





Milling Tools

S11. VHM-Channel Milling Tools single edged shank \varnothing 2,35 mm total length 38 mm unit: 10 pieces		
Ref. No.	Cutting \varnothing	
S11.123.09	0,9	
S11.123.10	1,0	
S11.123.11	1,1	
S11.123.12	1,2	
S11.123.13	1,3	
S11.123.14	1,4	
S11.123.15	1,5	
S11.123.16	1,6	
S11.123.17	1,7	
S11.123.18	1,8	
S11.123.19	1,9	
S11.123.20	2,0	

S11. VHM-Channel Milling Tools single edged shank \varnothing 3,0 mm total length 38 mm unit: 10 pieces		
Ref. No.	Cutting \varnothing	
S11.133.07	0,7	
S11.133.09	0,9	
S11.133.10	1,0	
S11.133.11	1,1	
S11.133.12	1,2	
S11.133.13	1,3	
S11.133.14	1,4	
S11.133.15	1,5	
S11.133.16	1,6	
S11.133.17	1,7	
S11.133.18	1,8	
S11.133.19	1,9	
S11.133.20	2,0	
S11.133.21	2,1	
S11.133.22	2,2	
S11.133.23	2,3	
S11.133.24	2,4	
S11.133.25	2,5	
S11.133.26	2,6	
S11.133.27	2,7	
S11.133.28	2,8	
S11.133.29	2,9	
S11.133.30	3,0	



Milling Tools

S11. VHM-Channel Milling Tools single edged shank \varnothing 3,0 mm total length 40 mm unit: 10 pieces		
Ref. No.	Cutting \varnothing	
S11.134.09	0,90	
S11.134.10	1,0	
S11.134.11	1,1	
S11.134.12	1,2	
S11.134.13	1,3	
S11.134.14	1,4	
S11.134.15	1,5	
S11.134.16	1,6	
S11.134.17	1,7	
S11.134.18	1,8	
S11.134.19	1,9	
S11.134.20	2,0	
S11.134.21	2,1	
S11.134.22	2,2	
S11.134.23	2,3	
S11.134.24	2,4	
S11.134.25	2,5	
S11.134.26	2,6	
S11.134.27	2,7	
S11.134.28	2,8	
S11.134.29	2,9	
S11.134.30	3,0	

S11. VHM-Channel Milling Tools double edged shank \varnothing 3,0 mm length of head 9,0 mm total length 38 mm unit: 10 pieces		
Ref. No.	Cutting \varnothing	
S11.233.09	0,9	
S11.233.10	1,0	
S11.233.11	1,1	
S11.233.12	1,2	
S11.233.13	1,3	
S11.233.14	1,4	
S11.233.15	1,5	
S11.233.16	1,6	
S11.233.17	1,7	
S11.233.18	1,8	
S11.233.19	1,9	



Milling Tools

S11. VHM-Channel Milling Tools double edged shank \varnothing 3,0 mm length of head 9,0 mm total length 38 mm unit: 10 pieces		
Ref. No.	Cutting \varnothing	
S11.233.20	2,0	
S11.233.21	2,1	
S11.233.22	2,2	
S11.233.23	2,3	
S11.233.24	2,4	
S11.233.25	2,5	

S11. Conical Milling Tools shank \varnothing 3,0 mm further shank \varnothing on request unit: on request		
tool at bottom B	0,68 0,78 0,72 0,82 0,77 0,87 0,81 0,91 0,95 1,15 1,09 1,29	
depth of channel Y	channel width A:	
0,40	1,14 1,24 1,18 1,28 1,23 1,33 1,27 1,37 1,41 1,61 1,55 1,75	
0,45	1,20 1,30 1,24 1,34 1,28 1,38 1,32 1,42 1,46 1,66 1,6 1,8	
0,50	1,26 1,36 1,30 1,40 1,34 1,44 1,38 1,48 1,52 1,72 1,66 1,86	
0,55	1,32 1,42 1,36 1,46 1,40 1,50 1,44 1,54 1,58 1,78 1,72 1,92	
0,60	1,37 1,47 1,41 1,51 1,46 1,56 1,50 1,60 1,64 1,84 1,78 1,98	
0,65	1,43 1,53 1,47 1,54 1,52 1,62 1,56 1,65 1,70 1,90 1,84 2,04	
0,70	1,49 1,59 1,53 1,63 1,57 1,67 1,61 1,71 1,75 1,95 1,90 2,10	



Milling Tools

S12.	VHM-Chamfer Tool, 120° single edged shank∅ 2,35 mm length of head 9 mm total length 38 mm unit: 1 pieces	
Ref. No.	Head∅	
S12.123.12	5,0	

S12.	VHM-Chamfer Tool 120° double edged shank∅ 2,35 mm length of head 9 mm total length 38 mm unit: 1 pieces	
Ref. No.	Head∅	
S12.223.12	5,0	

S12.	VHM-Chamfer Tool 160° and 170° double edged shank∅ 2,35 mm length of head 9 mm total length 38 mm unit: 1 pieces	
Ref. No.	Degrees Head∅	
S12.223.16	160° 9,0	
S12.223.17	170° 9,0	

S12.	VHM-Chamfer Tool, double edged shank∅ 3,0 mm length of head 9 mm total length 38 mm unit: 1 pieces	
Ref. No.	Degrees Head∅	
S12.233.09	90° 5,0	
S12.233.12	120° 5,0	
S12.233.16	160° 9,0	
S12.233.17	170° 9,0	
S12.233.175	175° 9,0	



Milling Tools

S12.	VHM-Scanning Tool shank \varnothing 3,0 mm length of head 9 mm total length 38 mm unit: 1 pieces	
Ref. No.	Head \varnothing	
S12.433.90	9,0	

S12.	VHM-Chamfer Tool, double edged shank \varnothing 3,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees		Head \varnothing
S12.234.06	60°		5,0
S12.234.09	90°		5,0
S12.234.12	120°		5,0
S12.234.13	130°		5,0
S12.234.16	160°		9,0
S12.234.17	170°		9,0

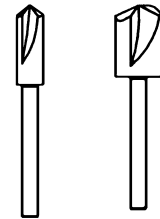
S12.	VHM-Chamfer Tool, double edged shank \varnothing 5,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees		Head \varnothing
S12.254.12	120°		5,0
S12.254.16	160°		9,0
S12.254.17	170°		9,0

S12.	VHM-Scanning Tool shank \varnothing 5,0 mm length of head 9 mm total length 40 mm unit: 1 pieces	
Ref. No.	Head \varnothing	
S12.454.90	9,0	



Milling Tools

S12.	VHM-Chamfer Tool, double edged	
	shank \varnothing 4 mm	
	length of head 9 mm	
	total length 38 mm	
	unit: 1 pieces	
Ref. No.	Degrees	Head \varnothing
S12.243.12	120°	5,0
S12.243.16	160°	9,0



S13.	VHM-Drill for positioning holes	
	length of head 9 mm	
	total length 38 mm	
	unit: 1 pieces	
Ref. No.	shank \varnothing S	Head \varnothing K
S13.023.50	2,35	5,0
S13.023.55	2,35	5,5
S13.033.50	3,0	5,0
S13.033.547	3,0	5,47
S13.033.55	3,0	5,5
S13.043.55	4,0	5,5



S13.	VHM-Drill for positioning holes	
	length of head 9 mm	
	total length 40 mm	
	unit: 1 pieces	
Ref. No.	shank \varnothing S	Head \varnothing K
S13.034.50	3,0	5,0
S13.034.547	3,0	5,47
S13.034.55	3,0	5,5
S13.054.50	5,0	5,0
S13.054.55	5,0	5,5



S19.	VHM-Milling Tool for chamfering the female stripping board	
	length of head 12 mm	
	total length 40 mm	
	unit: 1 pieces	
Ref. No.	shank \varnothing	Angle
S19.264.015	6,0	15°
S19.284.015	8,0	15°





Milling Tools

S22.	PKD-Diamond-Chamfer Tool single edged shank \varnothing 3,0 mm length of head 9 mm total length 38 mm unit: 1 pieces		
Ref. No.	Degrees	Head	
S22.138.12	120°	5,0	

S22.	PKD-Diamond-Chamfer Tool double edged shank \varnothing 3,0 mm length of head 9 mm total length 38 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.238.16	160°	9,0	

S22.	PKD-Diamond-Chamfer Tool single edged shank \varnothing 3,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.234.12	120°	5,0	

S22.	PKD-Diamond-Chamfer Tool double edged shank \varnothing 3,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.234.16	160°	9,0	
S22.234.17	170°	9,0	



Milling Tools

S22.	PKD-Diamond-Scanning Tool shank \varnothing 3,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.434.90		9,0	

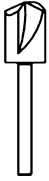
S22.	PKD-Diamond-Chamfer Tool double edged shank \varnothing 4,0 mm length of head 9 mm total length 38 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.243.12	120°	9,0	
S22.243.17	170°	9,0	

S22.	PKD-Diamond-Chamfer Tool single edged shank \varnothing 5,0 mm length of head 9 mm total length 38 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.158.12	120°	5,0	


S22.	PKD-Diamond-Chamfer Tool single edged shank \varnothing 5,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.254.12	120°	5,0	

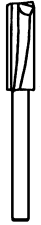


Milling Tools

S22.	PKD-Diamond-Chamfer Tool double edged shank \varnothing 5,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.254.16	160°	9,0	
S22.254.17	170°	9,0	

S22.	PKD-Diamond-Scanning Tool shank \varnothing 5,0 mm length of head 9 mm total length 40 mm unit: 1 pieces		
Ref. No.	Degrees	Head \varnothing	
S22.454.90		9,0	

S23.	PKD-Diamond-Drill for positioning holes length of head 9 mm Head diam. 5,5 mm unit: 1 pieces		
Ref. No.	Shank \varnothing S	Total length TL	
S23.034.55	3,0	40	
S23.043.55	4,0	38	
S23.054.55	5,0	40	

S23.	PKD-Diamond-Drill for positioning holes length of head 9 mm Head diam. 5,47 mm unit: 1 pieces		
Ref. No.	Shank \varnothing S	Total length TL	
S23.034.55	3,0	40	



Milling Tools

S

S99. Re-sharpening	
Ref. No.	Description
S99.1	re-sharpening of chamfer tools
S99.2	re-sharpening of special tools and drills
S99.3	re-sharpening of PKD-Diamond-tools

Description	
Abbreviations	
VHM	Voll-Hart-Metall = Tungsten Carbide
PKD-Diamond	Poly Kristalin Diamod -tipped