

PRECISION BENDING SOLUTIONS

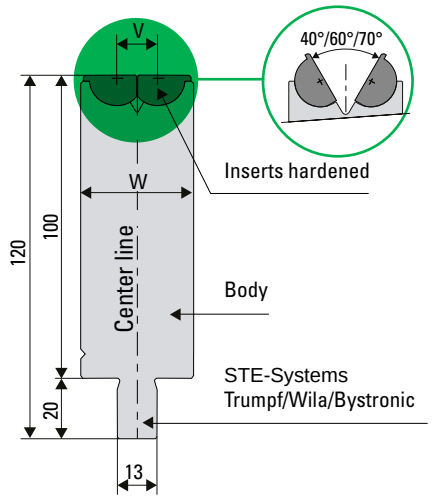
WINGBEND SYSTEM

STE-UNIBEND AND STE-WINGBEND PLUS

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Quality and precision

- Optimum materials
- Hardened according to the operation purpose
- Precision ground
- Guaranteed exchangeability and parallelism
- Tool marking with all technical information



Product advantages

- Reduces bending marks on sheets
- Short flanges with minimal marking
- Holes close to the bending line without deformation
- Ideal for diagonal and tapered bending
- Repeatability for punched sheets with steady flanges and exact angles
- Bulb and chequered plates with minimal marking at the visible surface
- No damage of the foil while bending laminated sheets
- Less tool change

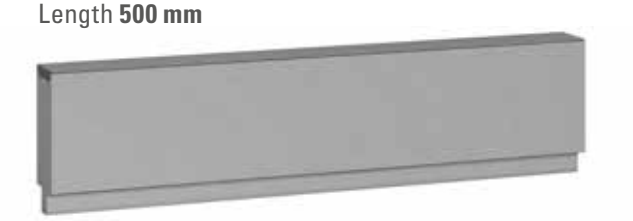
STE-CONTACT PARTNER

You will find your personal contact partner at

Tool lengths

DIES

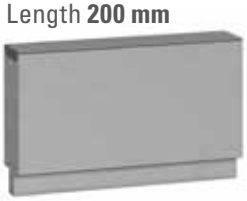
Length **500 mm**



Length **300 mm**



Length **200 mm**

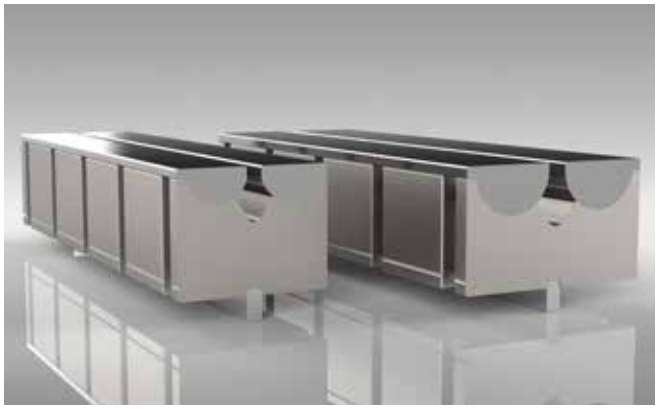


Length **100 mm**

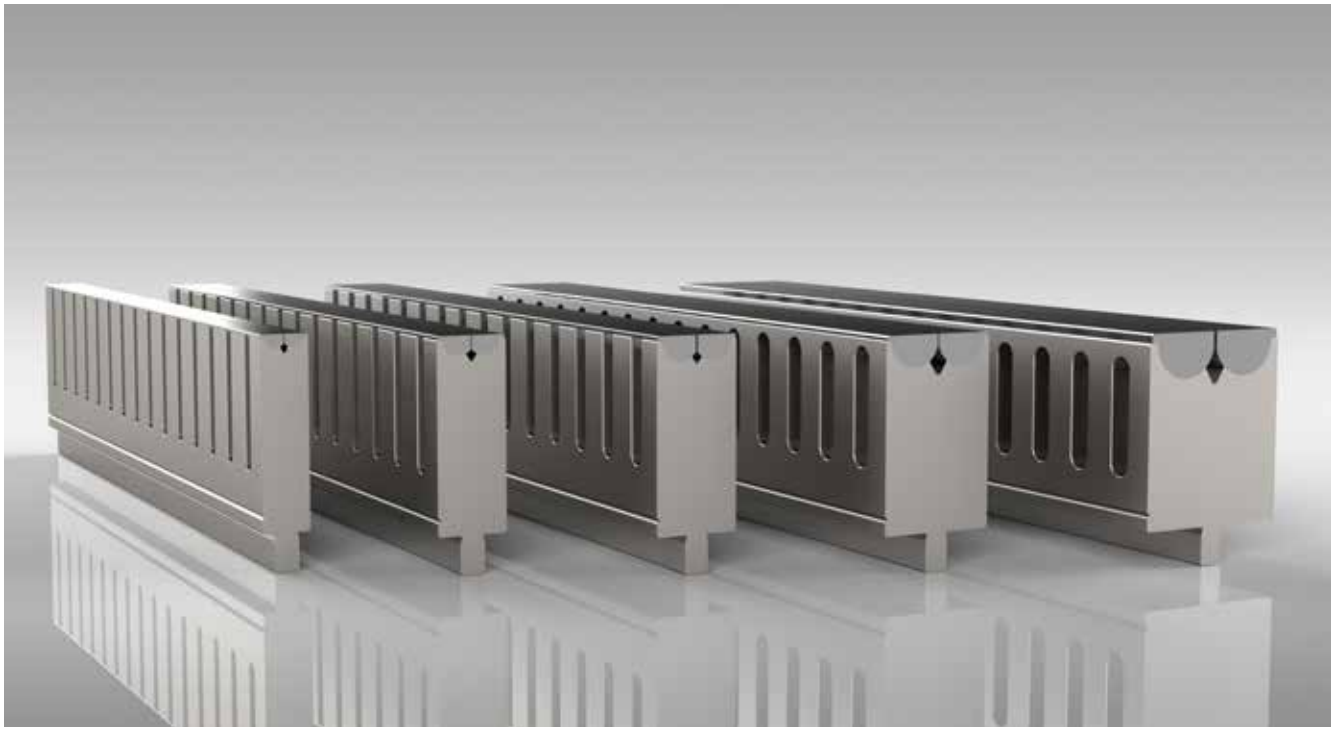


Length **50 mm**





Dies UniBend 29.600 and 29.850



Dies UniBend 29.000, 29.100, 29.150, 29.200 and 29.300

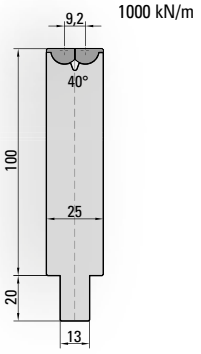
Dies WingBend

29.000 24h

500 mm	10,0 kg
300 mm	6,0 kg
200 mm	4,0 kg
100 mm	2,0 kg
50 mm	1,0 kg

Recommended material thicknesses:
R_m = 450 N/mm² max. 2,0 mm
R_m = 700 N/mm² max. 1,5 mm

1000 kN/m

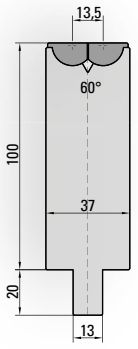


29.100 24h

500 mm	14,0 kg
300 mm	8,4 kg
200 mm	5,6 kg
100 mm	2,8 kg
50 mm	1,4 kg

Recommended material thicknesses:
R_m = 450 N/mm² max. 3,0 mm
R_m = 700 N/mm² max. 2,0 mm

1300 kN/m

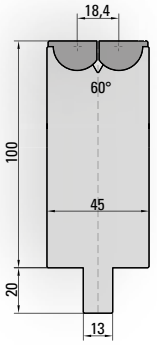


29.150 24h

500 mm	15,0 kg
300 mm	9,0 kg
200 mm	6,0 kg
100 mm	3,0 kg
50 mm	1,5 kg

Recommended material thicknesses:
R_m = 450 N/mm² max. 4,0 mm
R_m = 700 N/mm² max. 3,0 mm

1500 kN/m

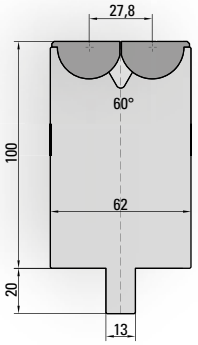


29.200 24h

500 mm	22,5 kg
300 mm	13,5 kg
200 mm	9,0 kg
100 mm	4,5 kg
50 mm	2,3 kg

Recommended material thicknesses:
R_m = 450 N/mm² max. 5,0 mm
R_m = 700 N/mm² max. 4,0 mm

1700 kN/m

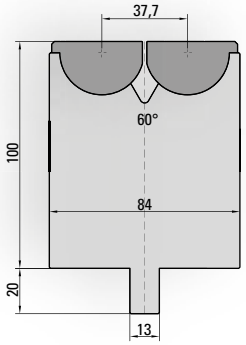


29.300 24h

500 mm	29,0 kg
300 mm	17,4 kg
200 mm	11,6 kg
100 mm	5,8 kg
50 mm	2,9 kg

Recommended material thicknesses:
R_m = 450 N/mm² max. 6,0 mm
R_m = 700 N/mm² max. 5,0 mm

2000 kN/m

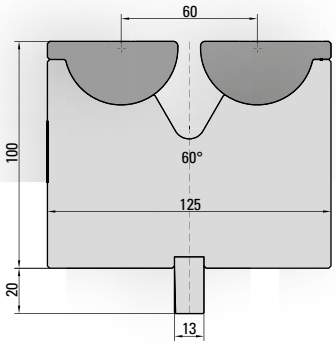


29.600 24h

500 mm	45,3 kg
300 mm	27,2 kg
200 mm	18,2 kg

Recommended material thicknesses:
R_m = 450 N/mm² max. 8,0 mm
R_m = 700 N/mm² max. 6,0 mm

2000 kN/m

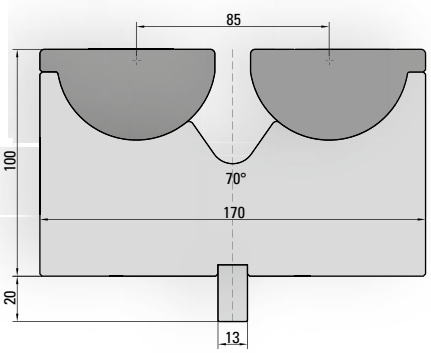


29.850 24h

500 mm	61,5 kg
300 mm	36,8 kg
200 mm	24,6 kg

Recommended material thicknesses:
R_m = 450 N/mm² max. 12,0 mm
R_m = 700 N/mm² max. 10,0 mm

2500 kN/m



STE-TEST BENDING

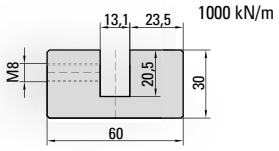
First test bending - then order!
Free of charge - with your sample sheets in your or our house!

Die adaptors

60.910 24h

1000 mm	15,0 kg
500 mm	7,5 kg

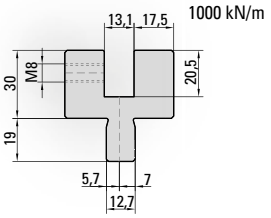
STE-System Amada ➔
STE-Systems Trumpf/Wila/Bystronic



60.935 24h

1000 mm	11,0 kg
500 mm	5,5 kg

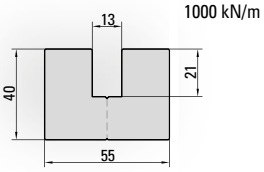
STE-System LVD ➔
STE-Systems Trumpf/Wila/Bystronic



60.940 24h

500 mm	7,5 kg

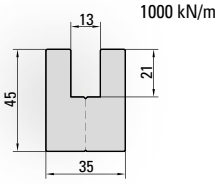
STE-System EHT ➔
STE-Systems Trumpf/Wila/Bystronic



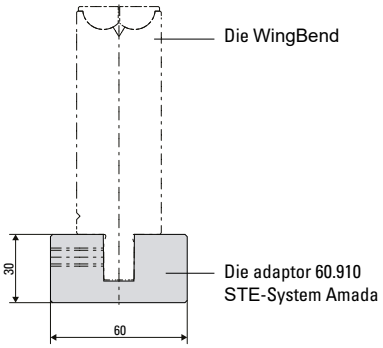
60.950 24h

500 mm	4,5 kg

STE-System Weinbrenner ➔
STE-Systems Trumpf/Wila/Bystronic



EXAMPLE OF USE



Lubricating grease

40.629 24h

100 ml



For lubrication of WingBend dies

STE-WingBend

Technical data Table of force: Tensile strength R_m = 450 N/mm², bending angle 90°

Model	29.000	29.100	29.150	29.200	29.300	29.600	29.850
Radius of the punch/top tool	R 1,0	R 1,0	R 1,0	R 1,0	R 1,0	R 6,0	R 10,0
Material thickness 0,5 mm	30	30	20				
Material thickness 1,0 mm	100	60	40	30			
Material thickness 1,5 mm	240	130	90	50			
Material thickness 2,0 mm	530	260	150	100	80		
Material thickness 2,5 mm		460	270	160	130		
Material thickness 3,0 mm		770	510	270	180		
Material thickness 4,0 mm			970	530	400		
Material thickness 5,0 mm				880	660	210	
Material thickness 6,0 mm					1050	580	
Material thickness 8,0 mm						1310	720
Material thickness 10,0 mm							1350
Material thickness 12,0 mm							1630

Refererence value for minimum flange: mild steel

Model	29.000		29.100	29.150		29.200		29.300		29.600		29.850	
Radius of the punch/top tool	R 0,5	R 1,0	R 1,0	R 1,0	R 3,0	R 1,0	R 4,0	R 1,0	R 4,0	R 4,0	R 6,0	R 6,0	R 10,0
Material thickness 0,5 mm	4,6	4,7	5,6	10,0	10,4								
Material thickness 1,0 mm	5,3	5,3	6,8	10,1	10,5	15,6	16,0						
Material thickness 1,5 mm	5,6	5,7	7,6	10,6	11,0	16,0	16,6						
Material thickness 2,0 mm	5,9	6,1	8,0	10,8	11,2	16,3	17,8	19,4	19,5				
Material thickness 2,5 mm			8,2	11,1	11,5	16,4	17,9	19,8	20,0				
Material thickness 3,0 mm			8,3	11,4	11,9	16,5	18,5	20,6	20,6				
Material thickness 4,0 mm				13,1	13,5	16,8	18,7	21,1	21,2				
Material thickness 5,0 mm						17,0	19,3	22,0	22,0	40,4	40,6		
Material thickness 6,0 mm								23,4	23,2	41,0	41,2		
Material thickness 8,0 mm										42,4	43,0	54,8	55,0
Material thickness 10,0 mm												55,7	56,3
Material thickness 12,0 mm												57,3	57,5

Table of force and reference values for stainless steel and aluminium on our Website:
www.softooling.com



Die WingBend 29.850 and die adaptor 60.910



Die WingBend 29.150 and die adaptor 60.910

Die WingBend VARIO

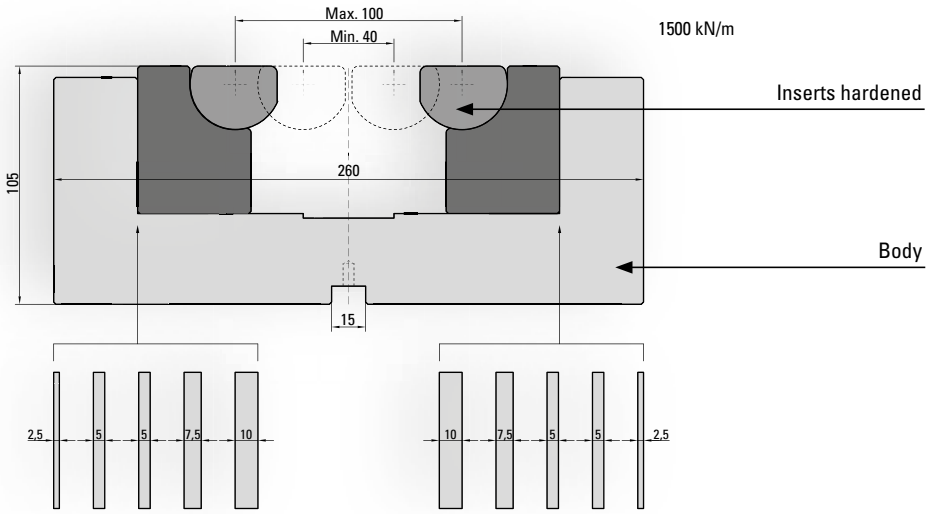
ADDITIONAL PRODUCT ADVANTAGES WingBend VARIO

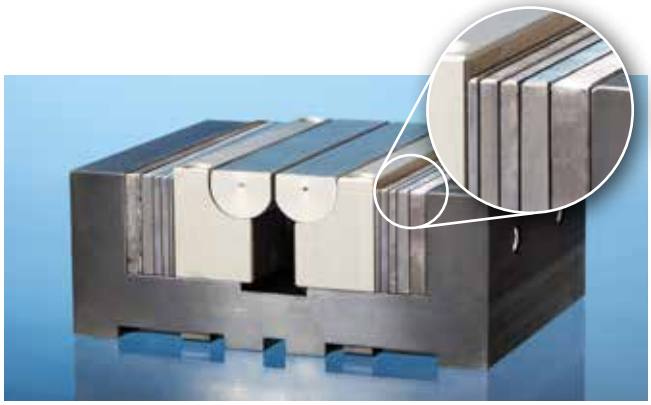
- ► Flexible adjustable V-openings
  - ► V = 40 – 100 mm
- ► Die width fast and easy adjustable, by changing strips, in 5 mm steps

62.094 24h

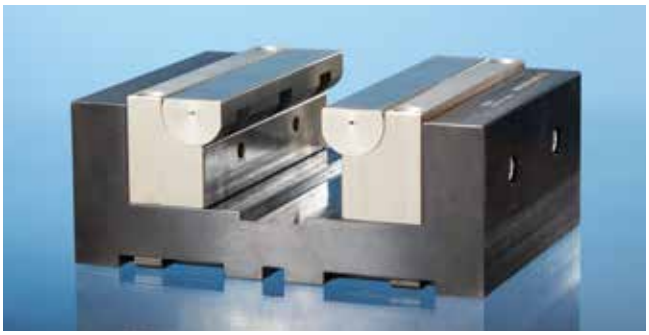
200 mm | 40,0 kg

Die WingBend VARIO including inserts type flat and strips in a set:
Width = 2 x each 2,5/5/5/7,5/10
max. 12,0 mm material thickness





Strips inserted, V = 40 mm



Without strips, V = 100 mm







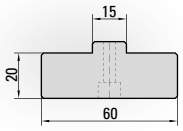
Bending results withWingBend VARIO

Die holders

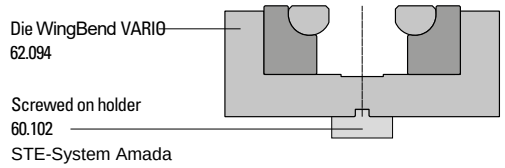
STE-SYSTEM AMADA

60.102 24h

198 mm | 2,0 kg



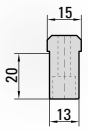
EXAMPLE OF USE



STE-SYSTEMS TRUMPF/WILA/BYSTRONIC

60.103 24h

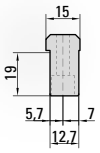
198 mm | 0,6 kg



STE-SYSTEM LVD

60.105 24h

198 mm | 0,6 kg



STE-INFO

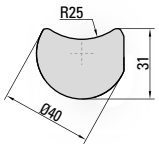
More die holders available!
Prices and delivery times on request!

Changeable inserts

62.181 24h

200 mm | 1,5 kg

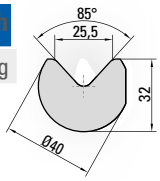
Insert type concave for 62.094
Price per piece



62.182 24h

200 mm | 1,5 kg

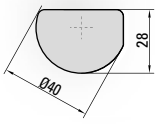
Insert type V for 62.094
Price per piece



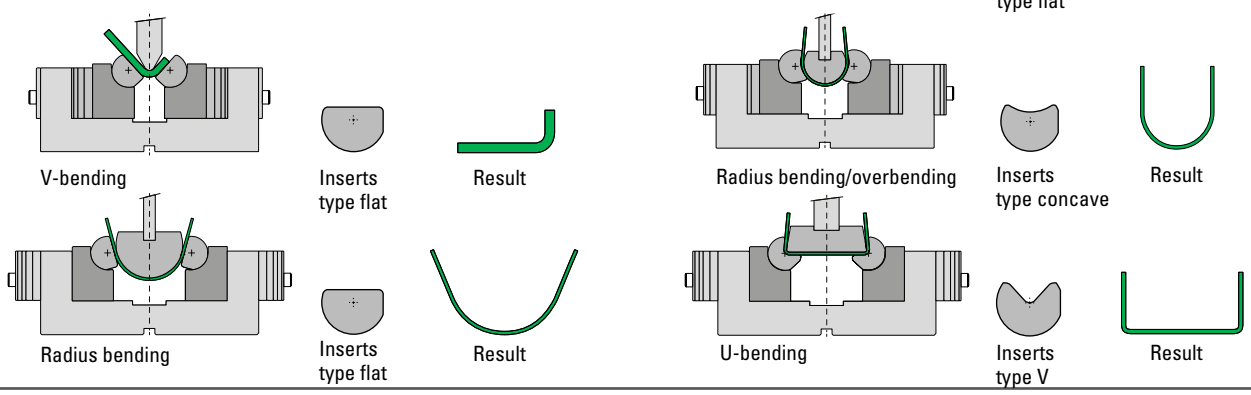
62.183 24h

200 mm | 1,5 kg

Insert type flat for 62.094
Price per piece



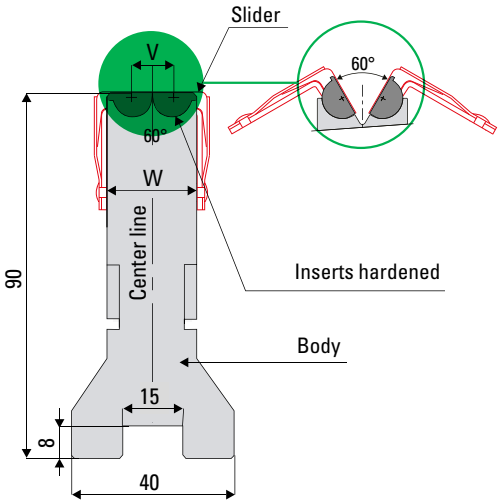
EXAMPLES OF USE



Quality and precision

- ▶ Optimum materials
- ▶ Hardened according to the operation purpose
- ▶ Precision ground
- ▶ Guaranteed exchangeability and parallelism
- ▶ Tool marking with all technical information

WingBend PLUS



Product advantages

- ▶ Avoids bending marks on sheets via Slider
- ▶ Short flanges with minimal marking
- ▶ Holes close to the bending line without deformation
- ▶ Ideal for diagonal and tapered bending
- ▶ Repeatability for punched sheets with steady flanges and exact angles
- ▶ Bulb and chequered plates with minimal marking at the visible surface
- ▶ No tool contamination while bending galvanized material or aluminium
- ▶ No reworking of workpieces necessary
- ▶ Increased product quality
- ▶ Less tool change

STE-CONTACT PARTNER

You will find your personal contact partner at

Tool lengths

DIES

Length **500 mm**



Length **200 mm**



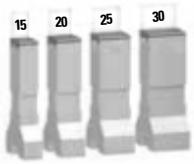
Length **100 mm**



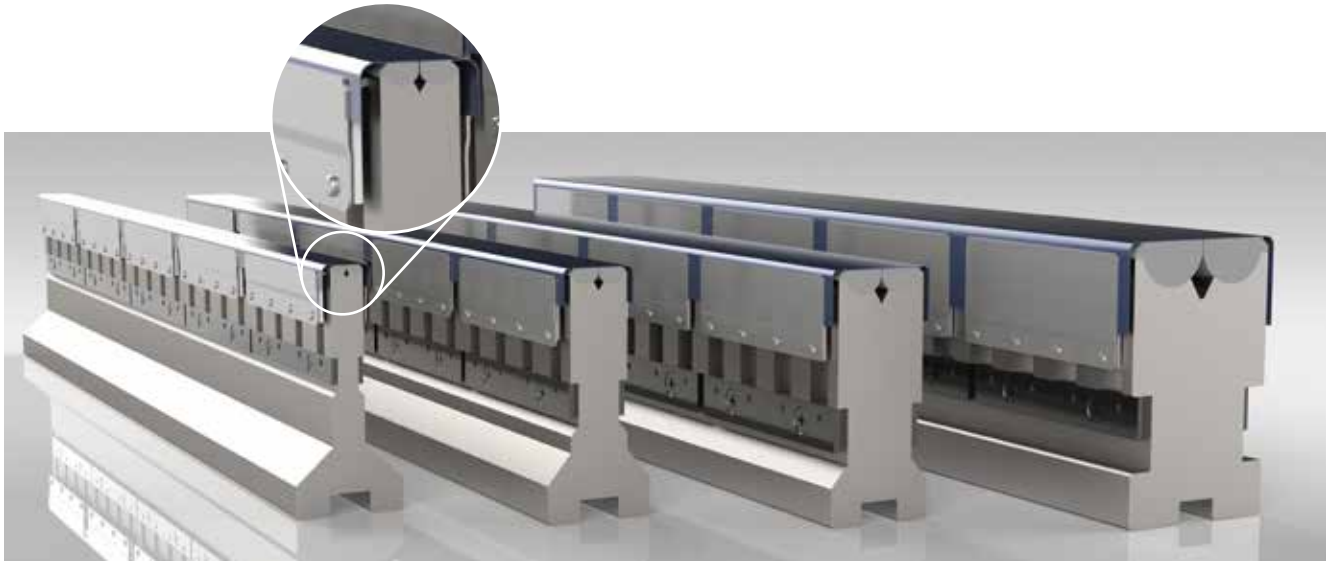
Length **50 mm**



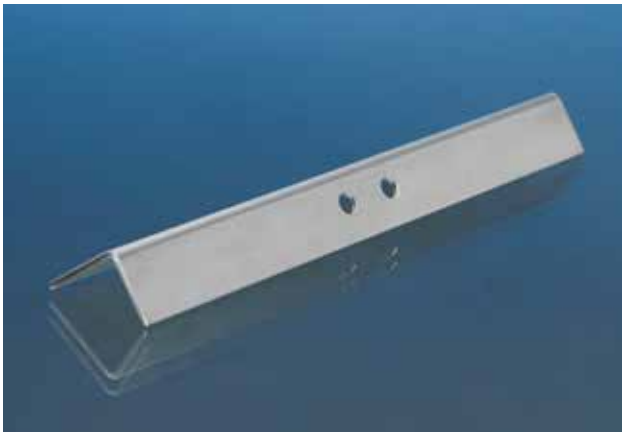
Length **90 mm sectionalized**



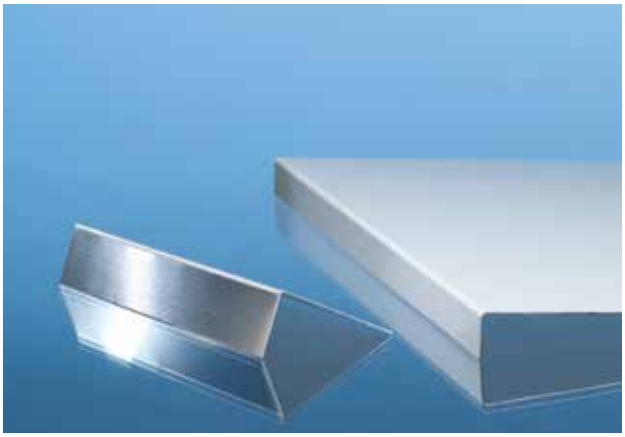
- Sectionalized dies are delivered as a complete set
- 4 Segments



Dies WingBend PLUS 62.120, 62.230, 62.350 and 62.650s (incl. Slider)



Holes near the bending line without deformation possible



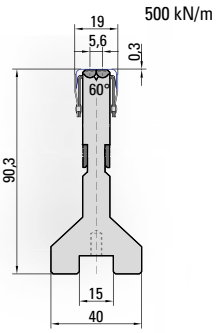
Anodized aluminium and polished stainless steel sheet with no visible bending marks on the surface

Dies WingBend PLUS

62.120 — 24h — 500 kN/m

500 mm	1335,– $	5,5 kg
200 mm		2,2 kg
100 mm		1,1 kg
50 mm		0,6 kg
90 mm sectionalized	701,– $	1,0 kg

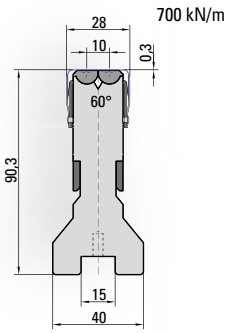
Incl. Slider in particular tool length
Recommended material thicknesses:
R_m = 450 N/mm² max. 1,2 mm
R_m = 700 N/mm² max. 1,0 mm



62.230 — 24h — 700 kN/m

500 mm	8,0 kg
200 mm	3,2 kg
100 mm	1,6 kg
50 mm	0,8 kg
90 mm sectionalized	1,5 kg

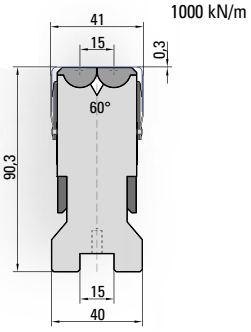
Incl. Slider in particular tool length
Recommended material thicknesses:
R_m = 450 N/mm² max. 2,3 mm
R_m = 700 N/mm² max. 1,5 mm



62.350 — 24h — 1000 kN/m

500 mm	8,3 kg
200 mm	4,1 kg
100 mm	2,1 kg
50 mm	1,1 kg

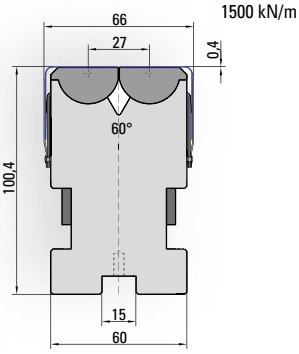
Incl. Slider in particular tool length
Recommended material thicknesses:
R_m = 450 N/mm² max. 3,5 mm
R_m = 700 N/mm² max. 2,5 mm



62.650s — 24h — 1500 kN/m

500 mm	18,0 kg
200 mm	7,2 kg
100 mm	3,6 kg
50 mm	1,8 kg

Incl. Slider in particular tool length
Recommended material thicknesses:
R_m = 450 N/mm² max. 6,5 mm
R_m = 700 N/mm² max. 4,0 mm



Lubricating grease

40.629 — 24h

100 ml	



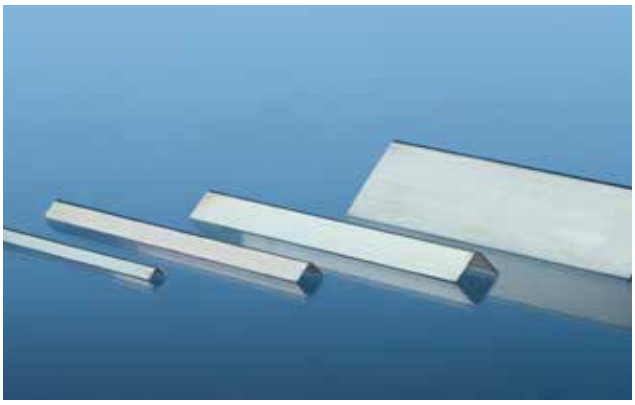
For lubrication of WingBend PLUS dies

Slider for WingBend PLUS

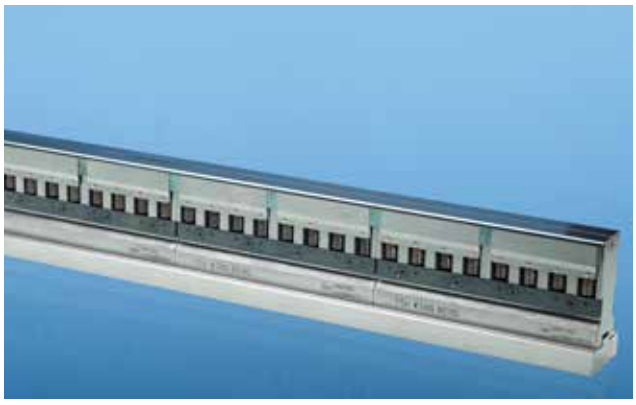
- ▶ Avoids bending marks on sheets
- ▶ Continously slider in favoured lengths up to 2000/3000 mm available
- ▶ Slider for model 62.120 up to a length of 2000 mm available in one piece
- ▶ Slider for models 62.230, 62.350, 62.650s up to a length of 3000 mm available in one piece

STE-INFO

Prices on request or visit www.softooling.com



Slider for WingBend PLUS



Dies WingBend PLUS with continously Slider

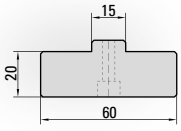
Die holders

STE-SYSTEM AMADA

60.102

499 mm	5,2 kg
198 mm	2,0 kg
98 mm	1,0 kg
48 mm	0,5 kg
90 mm sectionalized	0,9 kg

Screwed on holder

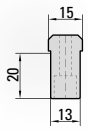


STE-SYSTEMS TRUMPF/WILA/BYSTRONIC

60.103

499 mm	1,5 kg
198 mm	0,6 kg
98 mm	0,3 kg
48 mm	0,2 kg
90 mm sectionalized	0,3 kg

Screwed on holder

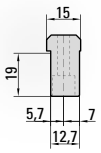


STE-SYSTEM LVD

60.105

496 mm	1,5 kg
198 mm	0,6 kg
98 mm	0,3 kg
48 mm	0,2 kg
90 mm sectionalized	0,3 kg

Screwed on holder



STE-INFO

More die holders available!
Prices and delivery times on request!

Technical data

Table of force: Tensile strength R_m = 450 N/mm², bending angle 90°

Model	62.120		62.230			62.350			62.650s			
Radius of the punch/top tool	R 0,2	R 1,0	R 0,2	R 1,0	R 3,0	R 0,2	R 1,0	R 3,0	R 1,0	R 3,0	R 5,0	R 10,0
Material thickness 0,3 mm	40	50	40	50	50							
Material thickness 0,5 mm	50	60	50	50	50	40	40	40	100	100	100	220
Material thickness 0,8 mm	100	130	70	80	90	40	50	50	100	110	130	230
Material thickness 1,0 mm	150	190	80	100	130	60	60	70	120	120	140	250
Material thickness 1,2 mm	240	300	110	140	180	70	70	80	120	120	150	270
Material thickness 1,6 mm			200	220	250	120	130	140	120	130	160	280
Material thickness 2,0 mm			300	330		190	200	220	130	140	160	360
Material thickness 2,3 mm			400	420		240	240	260	140	150	190	390
Material thickness 2,6 mm						340	360	470	190	200	240	510
Material thickness 3,2 mm						550	660		270	280	310	
Material thickness 4,0 mm									430	440	510	
Material thickness 4,6 mm									530	540	660	
Material thickness 6,0 mm									1000	1070		

Reference value for minimum flange: mild steel

Model	62.120		62.230		62.350	62.650s	
Radius of the punch/top tool	R 0,5	R 1,0	R 0,5	R 1,0	R 1,0	R 1,0	R 4,0
Material thickness 0,5 mm	2,7	2,9					
Material thickness 0,8 mm	3,2	3,4	4,7	4,9	5,6		
Material thickness 1,0 mm	3,5	3,6	5,4	5,5	7,1	7,7	7,2
Material thickness 1,5 mm			6,0	6,1	8,1	8,2	9,2
Material thickness 2,0 mm			6,4	6,6	8,3	10,4	10,9
Material thickness 2,5 mm					8,9	11,7	12,3
Material thickness 3,0 mm					9,4	13,3	13,9
Material thickness 4,0 mm						15,1	15,8
Material thickness 5,0 mm						16,1	16,3

Table of force and reference values for stainless steel and aluminium





The comparison: Bending results with WingBend PLUS and standard-V-die