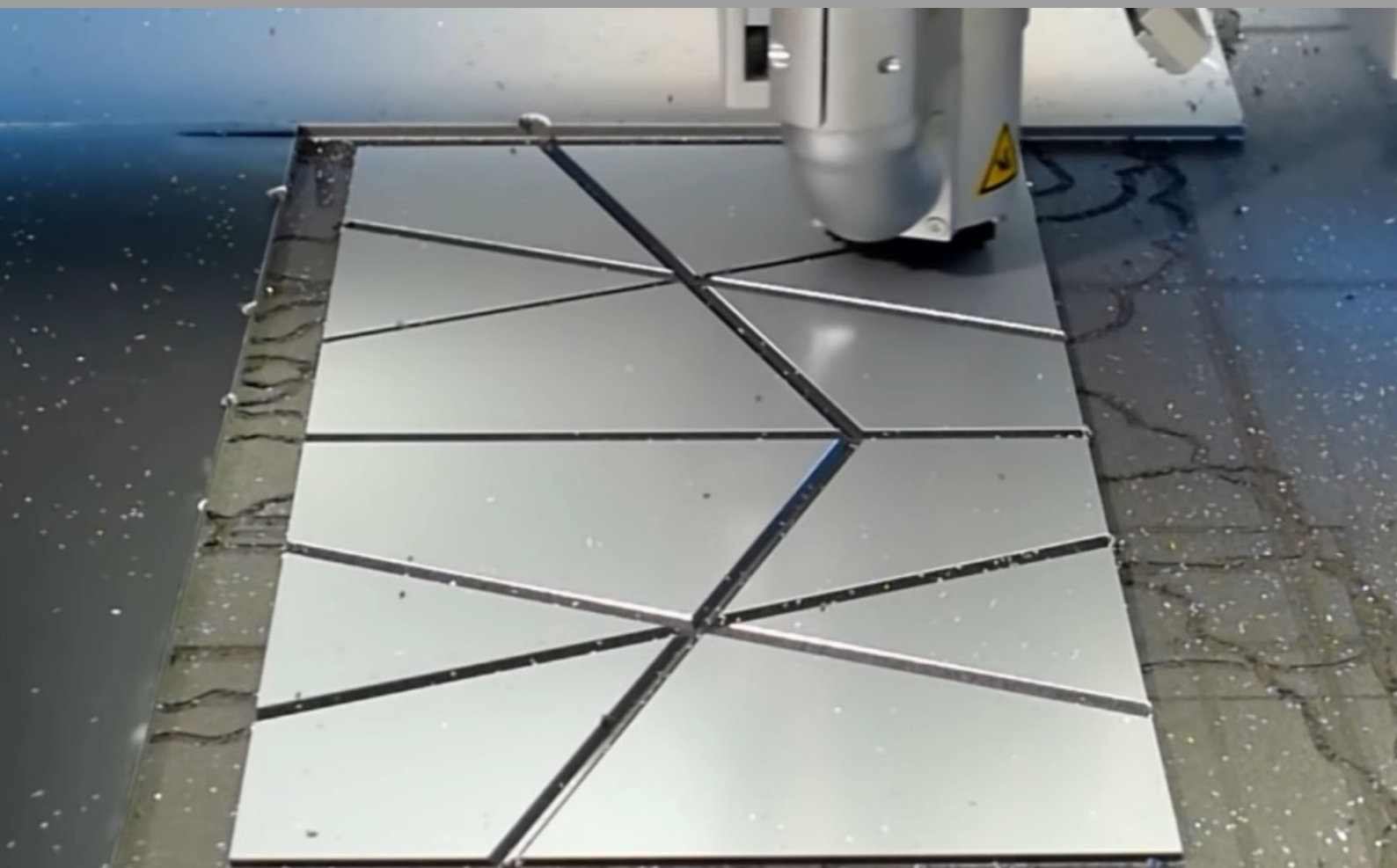




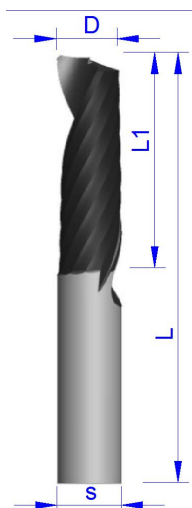
Frezy do Aluminim

Router for ALUMINIUM



ALU

PL



Frezy pełno węglkowe do ALU, 1 ostrzowe

Router bits for ALU. 1 helix flute

Polished
Flute



VHM
SUB-MICRON



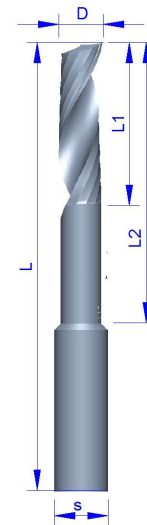
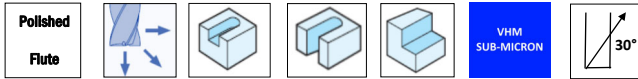
Z=1



D	L1	L	s	Z	Art.. Nr P/P	
3	12	50	3	1	AL101.030.012.050	
4	14	50	4	1	AL101.040.014.050	
5	18	55	5	1	AL101.050.018.055	
6	20	65	6	1	AL101.060.020.065	
6	25	70	6	1	AL101.060.025.070	
8	25	70	8	1	AL101.080.025.070	
8	35	80	8	1	AL101.080.035.080	
10	35	80	10	1	AL101.100.035.080	
10	45	90	10	1	AL101.100.045.090	
12	35	80	12	1	AL101.120.035.080	
12	45	90	12	1	AL101.120.045.090	

Frezy pełno węglkowe do ALU, 1 ostrzowe długie z przedłużonym korpusem.

Router bits for ALU. 1 helix flute, Long with reduce body.



ALU

PL

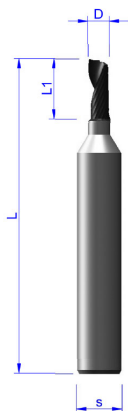
Z=1



D	L1	L2	L	s	Z	Art.. nr	
5	15	30	80	8	1	AL102.050.15-30.080	
5	20	40	90	8	1	AL102.050.20-40.090	
5	25	45	100	8	1	AL102.050.25-45.100	
6	15	30	80	8	1	AL102.060.15-30.080	
6	20	40	90	8	1	AL102.060.20-40.090	
6	25	45	100	8	1	AL102.060.25-45.100	
7	20	40	90	8	1	AL102.070.20-40.090	
7	25	45	100	8	1	AL102.070.25-45.100	
8	25	40	90	8	1	AL102.080.25-40.090	
8	35	50	100	8	1	AL102.080.35-50.100	
10	25	40	90	10	1	AL102.100.25-40.090	
10	35	50	100	10	1	AL102.100.35-50.100	

ALU

PL



Frezy pełno węglkowe do DIBONDU, 1 ostrzowe uchwyt s-6 mm

Router bits for DIBOND. 1 helix flute shank s-6 mm



Polished
Flute



VHM
SUB-MICRON



Z=1



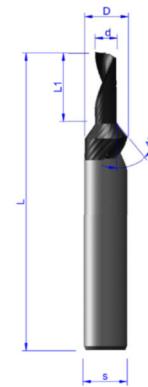
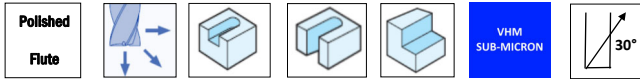
D	L1	L	s	Z	Art.. Nr	
3	8	50	6	1	AL101D.030.080.050	
4	8	50	6	1	AL101D.040.080.050	
5	10	50	6	1	AL101D.050.010.050	
6	10	50	6	1	AL101D.060.010.050	
8	10	50	8	1	AL101D.080.010.050	

Frezy pełno węglkowe do DIBONDU, 1 ostrzowe z fazowaniem narożnika, uchwyt s-6 mm

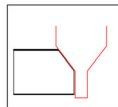
Router bits for DIBOND. 1 helix flute with chamfering
shank s-6 mm

ALU

PL



Z=1



D	d	L1	L	s	Z	Art.. Nr	
10	3	8	60	10	1	AL101DF.030.080.060	
10	4	8	60	10	1	AL101DF.040.080.060	
10	5	8	60	10	1	AL101DF.050.080.060	
12	5	8	60	12	1	AL101DF.050.080.060	
12	6	8	60	12	1	AL101DF.060.080.060	

ALU

Frezy pełno węglkowe do DIBONDU, 2 ostrzowe

Router bits for DIBOND. 1 helix flute shank



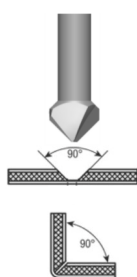
VHM
SUB-MICRON



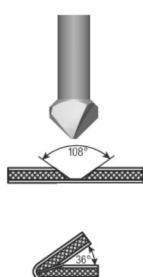
Z=2



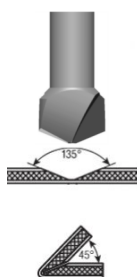
D	V	L ₁	L	s	Art., Nr	
16	90°	15	60	8	AL103D.016.090.060.08	
16	90°	15	60	12	AL103D.016.090.060.12	
16	108°	15	60	8	AL103D.016.108.060.08	
16	108°	15	60	12	AL103D.016.108.060.12	
18	135°	15	60	8	AL103D.018.135.060.08	
18	135°	15	60	12	AL103D.018.135.060.12	
16	R-24	15	60	8	AL103D.016.R24.060.08	
16	R-24	15	60	12	AL103D.016.R24.060.12	



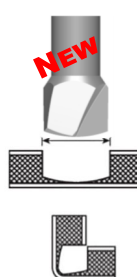
TYP V-90°



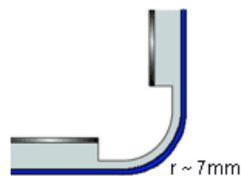
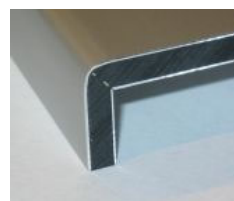
TYP V-108°



TYP V-135°



TYP R-24



Frezy pełno węglkowe do DIBONDU, 1 ostrzowe

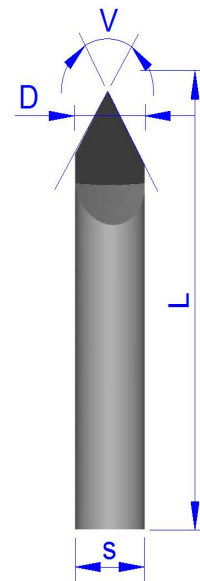
Router bits for DIBOND. 1 helix flute



VHM
SUB-MICRON

0°

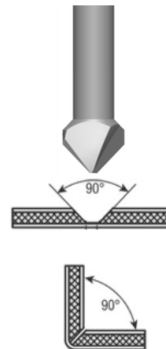
Z=1

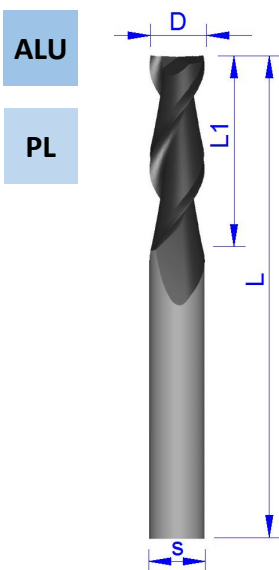


ALU

PL

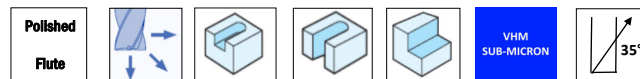
D	V	L ₁	L	s	Z	Art.. Nr	
8	90°	10	60	8	1	AL104D.080.090.060	
10	90°	10	60	10	1	AL104D.100.090.060	
12	90°	10	60	12	1	AL104D.120.090.060	





Frezy pełno węglkowe do ALU, 2 ostrzowe

Router bits for ALU. 2 helix flute



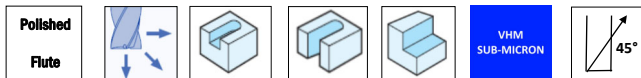
Z=2



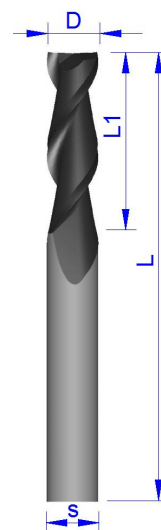
D	L1	L	s	Z	Art.. Nr	
2	8	50	3	2	AL201A.020.008.050	
3	12	50	3	2	AL201A.030.012.050	
4	14	50	4	2	AL201A.040.014.050	
5	15	50	5	2	AL201A.050.015.050	
6	20	65	6	2	AL201A.060.020.065	
6	25	70	6	2	AL201A.060.025.070	
8	25	70	8	2	AL201A.080.025.070	
8	35	80	8	2	AL201A.080.035.080	
10	30	80	10	2	AL201A.100.030.080	
10	45	90	10	2	AL201A.100.045.090	
12	35	80	12	2	AL201A.120.035.080	
12	45	90	12	2	AL201A.120.045.090	
14	30	80	14	2	AL201A.120.030.080	
14	45	90	14	2	AL201A.120.045.090	
16	30	80	14	2	AL201A.120.030.080	
16	45	90	14	2	AL201A.120.045.090	

Frezy pełno węglkowe do ALU, 2 ostrzowe długie z przedłużonym korpusem.

Router bits for ALU. 2 helix flute,



Z=2



ALU

PL

D	L1	L	s	Z	Art.. Nr	
2	8	50	3	2	AL201B.020.008.050	
3	12	50	3	2	AL201B.030.012.050	
4	14	50	4	2	AL201B.040.014.050	
5	15	50	5	2	AL201B.050.015.050	
6	20	65	6	2	AL201B.060.020.065	
6	25	70	6	2	AL201A.060.025.070	
8	25	70	8	2	AL201A.080.025.070	
8	35	80	8	2	AL201A.080.035.080	
10	30	80	10	2	AL201A.100.030.080	
10	45	90	10	2	AL201A.100.045.090	
12	35	80	12	2	AL201A.120.035.080	
12	45	90	12	2	AL201A.120.045.090	
14	30	80	14	2	AL201A.120.030.080	
14	45	90	14	2	AL201A.120.045.090	
16	30	80	14	2	AL201A.120.030.080	
16	45	90	14	2	AL201A.120.045.090	

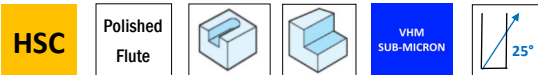
ALU



Frezy pełno węglkowe do ALU, 2 ostrzowe z promieniem
czoła do szybkiej pracy.

Router bits for ALU. 2 helix flute with radius on top for
Hi-speed machining

Hi-Speed Cutting



XT
coating

Z=2



D	L1	L2	R	L	d1	s	Z	Art.. Nr	Euro Resale
8	8	20	0,5	60	7,20	8	2	AL201HS.080.008.060.05XT	
10	10	30	1,0	80	9,00	10	2	AL201HS.100.010.080.10XT	
10	10	30	2,0	80	9,00	10	2	AL201HS.100.010.080.20XT	
12	14	40	1,0	90	11,00	12	2	AL201HS.120.014.090.10XT	
12	14	40	2,0	90	11,00	12	2	AL201HS.120.014.090.20XT	
12	14	40	3,0	90	11,00	12	2	AL201HS.120.014.090.30XT	
16	18	45	1,0	100	15,00	16	2	AL201HS.160.018.100.10XT	
16	18	45	2,0	100	15,00	16	2	AL201HS.160.018.100.20XT	
16	18	45	3,0	100	15,00	16	2	AL201HS.160.018.100.30XT	
16	18	75	3,0	130	15,00	16	2	AL201HS.160.018.130.30XT	
16	18	75	4,0	130	15,00	16	2	AL201HS.160.018.130.40XT	
20	22	55	1,0	110	19,00	20	2	AL201HS.200.022.110.10XT	
20	22	55	2,0	110	19,00	20	2	AL201HS.200.022.110.20XT	
20	22	55	3,0	110	19,00	20	2	AL201HS.200.022.110.30XT	
20	22	80	3,0	130	19,00	20	2	AL201HS.200.022.130.30XT	
20	22	80	4,0	130	19,00	20	2	AL201HS.200.022.130.40XT	

Frezy pełno węglkowe do ALU, 3 ostrzowe z promieniem
czoła do szybkiej pracy.

Router bits for ALU. 3 helix flute with radius on top for
Hi-speed machining

ALU

Polished
Flute



VHM
SUB-MICRON



HSC

Hi-Speed Cutting



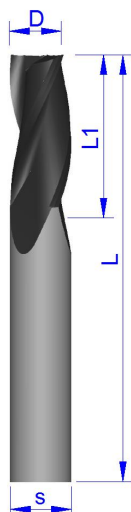
XT
coating

Z=3



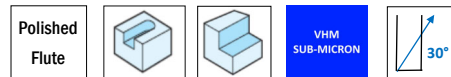
D	L1	L2	R	L	d1	s	Z	Art.. Nr	Euro Resale
12	14	35	3,0	80	11,00	12	3	AL301HS.120.014.080.30XT	
12	14	45	3,0	90	11,00	12	3	AL301HS.120.014.090.30XT	
12	14	55	-	100	11,00	12	3	AL301HS.120.014.100.00XT	
12	14	55	1,0	100	11,00	12	3	AL301HS.120.014.100.10XT	
12	14	55	3,0	100	11,00	12	3	AL301HS.120.014.100.30XT	
16	18	35	3,0	90	11,00	12	3	AL301HS.160.018.090.30XT	
16	18	45	3,0	100	11,00	12	3	AL301HS.160.018.100.30XT	
16	18	55	-	110	11,00	12	3	AL201HS.160.018.110.00XT	
16	18	55	1,0	110	11,00	12	3	AL201HS.160.018.110.10XT	
16	18	55	3,0	110	11,00	12	3	AL201HS.160.018.110.30XT	
16	18	75	3,0	130	15,00	16	2	AL201HS.160.018.130.30XT	
16	18	75	4,0	130	15,00	16	2	AL201HS.160.018.130.40XT	
20	22	55	1,0	110	19,00	20	2	AL201HS.200.022.110.10XT	
20	22	55	2,0	110	19,00	20	2	AL201HS.200.022.110.20XT	
20	22	55	3,0	110	19,00	20	2	AL201HS.200.022.110.30XT	
20	22	80	3,0	130	19,00	20	2	AL201HS.200.022.130.30XT	
20	22	80	4,0	130	19,00	20	2	AL201HS.200.022.130.40XT	

ALU



Frezy pełno węglkowe do ALU, 3 ostrzowe

Router bits for ALU. 3 helix flute



XT
coating

Z=2

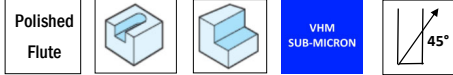


D	L1	L	s	Z	Art.. Nr		Art.. Nr XT	Euro Resale
6	20	65	6	3	AL301.060.020.065		AL301.060.020.065XT	
6	25	70	6	3	AL301.060.025.070		AL301.060.025.070XT	
8	25	70	8	3	AL301.080.025.070		AL301.080.025.070XT	
8	35	80	8	3	AL301.080.035.080		AL301.080.035.080XT	
10	35	80	10	3	AL301.100.035.080		AL301.100.035.080XT	
10	45	90	10	3	AL301.100.045.090		AL301.100.045.090XT	
12	35	80	12	3	AL301.120.035.080		AL301.120.035.080XT	
12	45	90	12	3	AL301.120.045.090		AL301.120.045.090XT	

Frezy pełno węglkowe do ALU, 3 ostrzowe

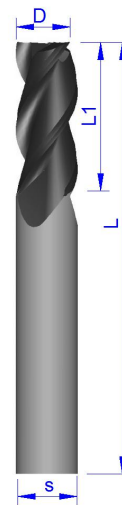
Router bits for ALU. 3 helix flute

ALU



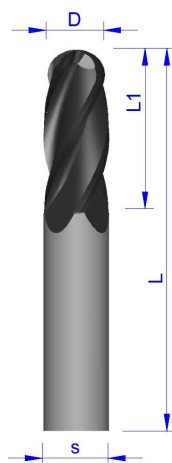
XT
coating

Z=3



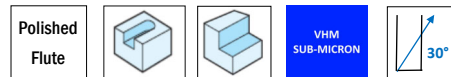
D	L1	L	s	Z	Art.. Nr		Art.. Nr XT	Euro Resale
6	20	65	6	3	AL301A.060.020.065		AL301A.060.020.065XT	
6	25	70	6	3	AL301A.060.025.070		AL301A.060.025.070XT	
8	25	70	8	3	AL301A.080.025.070		AL301A.080.025.070XT	
8	35	80	8	3	AL301A.080.035.080		AL301A.080.035.080XT	
10	35	80	10	3	AL301A.100.035.080		AL301A.100.035.080XT	
10	45	90	10	3	AL301A.100.045.090		AL301A.100.045.090XT	
12	35	80	12	3	AL301A.120.035.080		AL301A.120.035.080XT	
12	45	90	12	3	AL301A.120.045.090		AL301A.120.045.090XT	

ALU



Frezy pełno węglkowe do ALU, 2 ostrzowe z czolem kulistym

Router bits for ALU. 2 helix flute with ballnose



XT
coating

Z=2



D	L1	L	s	Z	Art.. Nr		Art.. Nr XT	Euro Resale
4	14	50	4	2	AL701.040.014.050		AL701.040.014.050XT	
5	18	55	5	2	AL701.050.018.055		AL701.050.018.055XT	
6	20	65	6	2	AL701.060.020.065		AL701.060.020.065XT	
6	25	70	6	2	AL701.060.025.070		AL701.060.025.070XT	
8	25	70	8	2	AL701.080.025.070		AL701.080.025.070XT	
8	35	80	8	2	AL701.080.035.080		AL701.080.035.080XT	
10	35	80	10	2	AL701.100.035.080		AL701.100.035.080XT	
10	45	90	10	2	AL701.100.045.090		AL701.100.045.090XT	
12	35	80	12	2	AL701.120.035.080		AL701.120.035.080XT	
12	40	90	12	2	AL701.120.040.090		AL701.120.040.090XT	
16	40	90	16	2	AL701.160.040.090		AL701.120.040.090XT	
16	55	110	16	2	AL701.160.055.110		AL701.120.055.110XT	

Frezy pełno węglkowe do ALU, 2 ostrzowe z czolem kulistym do szybkiej pracy

Router bits for ALU. 2 helix flute with ballnose for hi-speed machining.

Polished
Flute



VHM
SUB-MICRON

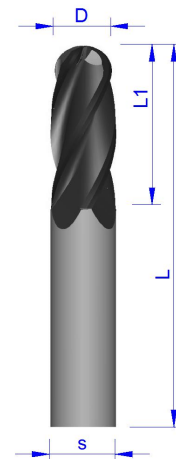


HSC

Hi-Speed Cutting

**XT
coating**

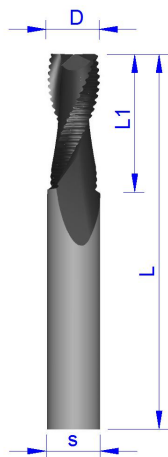
Z=2



ALU

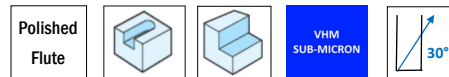
D	L1	L2	R	L	d1	s	Z	Art.. Nr	Euro Resale
8	8	20	4	60	7,20	8	2	AL701HS.080.008.060.05XT	
10	10	30	5	80	9,00	10	2	AL701HS.100.010.080.10XT	
12	14	40	6	90	11,00	12	2	AL701HS.120.014.090.10XT	
16	18	45	8	100	15,00	16	2	AL701HS.160.018.100.30XT	
16	18	75	8	130	15,00	16	2	AL701HS.160.018.130.30XT	
20	22	55	10	110	19,00	20	2	AL701HS.200.022.110.10XT	
20	22	80	10	130	19,00	20	2	AL701HS.200.022.130.40XT	

ALU



Frezy pełno węglkowe do ALU, 2 ostrzowe do obróbki zgrubnej

Router bits for ALU. 2 helix flute for roughing.



XT
coating

Z=2



D	L1	L	s	Z	Art.. Nr		Art.. Nr XT	Euro Resale
6	20	65	6	2	AL203.060.020.065		AL203.060.020.065XT	
6	25	70	6	2	AL203.060.025.070		AL203.060.025.070XT	
8	25	70	8	2	AL203.080.025.070		AL203.080.025.070XT	
8	35	80	8	2	AL203.080.035.080		AL203.080.035.080XT	
10	35	80	10	2	AL203.100.035.080		AL203.100.035.080XT	
10	45	90	10	2	AL203.100.045.090		AL203.100.045.090XT	
12	35	80	12	2	AL203.120.035.080		AL203.120.035.080XT	
12	45	90	12	2	AL203.120.045.090		AL203.120.045.090XT	
16	45	90	16	4	AL203.160.045.090		AL203.160.045.090XT	
16	55	100	16	4	AL203.160.055.100		AL203.160.055.100XT	
20	45	90	20	4	AL203.200.045.090		AL203.200.045.090XT	
20	55	100	20	4	AL203.200.055.100		AL203.200.055.100XT	

Frezy pełno węglkowe do ALU, 3 ostrzowe do obróbki zgrubnej.

Router bits for ALU. 3 helix flute for roughing.

ALU

Polished
Flute

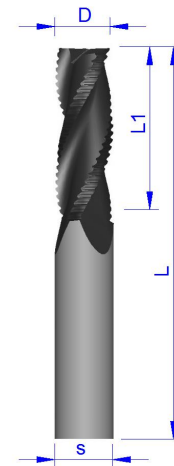


VHM
SUB-MICRON



XT
coating

Z=3



D	L1	L	s	Z	Art.. Nr		Art.. Nr	Euro Resale
8	25	70	8	3	AL303.080.025.070		AL303.080.025.070XT	
8	35	80	8	3	AL303.080.035.080		AL303.080.035.080XT	
10	35	80	10	3	AL303.100.035.080		AL303.100.035.080XT	
10	45	90	10	3	AL303.100.045.090		AL303.100.045.090XT	
12	35	80	12	3	AL303.120.035.080		AL303.120.035.080XT	
12	45	90	12	3	AL303.120.045.090		AL303.120.045.090XT	
16	45	90	16	4	AL303.160.045.090		AL303.160.045.090XT	
16	55	100	16	4	AL303.160.055.100		AL303.160.055.100XT	

