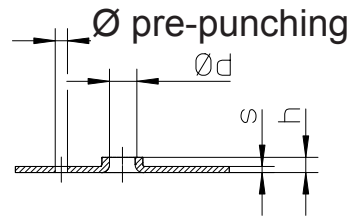
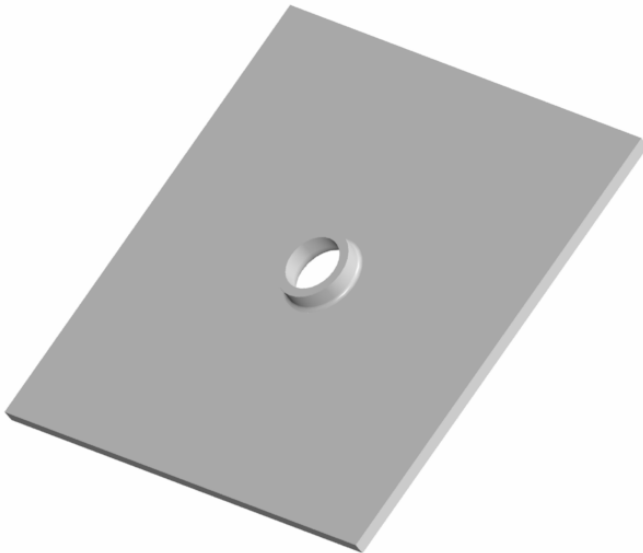
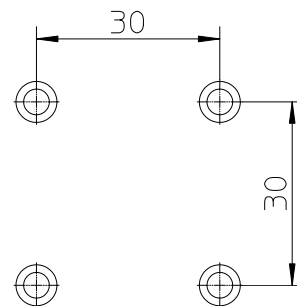


Extrusion Tool

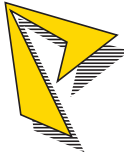


please inform if smaller distances are required!

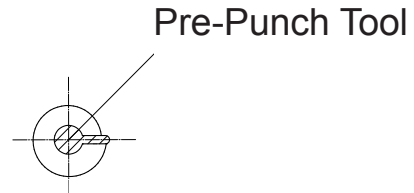
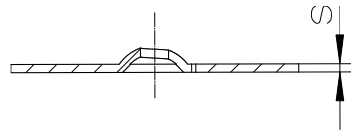


tool complete	part.-no.	910100.
thread upform	add. part.-no.:	Y.
thread downform	add. part.-no.:	Z.
thread-forming	add. part.-no.:	0F.
thread-cutting	add. part.-no.:	0S.
M2,5	add. part.-no.:	025.
M3	add. part.-no.:	030.
M4	add. part.-no.:	040.
M5	add. part.-no.:	050.
M6	add. part.-no.:	060.
M8	add. part.-no.:	080.
s = 0,8	add. part.-no.:	08.
s = 1,0	add. part.-no.:	10.
s = 1,5	add. part.-no.:	15.
s = 2,0	add. part.-no.:	20.
s = 2,5	add. part.-no.:	25.
s = 3,0	add. part.-no.:	30.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	910100. Y. 0F. 040. 10. ST

tool complete
upform
thread-cutting
M4
s = 1,0
Mild Steel

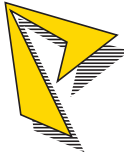


Thread Forming Tool

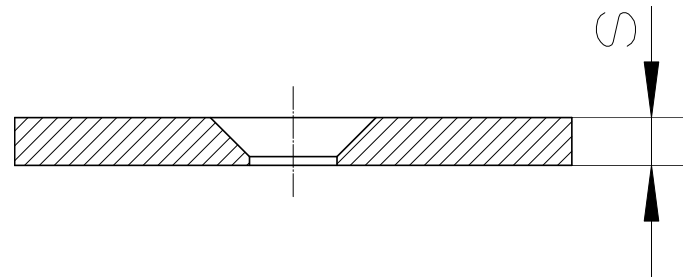
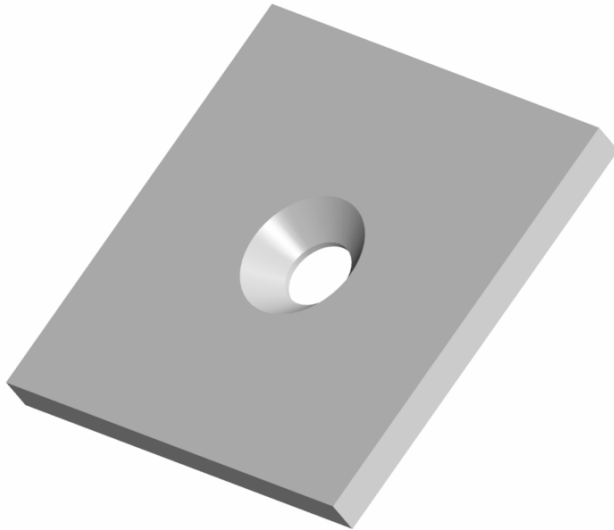


Thread Forming Tool	part.-no.:	911200.
Pre-Punch Tool cpl.	part.-no.:	9112A0.
thread Forming - upform	add. part.-no.:	Y.
thread Forming - downform	add. part.-no.:	Z.
thread-size 3,5	add. part.-no.:	035.
thread-size 3,9	add. part.-no.:	039.
thread-size 4,2	add. part.-no.:	042.
thread-size 4,8	add. part.-no.:	048.
thread-size 5,5	add. part.-no.:	055.
thread-size 6,3	add. part.-no.:	063.
s = 0,5	add. part.-no.:	05.
s = 0,8	add. part.-no.:	08.
s = 1,0	add. part.-no.:	10.
s = 1,2	add. part.-no.:	12.
s = 1,5	add. part.-no.:	15.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	911200. Y. 042. 08. ST

Thread Forming
Tool
upform
sheet-
screw 4,2
s = 0,8
Mild Steel

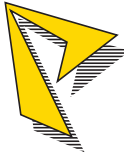


Counter Sink Tool

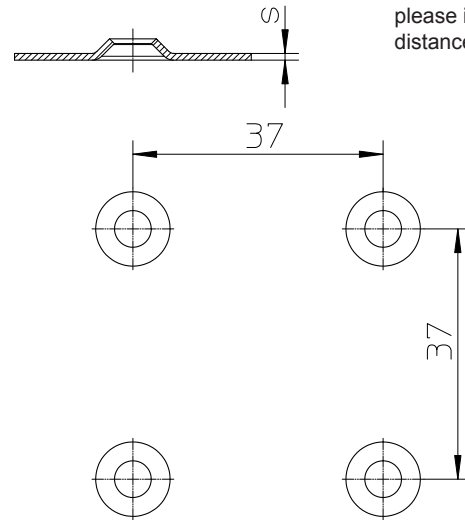
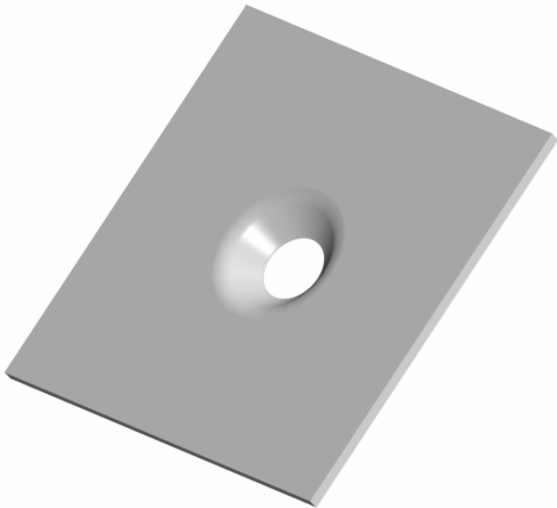


tool complete	part.-no.	910900.			
shape from bottom	add. part.-no.:	Y.			
shape from above	add. part.-no.:	Z.			
AM-shape	add. part.-no.:	AM.			
BM-shape	add. part.-no.:	BM.			
M2,5	add. part.-no.:		025.		
M3	add. part.-no.:		030.		
M4	add. part.-no.:		040.		
M5	add. part.-no.:		050.		
M6	add. part.-no.:		060.		
M8	add. part.-no.:		080.		
s = 0,8	add. part.-no.:			08.	
s = 1,0	add. part.-no.:			10.	
s = 1,5	add. part.-no.:			15.	
s = 2,0	add. part.-no.:			20.	
s = 2,5	add. part.-no.:			25.	
s = 3,0	add. part.-no.:			30.	
s = 4,0	add. part.-no.:			40.	
Mild Steel	add. part.-no.:				ST
Aluminium	add. part.-no.:				AL
Stainless steel	add. part.-no.:				VA
tool example:	part.-no.:	910900.	Y.	AM.	050. 40. AL

tool complete
 from bottom
 AM-
 shape
 M5
 s = 4,0
 Aluminium

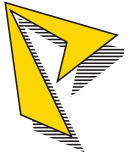


Emboss Counter Sink Tool



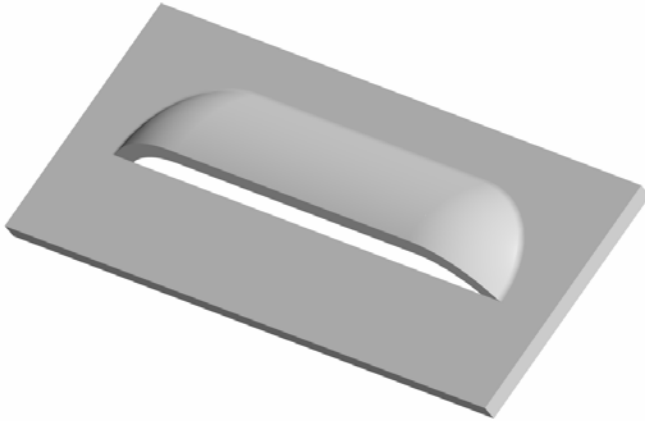
tool complete	part.-no.	911700.
Emboss - upform	add. part.-no.:	Y.
Emboss - downform	add. part.-no.:	Z.
M2,5	add. part.-no.:	025.
M3	add. part.-no.:	030.
M4	add. part.-no.:	040.
M5	add. part.-no.:	050.
M6	add. part.-no.:	060.
M8	add. part.-no.:	080.
M10	add. part.-no.:	100.
s = 0,8	add. part.-no.:	08.
s = 1,0	add. part.-no.:	10.
s = 1,5	add. part.-no.:	15.
s = 2,0	add. part.-no.:	20.
s = 2,5	add. part.-no.:	25.
s = 3,0	add. part.-no.:	30.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	911700. Y. 030. 20. ST

tool complete
upform
M3
s = 2
Steel



Louver Tool

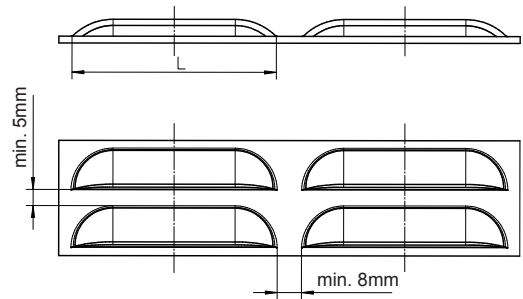
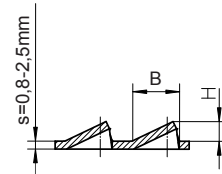
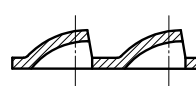
for $s = 0,8 - 2,5 \text{ mm}$



Louver shape „A“

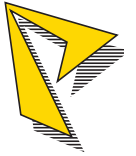


Louver shape „B“



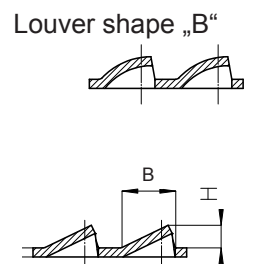
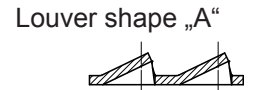
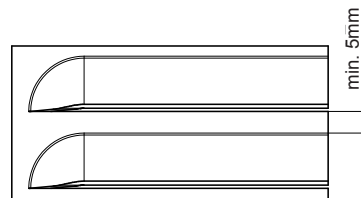
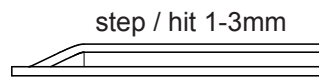
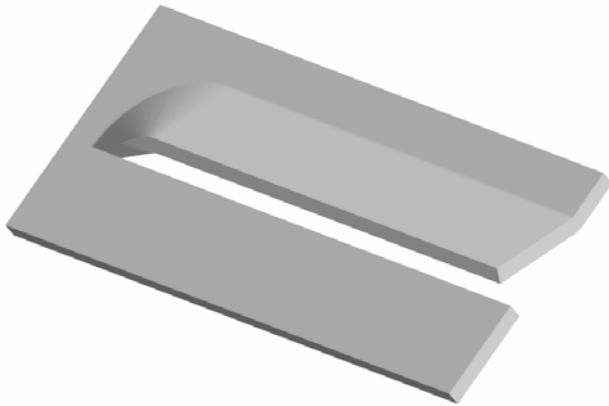
tool complete	part.-no.:	912200.				
Emboss - upform	add. part.-no.:	Y.				
Embos - downform	add. part.-no.:	Z.				
Louver shape "A"	add. part.-no.:	A.				
Louver shape "B"	add. part.-no.:	B.				
B = 8 / H = 3	add. part.-no.:		083.			
B = 10 / H = 4	add. part.-no.:		104.			
B = 12 / H = 5	add. part.-no.:		125.			
B = 15 / H = 6	add. part.-no.:		156.			
L = 40	add. part.-no.:			40.		
L = 50	add. part.-no.:			50.		
L = 60	add. part.-no.:			60.		
Mild Steel	add. part.-no.:				ST	
Aluminium	add. part.-no.:				AL	
Stainless steel	add. part.-no.:				VA	
tool example:	part.-no.:	912200.	Y.	A.	125.	60.
						ST

tool complete
upform
Louver shape "A"
B = 12 / H = 5
L = 60
Mild Steel



Continuous Louver Tool

for s = 0,8 - 2,5 mm

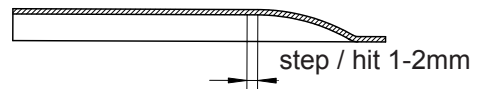
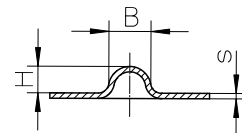
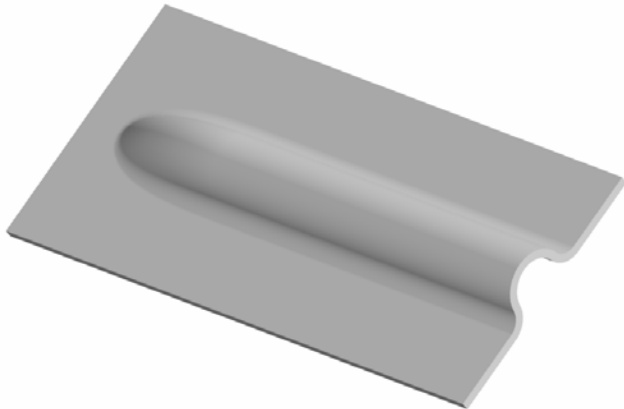


tool complete	part.-no.:	912400.				
Emboss - upform	add. part.-no.:	Y.				
Emboss - downform	add. part.-no.:	Z.				
Louver shape "A"	add. part.-no.:	A.				
Louver shape "B"	add. part.-no.:	B.				
B = 8 / H = 3	add. part.-no.:	083.				
B = 10 / H = 4	add. part.-no.:	104.				
B = 12 / H = 5	add. part.-no.:	125.				
Mild Steel	add. part.-no.:	ST				
Aluminium	add. part.-no.:	AL				
Stainless steel	add. part.-no.:	VA				
tool example:	part.-no.:	912400.	Y.	A.	125.	ST

tool complete
upform
Louver shape "A"
B = 12 / H = 5
Mild Steel

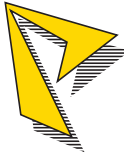


Countinous Beading Tool

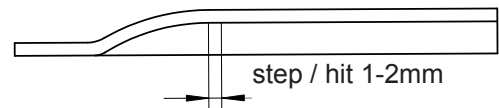
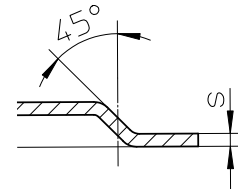
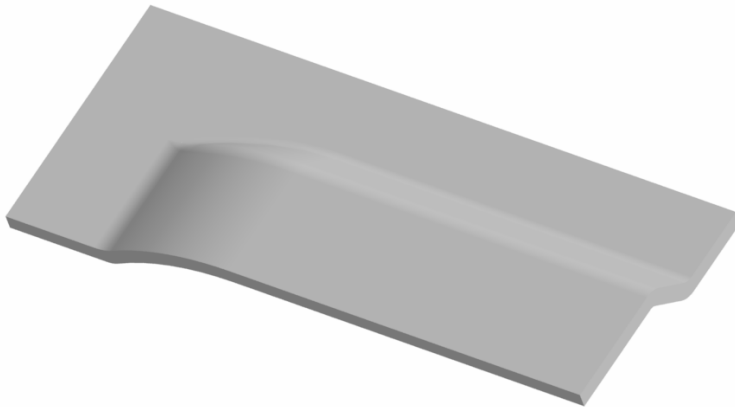


tool complete	part.-no.:	912600.
Emboss - upform	add. part.-no.:	Y.
Emboss - downform	add. part.-no.:	Z.
B = 4 / H = 2	add. part.-no.:	042.
B = 6 / H = 3	add. part.-no.:	063.
B = 8 / H = 4	add. part.-no.:	084.
B = 10 / H = 5	add. part.-no.:	105.
s = 0,8	add. part.-no.:	08.
s = 1,0	add. part.-no.:	10.
s = 1,5	add. part.-no.:	15.
s = 2,0	add. part.-no.:	20.
s = 2,5	add. part.-no.:	25.
s = 3,0	add. part.-no.:	30.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	912600. Y. 105. 10. VA

tool complete
upform
B = 10 / H = 5
s = 1,0
Mild Steel



Continuous Offset Tool



tool complete	part.-no.:	912800.
H = 1,0	add. part.-no.:	010.
H = 1,5	add. part.-no.:	015.
H = 2,0	add. part.-no.:	020.
H = 2,5	add. part.-no.:	025.
H = 3,0	add. part.-no.:	030.
H = 4,0	add. part.-no.:	040.
H = 5,0	add. part.-no.:	050.
s = 0,8	add. part.-no.:	08.
s = 1,0	add. part.-no.:	10.
s = 1,5	add. part.-no.:	15.
s = 2,0	add. part.-no.:	20.
s = 2,5	add. part.-no.:	25.
s = 3,0	add. part.-no.:	30.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	912800. 030. 15. AL

tool complete

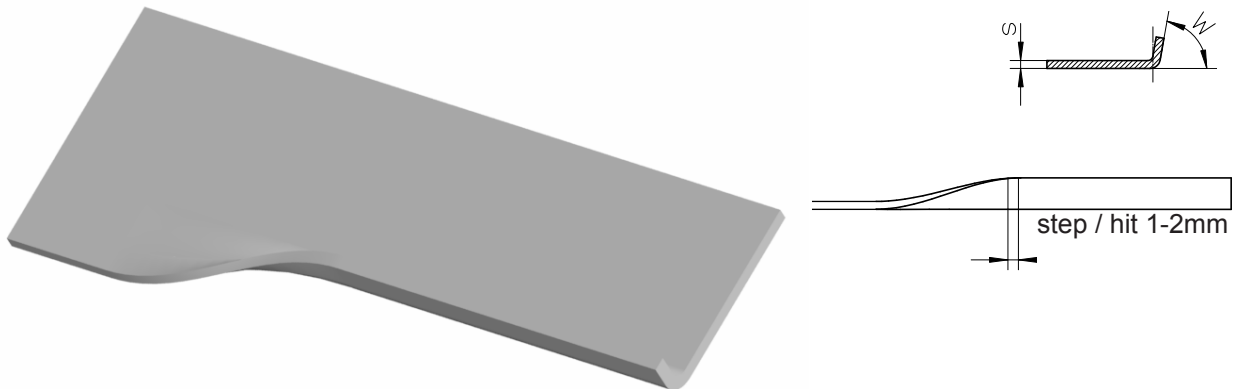
H = 3,0

s = 1,5

Aluminium

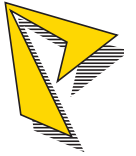


Continuous Bending Tool

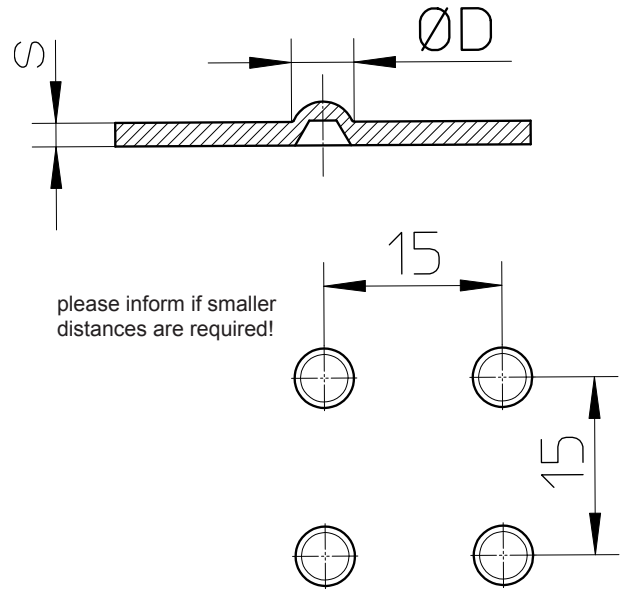
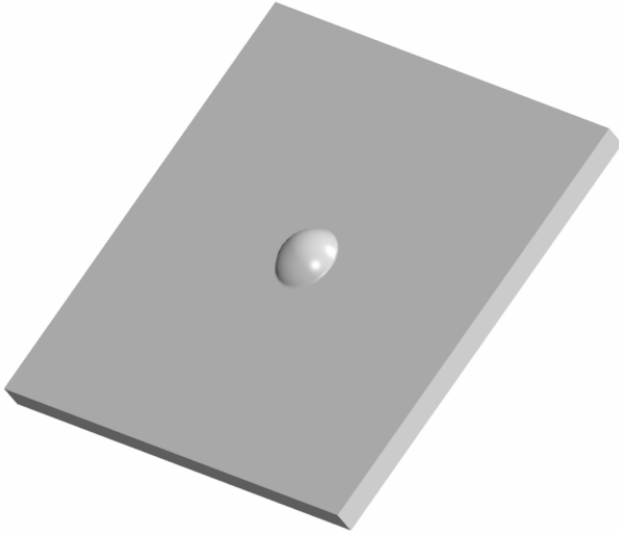


tool complete	part.-no.:	912900.
Emboss - upform	add. part.-no.:	Y.
W = 30°	add. part.-no.:	030.
W = 45°	add. part.-no.:	045.
W = 60°	add. part.-no.:	060.
W = 80°	add. part.-no.:	080.
s = 0,8	add. part.-no.:	08.
s = 1,0	add. part.-no.:	10.
s = 1,5	add. part.-no.:	15.
s = 2,0	add. part.-no.:	20.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	912900. Y. 060. 10. ST

tool complete
 upform
 angle = 60°
 s = 1,0
 Mild Steel

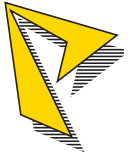


Dimple Tool



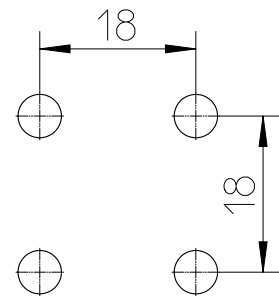
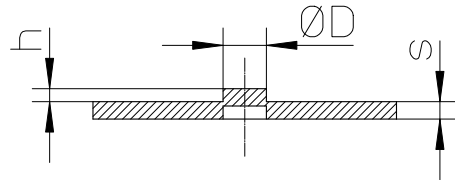
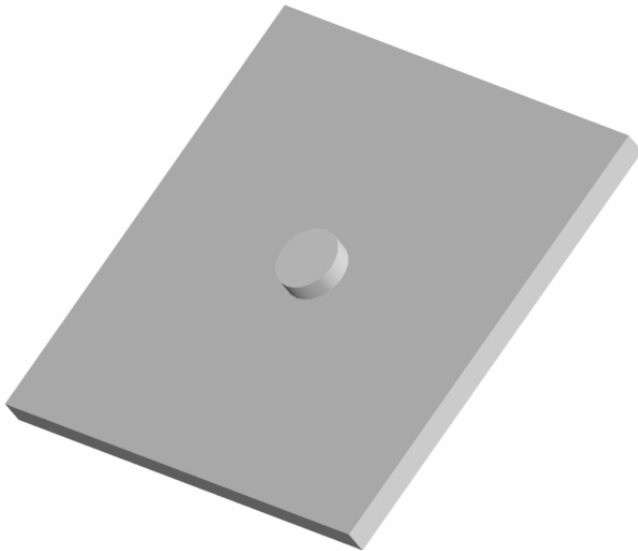
tool complete	part.-no.:	911300.
Emboss - upform	add. part.-no.:	Y.
Emboss - downform	add. part.-no.:	Z.
D = 1,6	add. part.-no.:	016.
D = 2,0	add. part.-no.:	020.
D = 2,5	add. part.-no.:	025.
D = 3,0	add. part.-no.:	030.
D = 3,2	add. part.-no.:	032.
D = 4,0	add. part.-no.:	040.
D = 5,0	add. part.-no.:	050.
D = 5,6	add. part.-no.:	056.
D = 6,0	add. part.-no.:	060.
s = 0,63	add. part.-no.:	063.
s = 0,8	add. part.-no.:	080.
s = 1,0	add. part.-no.:	100.
s = 1,5	add. part.-no.:	150.
s = 2,0	add. part.-no.:	200.
s = 2,5	add. part.-no.:	250.
s = 3,0	add. part.-no.:	300.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	911300. Y. 040. 200. VA

tool complete
upform
D = 4,0
s = 2,0
Stainless Steel



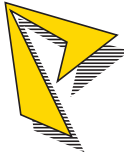
Half Shear Tool

for $s = 0,8 - 2,5 \text{ mm}$ / $h = 60\% \text{ of } s$



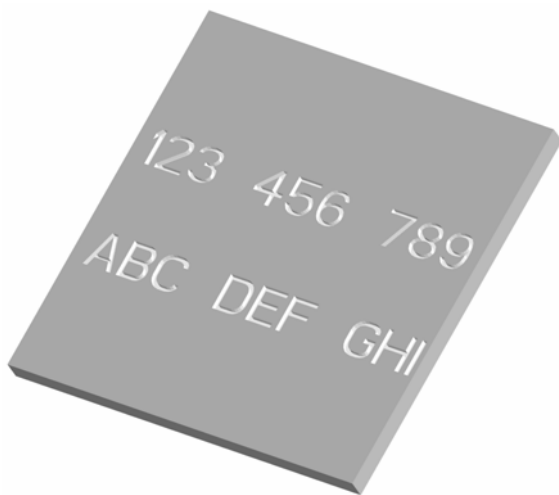
tool complete	part.-no.:	911500.
Emboss upform	add. part.-no.:	Y.
Emboss downform	add. part.-no.:	Z.
D = 2,0	add. part.-no.:	020.
D = 3,0	add. part.-no.:	030.
D = 4,0	add. part.-no.:	040.
D = 5,0	add. part.-no.:	050.
D = 6,0	add. part.-no.:	060.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	911500. Y. 020. ST

tool complete
upform
D = 2,0
Mild Steel

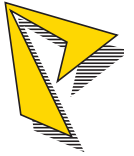


Letter Marking Tool

(V-Line)

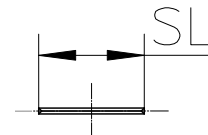
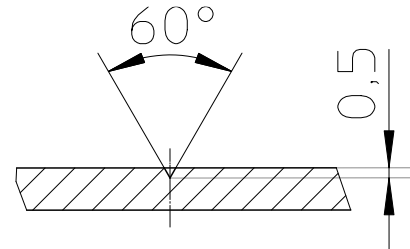


Tool 1-line	part.-no.:	910700.			
Tool 2-line	part.-no.:	910750.			
Emboss - upform	add. part.-no.:	Y.			
Emboss - downform	add. part.-no.:	Z.			
letter height 3 mm (15 pce. in row)	add. part.-no.:	030.			
letter height 4 mm (12 pce. in row)	add. part.-no.:	040.			
letter height 5 mm (10 pce. in row)	add. part.-no.:	050.			
s = 1,0 bis 4,0	add. part.-no.:	04.			
s = 4,1 bis 8,0	add. part.-no.:	08.			
tool example:	part.-no.:	910700.	Y.	040.	04.
	tool complete				
	upform				
	letter height = 4				
	s = 1,0 bis 4,0				



Line Marking Tool

(V-Line)



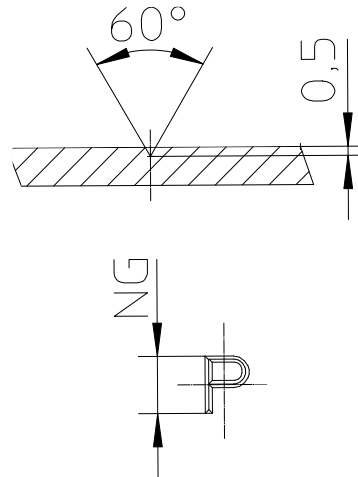
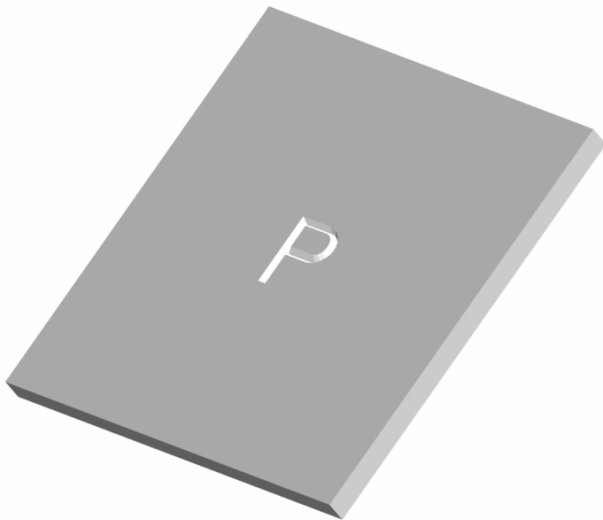
tool complete	part.-no.:	910300.		
Emboss - upform	add. part.-no.:	Y.		
Emboss - downform	add. part.-no.:	Z.		
line length 3 mm	add. part.-no.:	03.		
line length 4 mm	add. part.-no.:	04.		
line length 5 mm	add. part.-no.:	05.		
line length 6 mm	add. part.-no.:	06.		
line length 8 mm	add. part.-no.:	08.		
line length 10 mm	add. part.-no.:	10.		
s = 1,0 bis 4,0	add. part.-no.:	04.		
s = 4,1 bis 8,0	add. part.-no.:	08.		
Mild Steel	add. part.-no.:	ST		
Aluminium	add. part.-no.:	AL		
Stainless steel	add. part.-no.:	VA		
tool example:	part.-no.:	910300.	Y.	04. 04.

tool complete
upform
line length
4 mm
s = 1,0 bis 4,0
mm
(all sheet
versions)



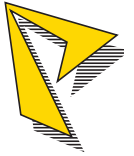
Letter Marking Tool

(V-Line)



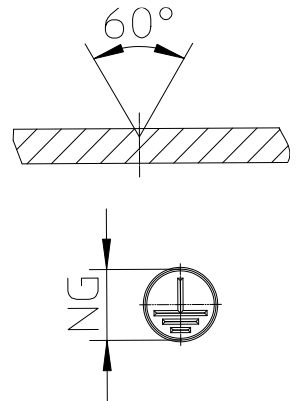
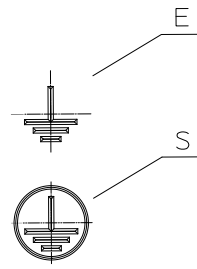
tool complete	part.-no.:	910400.
Emboss - upform	add. part.-no.:	Y.
Emboss - downform	add. part.-no.:	Z.
size NG 3 mm	add. part.-no.:	03.
size NG 4 mm	add. part.-no.:	04.
size NG 5 mm	add. part.-no.:	05.
size NG 6 mm	add. part.-no.:	06.
size NG 8 mm	add. part.-no.:	08.
size NG 10 mm	add. part.-no.:	10.
s = 1,0 bis 4,0	add. part.-no.:	04.
s = 4,1 bis 8,0	add. part.-no.:	08.
Mild Steel	add. part.-no.:	ST
Aluminium	add. part.-no.:	AL
Stainless steel	add. part.-no.:	VA
tool example:	part.-no.:	910400. Y. 04. 04.

tool complete
upform
size NG 4 mm
s = 1,0 bis 4,0 mm
(all sheet versions)



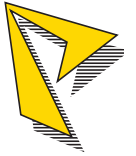
Ground Symbol Marking Tool

(V-Line)

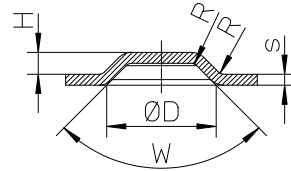
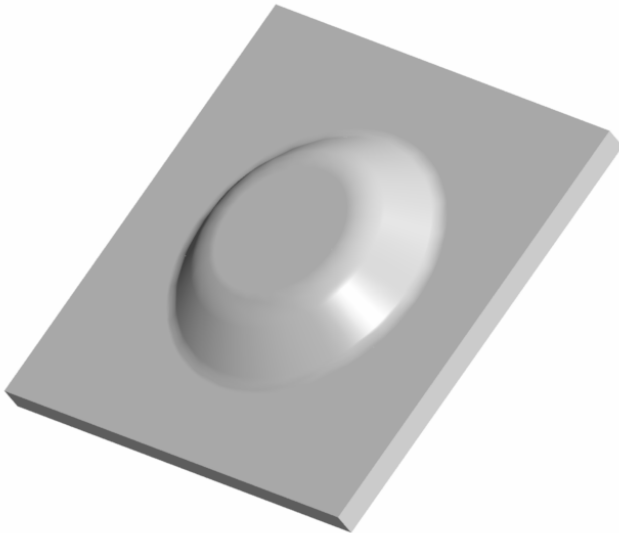


tool complete	part.-no.:	910500.			
Emboss - upform	add. part.-no.:	Y.			
Emboss - downform	add. part.-no.:	Z.			
ground symbol „E“	add. part.-no.:	E.			
ground symbol „S“	add. part.-no.:	S.			
size NG 4 mm	add. part.-no.:		04.		
size NG 5 mm	add. part.-no.:		05.		
size NG 6 mm	add. part.-no.:		06.		
size NG 8 mm	add. part.-no.:		08.		
size NG 10 mm	add. part.-no.:		10.		
size NG 12 mm	add. part.-no.:		12.		
s = 1,0 bis 4,0	add. part.-no.:		04.		
s = 4,1 bis 8,0	add. part.-no.:		08.		
Mild Steel	add. part.-no.:			ST	
Aluminium	add. part.-no.:			AL	
Stainless steel	add. part.-no.:			VA	
tool example:	part.-no.:	910500.	Y.	E.	08. 04.

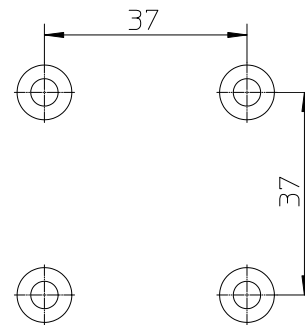
tool complete
upform
ground symbol „E“
size NG 8
s = 1,0 bis 4,0
(all sheet versions)



Round Emboss Tool



please inform if smaller distances are required!

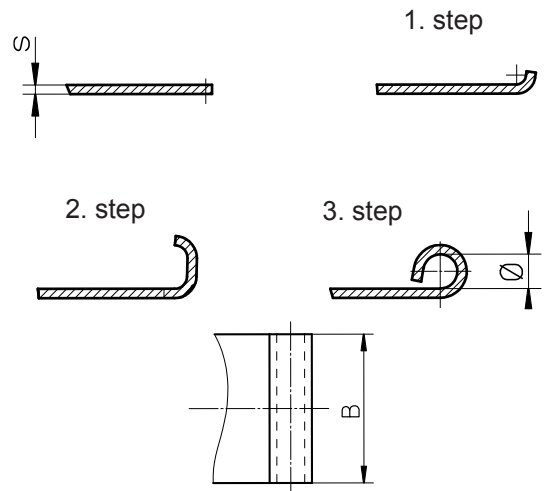
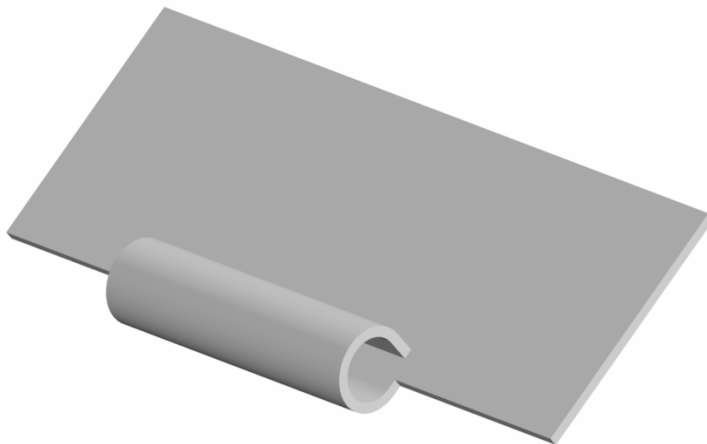


tool complete	part.-no.:	911900.						
Emboss - upform	add. part.-no.:	Y.						
Emboss - downform	add. part.-no.:	Z.						
D = 12	add. part.-no.:	12.						
D = 20	add. part.-no.:	20.						
D = 30	add. part.-no.:	30.						
H = 2,0	add. part.-no.:	020.						
H = 3,0	add. part.-no.:	030.						
H = 4,0	add. part.-no.:	040.						
H = 5,0	add. part.-no.:	050.						
s = 0,8	add. part.-no.:	08.						
s = 1,0	add. part.-no.:	10.						
s = 1,5	add. part.-no.:	15.						
s = 2,0	add. part.-no.:	20.						
s = 2,5	add. part.-no.:	25.						
s = 3,0	add. part.-no.:	30.						
w = 60°	add. part.-no.:	060.						
w = 90°	add. part.-no.:	090.						
w = 120°	add. part.-no.:	120.						
Mild Steel	add. part.-no.:						ST	
Aluminium	add. part.-no.:						AL	
Stainless steel	add. part.-no.:						VA	
tool example:	part.-no.:	911900.	Y.	20.	020.	10.	090.	VA

tool complete
upform
D = 20
H = 2,0
s = 1,0
Winkel = 90°
Stainless Steel

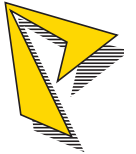


Hinge Tool Set

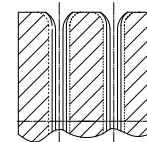
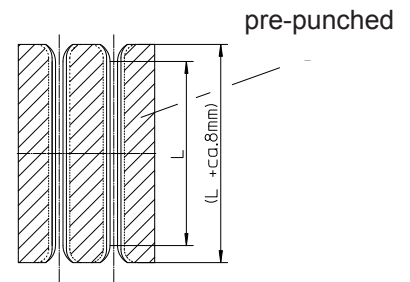
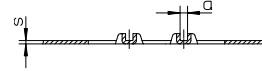
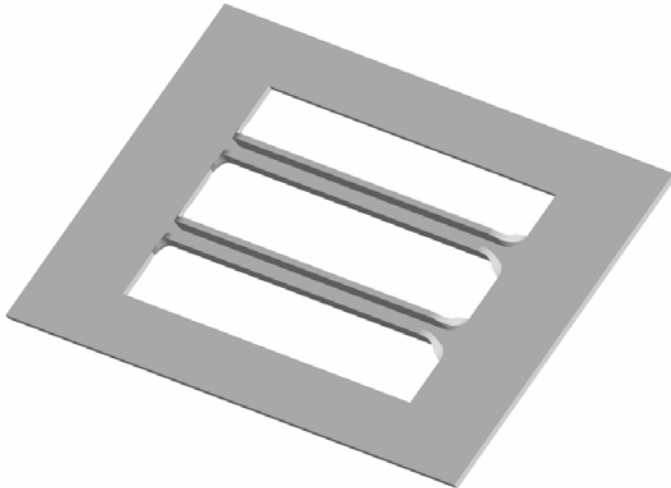


tool set complete	part.-no.:	913000.	
Emboss - upform		Y.	
Hinge diameter Ø 3,1	add. part.-no.:	030.	(for pin Ø 3,0)
Hinge diameter Ø 4,1	add. part.-no.:	040.	(for pin Ø 4,0)
Hinge diameter Ø 4,6	add. part.-no.:	045.	(for pin Ø 4,5)
Hinge diameter Ø 5,1	add. part.-no.:	050.	(for pin Ø 5,0)
Hinge diameter Ø 5,6	add. part.-no.:	055.	(for pin Ø 5,5)
Hinge diameter Ø 6,1	add. part.-no.:	060.	(for pin Ø 6,0)
Hinge length 20,0	add. part.-no.:	20.	
Hinge length 30,0	add. part.-no.:	30.	
Hinge length 40,0	add. part.-no.:	40.	
s = 0,5	add. part.-no.:	05.	
s = 0,8	add. part.-no.:	08.	
s = 1,0	add. part.-no.:	10.	
s = 1,2	add. part.-no.:	12.	
s = 1,5	add. part.-no.:	15.	
Mild Steel	add. part.-no.:		ST
Aluminium	add. part.-no.:		AL
Stainless steel	add. part.-no.:		VA
tool example:	part.-no.:	913000. Y. 050. 30. 10. ST	

tool set complete
upform
hinge- for pin Ø 5,1
hinge- length = 30
s = 1,0
Mild Steel



Card Guide Tool



tool complete	part-no.	913100.
Emboss - upform	add. part.-no:	Y
guide width 2,1	add. part.-no:	020.
guide width 2,6	add. part.-no:	025.
guide width 3,1	add. part.-no:	030.
guide width 3,6	add. part.-no:	035.
guide width 4,1	add. part.-no:	040.
guide width 5,1	add. part.-no:	050.
guide length = 30,0	add. part.-no:	30.
guide length = 40,0	add. part.-no:	40.
guide length = 50,0	add. part.-no:	50.
s=0,5	add. part.-no:	05.
s=0,8	add. part.-no:	08.
s=1,0	add. part.-no:	10.
s=1,2	add. part.-no:	12.
s=1,5	add. part.-no:	15.
Mild Steel	add. part.-no:	ST
Aluminium	add. part.-no:	AL
Stainless steel	add. part.-no:	VA
tool example	part-no.:	913100. Y. 030. 40. 10. ST

tool complete
upform
guide-
width 3,0
guide-
length = 40
s = 1,0
Mild Steel