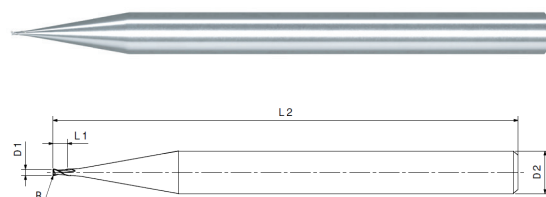


MI0112-NR01119

Schaftfräser mit Eckenradius Z2
Corner radius end mill Z2



P1	P2	P3	P4	P5	M1	M2	M3	K1	N1	N2
N3	N4	N5	N6	N7	N8	S1	S2	S3	H1	

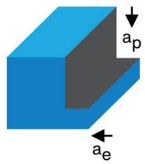
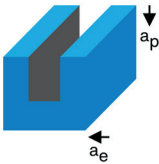


D1	L1	D2	L2	Z	R	DWS Art. N°
0.20	0.30	3	39	2	0.02	460371
0.20	0.60	3	39	2	0.02	460372
0.25	0.38	3	39	2	0.02	460373
0.25	0.75	3	39	2	0.02	460374
0.30	0.45	3	39	2	0.03	460375
0.30	0.90	3	39	2	0.03	460376
0.35	0.53	3	39	2	0.03	460377
0.35	1.05	3	39	2	0.03	460378
0.40	0.60	3	39	2	0.05	460379
0.40	1.20	3	39	2	0.05	460380
0.45	0.68	3	39	2	0.05	460381
0.45	1.35	3	39	2	0.05	460382
0.50	0.75	3	39	2	0.05	460383
0.50	1.50	3	39	2	0.05	460384
0.60	0.90	3	39	2	0.10	460385
0.60	1.80	3	39	2	0.10	460386
0.70	1.05	3	39	2	0.10	460387
0.70	2.10	3	39	2	0.10	460388
0.80	1.20	3	39	2	0.15	460389
0.80	2.40	3	39	2	0.15	460390
0.90	1.35	3	39	2	0.20	460391
0.90	2.70	3	39	2	0.20	460392
1.00	1.50	3	39	2	0.20	460393
1.00	3.00	3	39	2	0.20	460394
1.10	1.65	3	39	2	0.20	460395
1.10	3.30	3	39	2	0.20	460396
1.20	1.80	3	39	2	0.10	460397
1.20	3.60	3	39	2	0.10	460398
1.20	3.60	3	39	2	0.20	460399
1.30	2.60	3	39	2	0.20	460400
1.30	3.90	3	39	2	0.20	460401
1.40	2.80	3	39	2	0.20	460402
1.50	2.25	3	39	2	0.20	460403
1.50	4.50	3	39	2	0.50	460404
1.60	3.20	3	39	2	0.50	460405
1.70	3.70	3	39	2	0.50	460406
1.80	3.60	3	39	2	0.50	460407
1.90	3.80	3	39	2	0.50	460408
2.00	3.00	3	39	2	0.20	460409
2.00	6.00	3	39	2	0.50	460410
2.50	3.75	3	39	2	0.20	460411
2.50	7.50	3	39	2	0.50	460412
2.80	4.50	3	39	2	0.50	460413
3.00	4.50	3	39	2	0.50	460414
3.00	9.00	3	39	2	1.00	460415
3.00	8.00	3	39	2	0.30	460416
3.00	8.00	3	39	2	0.50	460417

Weitere Beschichtungen oder kundenspezifische Lösungen auf Anfrage
Other coatings or customized solutions are available on request

MI0112-NR01119

Schnittparameter
Cutting parameters

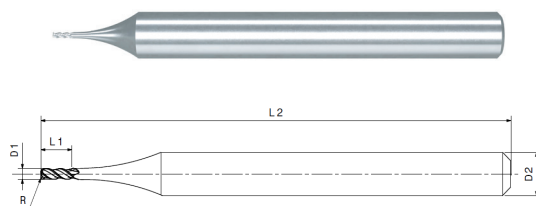
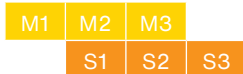
Anwendung Application	Eckfräsen Side Milling	Nutenfräsen Slotting
Funktion Function		
	a_p	a_p
	$1 \times D_1$	$0.5 \times D_1$
	a_e	a_e
	$0.4 \times D_1$	$1 \times D_1$

		f_z [mm]		
ISO	V_c [m/min]	Ø 0.30 - 0.80	Ø 0.90 - 1.20	Ø 1.30 - 2.90
P1	110 - 130	0,004 - 0,009	0.008 - 0.020	0.015 - 0.030
P2	100 - 120	0,004 - 0,009	0.008 - 0.020	0.015 - 0.030
P3	100 - 120	0,004 - 0,009	0.008 - 0.020	0.015 - 0.030
P4	80 - 110	0,004 - 0,009	0.008 - 0.020	0.015 - 0.030
P5	60 - 80	0,004 - 0,009	0.008 - 0.020	0.015 - 0.030
M1	50 - 70	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030
M2	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030
M3	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030
K1	140 - 170	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N1	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N2	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N3	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N4	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N5	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N6	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N7	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
N8	200 - 250	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040
S1	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030
S2	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030
S3	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030
H1	30 - 50	0.002 - 0.004	0.003 - 0.005	0.004 - 0.006
H2				

Richtwerte
Indicative values

MI0112-AR01116

Schaftfräser mit Eckenradius Z3
Corner radius end mill Z3

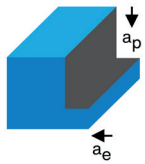
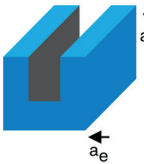


D1	L1	D2	L2	Z	R	DWX Art. N°
0.5	1.25	4	40	3	0.05	460341
0.6	1.50	4	40	3	0.05	460342
0.7	1.75	4	40	3	0.05	460343
0.8	2.00	4	40	3	0.05	460344
1.0	2.50	4	40	3	0.10	460345
1.2	3.00	4	40	3	0.10	460346
1.5	3.75	4	40	3	0.10	460347
1.8	4.50	4	40	3	0.10	460348
2.0	5.00	4	40	3	0.20	460349
2.5	6.25	6	51	3	0.20	460350
3.0	7.50	6	51	3	0.20	460351
3.5	8.75	6	51	3	0.20	460352
4.0	10.00	6	51	3	0.30	460353
4.5	11.25	8	59	3	0.30	460354
5.0	12.50	8	59	3	0.30	460355
5.5	13.75	8	59	3	0.30	460356
6.0	15.00	8	59	3	0.40	460357

Weitere Beschichtungen oder kundenspezifische Lösungen auf Anfrage
Other coatings or customized solutions are available on request

MI0112-AR01116

Schnittparameter
Cutting parameters

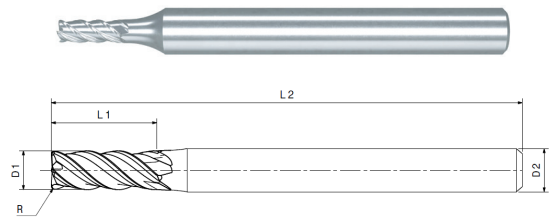
Anwendung Application	Eckfräsen Side Milling	Nutenfräsen Slotting
Funktion Function		
	a_p	a_p
	$1 \times D_1$	$0.5 \times D_1$
	a_e	a_e
	$0.4 \times D_1$	$1 \times D_1$

		f_z [mm]			
ISO	V_c [m/min]	Ø 0.30 - 0.80	Ø 0.90 - 1.20	Ø 1.30 - 2.90	Ø 3.00 - 6.00
P1					
P2					
P3					
P4					
P5					
M1	50 - 70	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
M2	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
M3	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
K1					
N1					
N2					
N3					
N4					
N5					
N6					
N7					
N8					
S1	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
S2	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
S3	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
H1					
H2					

Richtwerte
Indicative values

MI0112-AR01117

Schaftfräser mit Eckenradius Z4
Corner radius end mill Z4

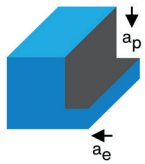
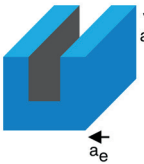


D1	L1	D2	L2	Z	R	DWX Art. N°
1.0	2.50	4	40	4	0.10	460358
1.2	3.00	4	40	4	0.10	460359
1.5	3.75	4	40	4	0.10	460360
1.8	4.50	4	40	4	0.10	460361
2.0	5.00	4	40	4	0.20	460362
2.5	6.25	6	51	4	0.20	460363
3.0	7.50	6	51	4	0.20	460364
3.5	8.75	6	51	4	0.20	460365
4.0	10.00	6	51	4	0.30	460366
4.5	11.25	8	59	4	0.30	460367
5.0	12.50	8	59	4	0.30	460368
5.5	13.75	8	59	4	0.30	460369
6.0	15.00	8	59	4	0.40	460370

Weitere Beschichtungen oder kundenspezifische Lösungen auf Anfrage
Other coatings or customized solutions are available on request

MI0112-AR01117

Schnittparameter
Cutting parameters

Anwendung Application	Eckfräsen Side Milling	Nutenfräsen Slotting
Funktion Function		
	a_p	a_p
	$1 \times D_1$	$0.5 \times D_1$
	a_e	a_e
	$0.4 \times D_1$	$1 \times D_1$

ISO	V_c [m/min]	f_z [mm]			
		Ø 0.30 - 0.80	Ø 0.90 - 1.20	Ø 1.30 - 2.90	Ø 3.00 - 6.00
P1					
P2					
P3					
P4					
P5					
M1	50 - 70	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
M2	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
M3	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
K1					
N1					
N2					
N3					
N4					
N5					
N6					
N7					
N8					
S1	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
S2	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
S3	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
H1					
H2					

Richtwerte
Indicative values

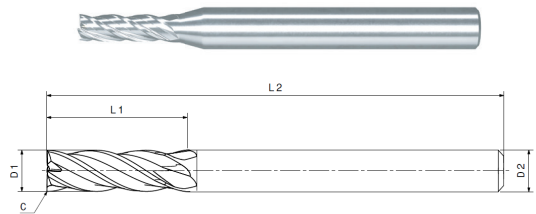
MI0114-NR01120

Schaftfräser mit Fase
Corner chamfer end mill



P1	P2	P3	P4	P5	M1	M2	M3	K1	N1	N2
N3	N4	N5	N6	N7	N8	S1	S2	S3	H1	

VHM		h5			33°	2.5xD	45°
-----	--	----	--	--	-----	-------	-----

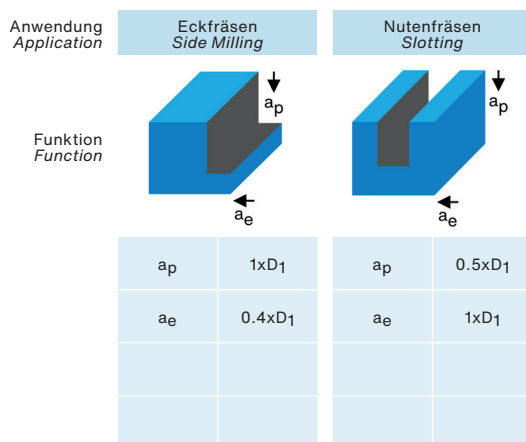


D1	L1	D2	L2	Z	C	DWS Art. N°
0.3	0.75	3	39	3	0.01x45°	460501
0.4	1.00	3	39	4	0.01x45°	460502
0.5	1.25	3	39	4	0.01x45°	460503
0.6	1.50	3	39	4	0.01x45°	460504
0.8	2.00	3	39	4	0.01x45°	460505
1.0	2.50	3	39	4	0.01x45°	460506
1.5	3.75	3	39	4	0.01x45°	460507
2.0	5.00	3	39	4	0.01x45°	460508
2.5	6.25	3	39	4	0.01x45°	460509
3.0	7.50	4	51	4	0.01x45°	460510
3.5	8.75	4	51	4	0.02x45°	460511
4.0	10.00	5	51	4	0.02x45°	460512
4.5	11.25	5	51	4	0.02x45°	460513
5.0	12.50	6	58	4	0.02x45°	460514
5.5	13.75	6	58	4	0.02x45°	460515
6.0	15.00	8	64	4	0.02x45°	460516

Weitere Beschichtungen oder kundenspezifische Lösungen auf Anfrage
Other coatings or customized solutions are available on request

MIO114-NR01120

Schnittparameter
Cutting parameters



		f_z [mm]			
ISO	V_c [m/min]	Ø 0.30 - 0.80	Ø 0.90 - 1.20	Ø 1.30 - 2.90	Ø 3.00 - 6.00
P1	140 - 170	0.004 - 0.009	0.008 - 0.020	0.015 - 0.030	0.020 - 0.040
P2	140 - 170	0.004 - 0.009	0.008 - 0.020	0.015 - 0.030	0.020 - 0.040
P3	140 - 170	0.004 - 0.009	0.008 - 0.020	0.015 - 0.030	0.020 - 0.040
P4	120 - 150	0.004 - 0.009	0.008 - 0.020	0.015 - 0.030	0.020 - 0.040
P5	90 - 120	0.004 - 0.009	0.008 - 0.020	0.015 - 0.030	0.020 - 0.040
M1	50 - 70	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
M2	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
M3	40 - 60	0.003 - 0.008	0.007 - 0.015	0.010 - 0.030	0.015 - 0.035
K1	140 - 170	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N1	300 - 400	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N2	300 - 400	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N3	300 - 400	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N4	300 - 400	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N5	300 - 400	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N6	200 - 300	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N7	200 - 300	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
N8	300 - 400	0.004 - 0.009	0.008 - 0.025	0.020 - 0.040	0.030 - 0.060
S1	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
S2	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
S3	30 - 50	0.003 - 0.008	0.008 - 0.015	0.015 - 0.030	0.025 - 0.045
H1	30 - 50	0.002 - 0.004	0.003 - 0.005	0.004 - 0.006	0.005 - 0.008
H2					

Richtwerte
Indicative values