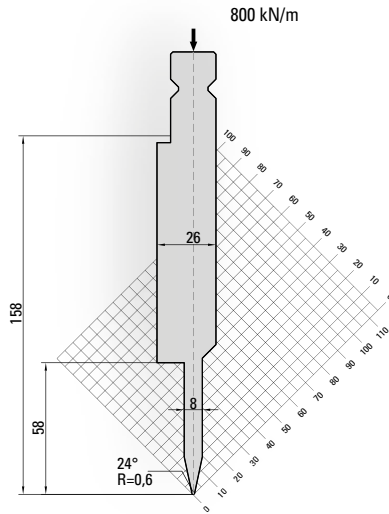
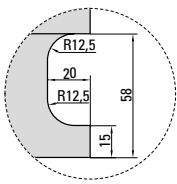
Simple Clamp

300 mm 8,4 kg

200 mm 5,6 kg

100 mm 2,8 kg

550 mm sectionalized 15,4 kg



25.992

24h

500 mm 21,5 kg

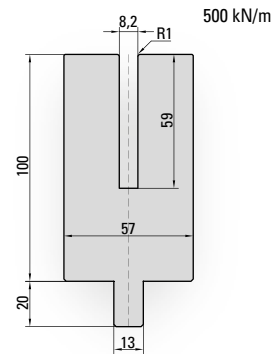
300 mm 12,9 kg

200 mm 8,6 kg

100 mm 4,3 kg

550 mm sectionalized 23,6 kg

Max. 1,2 mm material thickness
 $R_m = 400 \text{ N/mm}^2$



15.904

24h

Safety pins

500 mm 14,5 kg

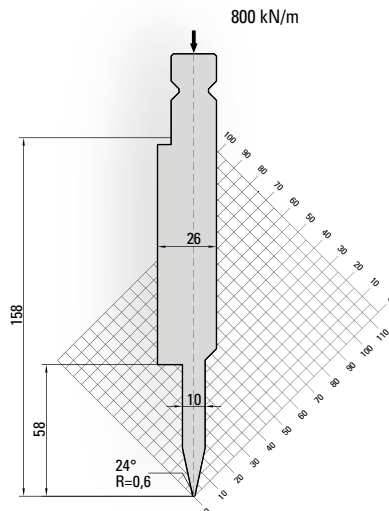
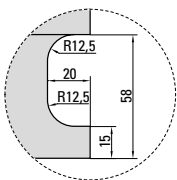
Simple Clamp

300 mm 8,7 kg

200 mm 5,8 kg

100 mm 2,9 kg

550 mm sectionalized 16,0 kg



25.994

24h

500 mm 21,0 kg

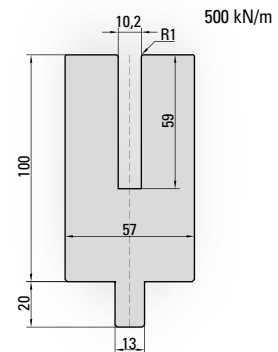
300 mm 12,6 kg

200 mm 8,4 kg

100 mm 4,2 kg

550 mm sectionalized 23,1 kg

Max. 1,8 mm material thickness
 $R_m = 400 \text{ N/mm}^2$



15.905

24h

Safety pins

500 mm 15,0 kg

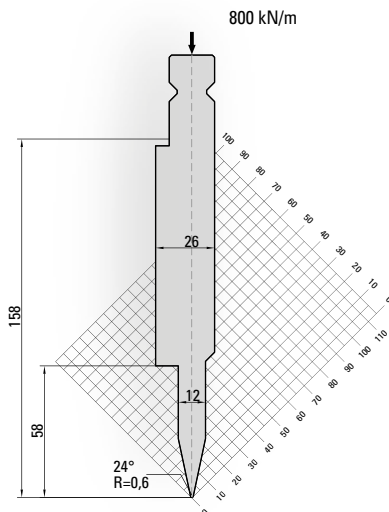
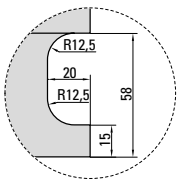
Simple Clamp

300 mm 9,0 kg

200 mm 6,0 kg

100 mm 3,0 kg

550 mm sectionalized 16,5 kg



25.995

24h

500 mm 20,5 kg

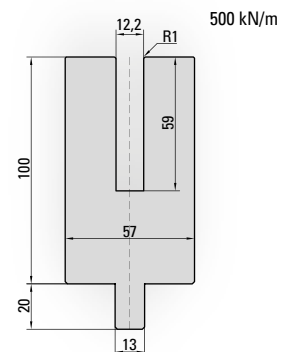
300 mm 12,3 kg

200 mm 8,2 kg

100 mm 4,1 kg

550 mm sectionalized 22,6 kg

Max. 2,5 mm material thickness
 $R_m = 400 \text{ N/mm}^2$



Flattening punches/top tools and flattening dies

EXAMPLE OF USE

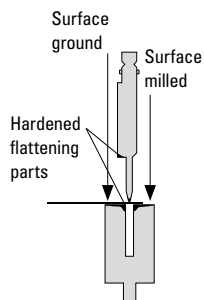


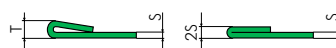
Table of force for flattening

Material: $R_m = 400 \text{ N/mm}^2$ (St)

S (mm)	(t/m)	T (mm)	(t/m)	2S (mm)
0,6	9	3,0	23	1,2
0,8	12	3,0	32	1,6
1,0	15	3,5	40	2,0
1,25	17	3,5	50	2,5
1,5	22	4,6	63	3,0
2,0	30	5,5	80	4,0
2,5	55	6,5	90	5,0
3,0	70	8,0	100	6,0

Material: $R_m = 700 \text{ N/mm}^2$ (VA)

S (mm)	(t/m)	T (mm)	(t/m)	2S (mm)
0,6	15	3,0	35	1,2
0,8	20	3,0	50	1,6
1,0	25	3,5	60	2,0
1,25	26	3,5	80	2,5
1,5	38	4,6	95	3,0
2,0	50	5,5	130	4,0



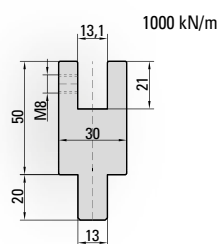
Die heightenings

60.960

24h

500 mm

5,8 kg



60.965

24h

500 mm

16,6 kg

