INDEXABLE SQUARE SHOULDER MILLS

SQUARE SHOULDER MILLING

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	SAD07D	SAD11E	SAD16E	SAP10D	SAP16D
	90°	90°	90°	90°	90°
	APMX [mm] 5.0	APMX [mm] 9.0	APMX [mm] 13.0	APMX [mm] 9.0	APMX [mm] 13.0
	DC [mm] 10 – 32	DC [mm] 16 – 125	DC [mm] 25 – 175	DC [mm] 10 – 63	DC [mm] 25 – 160
Cylindrical shank	 DC = 10 – 25 [mm]	 DC = 16 – 35 [mm]	 DC = 25 – 32 [mm]		
Weldon		 DC = 16 – 32 [mm]	 DC = 25 – 40 [mm]	 DC = 10 – 25 [mm]	 DC = 25 – 40 [mm]
Modular	 DC = 12 – 32 [mm]	 DC = 16 – 40 [mm]	 DC = 32 – 40 [mm]		
Shell mill		 DC = 40 – 125 [mm]	 DC = 40 – 175 [mm]	 DC = 40 – 63 [mm]	 DC = 40 – 160 [mm]
Page	413	420	429	438	441
ISO	P M K N S	P M K N S H	P M K N S H	P M K N S	P M K N S
Insert shape					
Inserts	AD.X 0702	AD.X 11T3	AD.X 1606	APKT 1003	AP.T 1604
No. of cutting edges	2	2	2	2	2
Shallow shoulder milling	■	■	■	■	■
Helical interpolation	■	■	■	■	■
Shallow slot milling	■	■	■	■	■
Plunge milling	■	■	■	■	■
Progressive plunging	■	■	■	■	■
Ramping	■	■	■	■	■
Face milling	◩	◩	◩	◩	◩
Shape surfaces milling (copy milling)	◩	■	■		

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SQUARE SHOULDER MILLING

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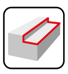
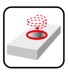
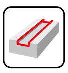
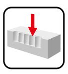
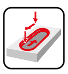
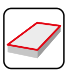
	STN10	STN16	SLN12	SLN16	SSO05O	SSO09
	90°	90°	90°	90°	90°	90°
APMX [mm]	5.0	10.0	9.0	13.0	4.5	8.0
DC [mm]	18 – 32	25 – 175	25 – 125	63 – 175	12 – 40	20 – 125
	 DC = 18 – 35 [mm]	 DC = 25 – 35 [mm]	 DC = 25 – 32 [mm]		 DC = 12 – 25 [mm]	
	 DC = 20 – 32 [mm]	 DC = 25 – 40 [mm]	 DC = 25 – 40 [mm]		 DC = 20 – 32 [mm]	 DC = 20 – 32 [mm]
	 DC = 20 – 32 [mm]	 DC = 25 – 40 [mm]	 DC = 25 – 40 [mm]			
	 DC = 40 – 80 [mm]	 DC = 40 – 175 [mm]	 DC = 40 – 125 [mm]		 DC = 32 – 40 [mm]	 DC = 40 – 125 [mm]
	446	450	455	461	466	469
	P M K N	P M K N	P M K N	P K N H	P M K S	P M K S
						
	TNGX 1004	TNGX 1606	LNG. 1205	LN.U 1607	SOMT 0502	SOMT 09T3
	6	6	4	4	4	4
	■	■	■	■	■	■
	◩	◩	◩			
	■	■	■	■	■	■
	◩		■	■	■	■
	◩		◩			
	◩		◩			
	■	■	◩			◩
			◩	◩	■	

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SQUARE SHOULDER MILLING

	SSD12	FTB27X			
	90°	90°			
	APMX [mm] 10.0	APMX [mm] 18.0			
	DC [mm] 50 – 160	DC [mm] 140 – 260			
Cylindrical shank					
Weldon					
Modular					
Shell mill					
Page	472	475			
ISO	P M K N S	P M K			
Insert shape					
Inserts	SDMT 1205	TBMR 2707			
No. of cutting edges	4	3			
Shallow shoulder milling	■	■			
Helical interpolation					
Shallow slot milling	■	◩			
Plunge milling	■				
Progressive plunging					
Ramping					
Face milling	◩	◩			
Shape surfaces milling (copy milling)					

SAD07D

P M K N S

PRAMET

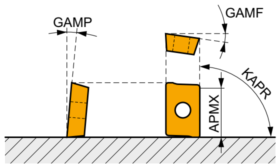
S

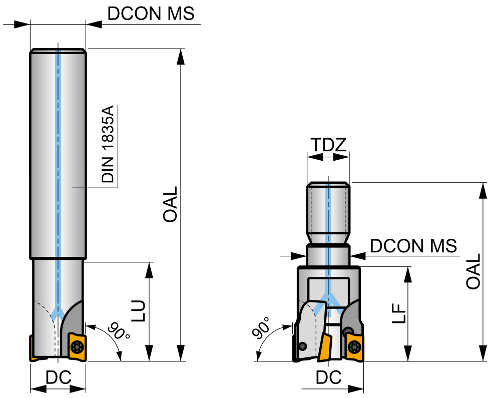
FORCE AD07 Square Shoulder Mill with Internal Coolant

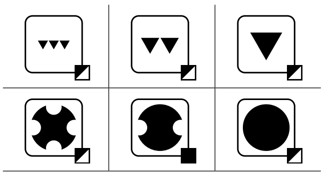
90° end mill utilising positive AD.. 07 style insert with APMX of 5 mm. Suitable for applications, including face, shoulder, slot, helical, trochoidal, ramping and plunge milling. Available in cylindrical and modular style and with differential tooth pitch, in Ø10 up to Ø32 mm. Body treated for longer tool life.

FORCE AD

KAPR	90°
APMX	5.0 mm







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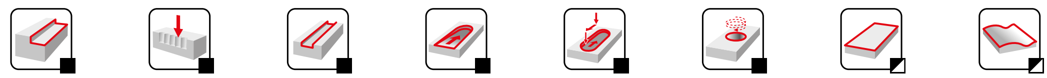


	Product	DC	OAL	DCON MS	LU	LF	TDZ	GAMF	GAMP			max.		kg		
		[mm]	[mm]	[mm]	[mm]	[mm]		[°]	[°]							
DIN 1835A	10A2R016A08-SAD07D-C	10	100	8	16	–	–	-12	8	2	–	61600	✓	0.07	GI276	SQ010
	10A2R016A10-SAD07D-C	10	80	10	16	–	–	-12	8	2	–	61600	✓	0.07	GI276	SQ010
	10A2R018A08-SAD07D-CF	10	100	8	18	–	–	-12	8	2	–	61600	✓	0.07	GI276	SQ010
	10A2R018A10-SAD07D-CF	10	80	10	18	–	–	-12	8	2	–	61600	✓	0.07	GI276	SQ010
	12A2R018A10-SAD07D-C	12	120	10	18	–	–	-10	8	2	–	56300	✓	0.09	GI276	SQ010
	12A2R018A12-SAD07D-C	12	90	12	18	–	–	-10	8	2	–	56300	✓	0.10	GI276	SQ010
	12A3R018A12-SAD07D-C	12	90	12	18	–	–	-10	8	3	–	56200	✓	0.10	GI276	SQ010
	12A3R020A12-SAD07D-CF	12	90	12	20	–	–	-10	8	3	–	56200	✓	0.10	GI276	SQ010
	14A3R018A12-SAD07D-C	14	140	12	18	–	–	-9	8	3	–	52100	✓	0.15	GI276	SQ010
	14A3R018A14-SAD07D-C	14	90	14	18	–	–	-9	8	3	–	52100	✓	0.12	GI276	SQ010
	14A3R020A12-SAD07D-CF	14	140	12	20	–	–	-9	8	3	–	52100	✓	0.14	GI276	SQ010
	14A3R020A14-SAD07D-CF	14	90	14	20	–	–	-9	8	3	–	52100	✓	0.09	GI276	SQ010
	16A3R019A14-SAD07D-C	16	160	14	19	–	–	-8	8	3	–	48700	✓	0.21	GI276	SQ011
	16A3R019A16-SAD07D-C	16	110	16	19	–	–	-8	8	3	–	48700	✓	0.18	GI276	SQ011
	16A4R019A16-SAD07D-C	16	110	16	19	–	–	-8	8	4	–	48700	✓	0.18	GI276	SQ011
	18A4R019A16-SAD07D-C	18	180	16	19	–	–	-7.5	8	4	✓	45900	✓	0.28	GI276	SQ011
	18A4R019A18-SAD07D-C	18	110	18	19	–	–	-7.5	8	4	✓	45900	✓	0.22	GI276	SQ011
	20A4R020A18-SAD07D-C	20	200	18	20	–	–	-7	8	4	✓	43600	✓	0.38	GI276	SQ011
	20A4R020A20-SAD07D-C	20	125	20	20	–	–	-7	8	4	✓	43600	✓	0.30	GI276	SQ011
	20A5R020A20-SAD07D-C	20	125	20	20	–	–	-7	8	5	✓	43600	✓	0.30	GI276	SQ011
	25A5R024A25-SAD07D-C	25	140	25	24	–	–	-6.5	8	5	✓	39000	✓	0.52	GI276	SQ011
	25A6R024A25-SAD07D-C	25	140	25	24	–	–	-6.5	8	6	✓	39000	✓	0.52	GI276	SQ011
MODULAR	12A2R020M06-SAD07D-C	12	35	6.5	–	20	M6	-10	8	2	–	–	✓	0.05	GI276	SQ010
	14A3R020M08-SAD07D-C	14	38	8.5	–	20	M8	-9	8	3	–	–	✓	0.05	GI276	SQ010
	14A3R023M08-SAD07D-CF	14	41	8.5	–	23	M8	-9	8	3	–	–	✓	0.05	GI276	SQ010
	16A4R023M08-SAD07D-C	16	41	8.5	–	23	M8	-8	8	4	✓	–	✓	0.06	GI276	SQ011
	20A5R030M10-SAD07D-C	20	49	10.5	–	30	M10	-7	8	5	✓	–	✓	0.09	GI276	SQ011

Product	DC [mm]	OAL [mm]	DCON MS [mm]	LU [mm]	LF [mm]	TDZ	GAMF [°]	GAMP [°]			max.		kg		
MODULAR 25A6R035M12-SAD07D-C	25	57	12.5	–	35	M12	-6.5	8	6	✓	–	✓	0.13	GI276	SQ011
32A8R043M16-SAD07D-C	32	66	17	–	43	M16	-6	8	8	✓	–	✓	0.25	GI276	SQ011

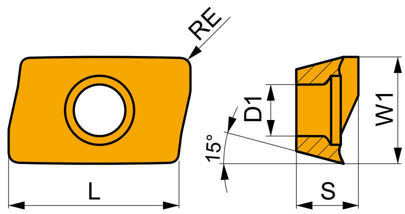
GI276	ADMX 0702..

		Nm			
SQ010	US 62003A-T06P	0.6	M 2	3	Flag T06P
SQ011	US 62004A-T06P	0.6	M 2	4	Flag T06P

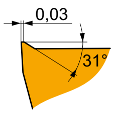
ADMX 07

PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
0702	4.482	2.20	6.95	2.48

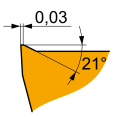


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



F geometry with very sharp positive design for light machining.

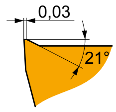
Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 070202SR-F	M8330	0.2	■	220	0.07	2.0	■	130	0.06	2.0		–	–	–	◪	660	0.08	2.0	◪	55	0.05	1.6		–	–	–
	M8340	0.2	■	200	0.07	2.0	■	120	0.06	2.0		–	–	–		–	–	–	◪	50	0.05	1.6		–	–	–
ADMX 070204SR-F	M6330	0.4	■	200	0.07	2.0	■	140	0.06	2.0		–	–	–		–	–	–	◪	60	0.05	1.6		–	–	–
	M8310	0.4	■	265	0.07	2.0	◪	135	0.06	2.0		–	–	–		–	–	–		–	–	–		–	–	–
	M8330	0.4	■	235	0.07	2.0	■	140	0.06	2.0		–	–	–	◪	705	0.08	2.0	◪	55	0.05	1.6		–	–	–
	M8340	0.4	■	215	0.07	2.0	■	125	0.06	2.0		–	–	–		–	–	–	◪	50	0.05	1.6		–	–	–
	M9340	0.4	■	290	0.07	2.0	■	170	0.06	2.0		–	–	–		–	–	–	◪	70	0.05	1.6		–	–	–
ADMX 070208SR-F	M6330	0.8	■	240	0.07	2.0	■	170	0.06	2.0		–	–	–		–	–	–	◪	70	0.05	1.6		–	–	–
	M8310	0.8	■	320	0.07	2.0	◪	160	0.06	2.0		–	–	–		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	280	0.07	2.0	■	165	0.06	2.0		–	–	–	◪	840	0.08	2.0	◪	70	0.05	1.6		–	–	–
	M8340	0.8	■	255	0.07	2.0	■	150	0.06	2.0		–	–	–		–	–	–	◪	60	0.05	1.6		–	–	–



M geometry with positive design for light to medium machining.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 070202SR-M	8215	0.2	■	210	0.09	2.2	◪	125	0.08	2.2	◪	195	0.09	2.2	◪	630	0.11	2.2	◪	50	0.06	1.8		–	–	–
	M8330	0.2	■	205	0.09	2.2	◪	120	0.08	2.2	◪	190	0.09	2.2	◪	615	0.11	2.2	◪	50	0.06	1.8		–	–	–
	M8340	0.2	■	185	0.09	2.2	◪	110	0.08	2.2	◪	175	0.09	2.2		–	–	–	◪	45	0.06	1.8		–	–	–

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



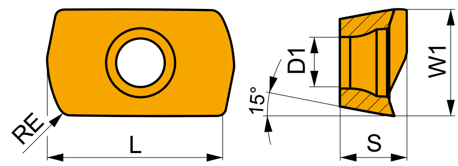
M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 070204SR-M	**8215**	0.4	■ 225	0.09	2.2	◩ 135	0.08	2.2	◩ 210	0.09	2.2	◩ 675	0.11	2.2	◩ 55	0.06	1.8	–	–	–
	M6330	0.4	■ 190	0.09	2.2	◩ 135	0.08	2.2	–	–	–	–	–	–	◩ 55	0.06	1.8	–	–	–
	M8310	0.4	■ 245	0.09	2.2	◩ 120	0.08	2.2	◩ 230	0.09	2.2	–	–	–	–	–	–	–	–	–
	M8330	0.4	■ 220	0.09	2.2	◩ 130	0.08	2.2	◩ 205	0.09	2.2	◩ 660	0.11	2.2	◩ 55	0.06	1.8	–	–	–
	M8340	0.4	■ 200	0.09	2.2	◩ 120	0.08	2.2	◩ 190	0.09	2.2	–	–	–	◩ 50	0.06	1.8	–	–	–
	M9340	0.4	■ 265	0.09	2.2	◩ 155	0.08	2.2	–	–	–	–	–	–	◩ 65	0.06	1.8	–	–	–
ADMX 070208SR-M	**8215**	0.8	■ 270	0.09	2.2	◩ 160	0.08	2.2	◩ 255	0.09	2.2	◩ 810	0.11	2.2	◩ 65	0.06	1.8	–	–	–
	M6330	0.8	■ 225	0.09	2.2	◩ 160	0.08	2.2	–	–	–	–	–	–	◩ 65	0.06	1.8	–	–	–
	M8310	0.8	■ 290	0.09	2.2	◩ 145	0.08	2.2	◩ 275	0.09	2.2	–	–	–	–	–	–	–	–	–
	M8330	0.8	■ 260	0.09	2.2	◩ 155	0.08	2.2	◩ 245	0.09	2.2	◩ 780	0.11	2.2	◩ 65	0.06	1.8	–	–	–
	M8340	0.8	■ 240	0.09	2.2	◩ 140	0.08	2.2	◩ 225	0.09	2.2	–	–	–	◩ 60	0.06	1.8	–	–	–
	M9340	0.8	■ 315	0.09	2.2	◩ 185	0.08	2.2	–	–	–	–	–	–	◩ 75	0.06	1.8	–	–	–
ADMX 070212SR-M	**M8340**	1.2	■ 250	0.09	2.2	◩ 150	0.08	2.2	◩ 235	0.09	2.2	–	–	–	◩ 60	0.06	1.8	–	–	–
ADMX 070216SR-M	**M8310**	1.6	■ 320	0.09	2.2	◩ 160	0.08	2.2	◩ 300	0.09	2.2	–	–	–	–	–	–	–	–	–
	M8330	1.6	■ 290	0.09	2.2	◩ 170	0.08	2.2	◩ 275	0.09	2.2	◩ 870	0.11	2.2	◩ 70	0.06	1.8	–	–	–
	M8340	1.6	■ 265	0.09	2.2	◩ 155	0.08	2.2	◩ 250	0.09	2.2	–	–	–	◩ 65	0.06	1.8	–	–	–
ADMX 070220SR-M	**M6330**	2.0	■ 260	0.09	2.2	◩ 185	0.08	2.2	–	–	–	–	–	–	◩ 75	0.06	1.8	–	–	–
	M8310	2.0	■ 340	0.09	2.2	◩ 170	0.08	2.2	◩ 320	0.09	2.2	–	–	–	–	–	–	–	–	–
	M8330	2.0	■ 300	0.09	2.2	◩ 180	0.08	2.2	◩ 285	0.09	2.2	◩ 900	0.11	2.2	◩ 75	0.06	1.8	–	–	–
	M8340	2.0	■ 275	0.09	2.2	◩ 165	0.08	2.2	◩ 260	0.09	2.2	–	–	–	◩ 65	0.06	1.8	–	–	–

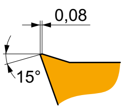
ADEX 07-HF

PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
0702	4.439	2.20	6.45	2.48



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

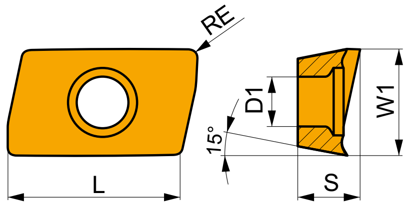


HF geometry with highly positive design for high feed machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 070206SR-HF	**M6330**	0.6	■ 200	0.60	0.3	◩ 140	0.54	0.3	–	–	–	–	–	–	–	–	–	–	–	–
	M8330	0.6	■ 225	0.60	0.3	◩ 135	0.54	0.3	–	–	–	–	–	–	–	–	–	–	–	–
	M8340	0.6	■ 215	0.60	0.3	◩ 125	0.54	0.3	–	–	–	–	–	–	–	–	–	–	–	–

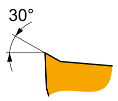
ADEX 07-FA

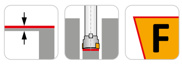
	W1 [mm]	D1 [mm]	L [mm]	S [mm]
0702	4.497	2.20	6.95	2.48



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 070204FR-FA	**HF7**	0.4	–	–	–	–	–	–	–	–	–	■	240	0.18	3.0	–	–	–	–	–	–
	M0315	0.4	–	–	–	–	–	–	–	–	–	■	555	0.18	3.0	–	–	–	–	–	–
ADEX 070208FR-FA	**HF7**	0.8	–	–	–	–	–	–	–	–	–	■	285	0.18	3.0	–	–	–	–	–	–

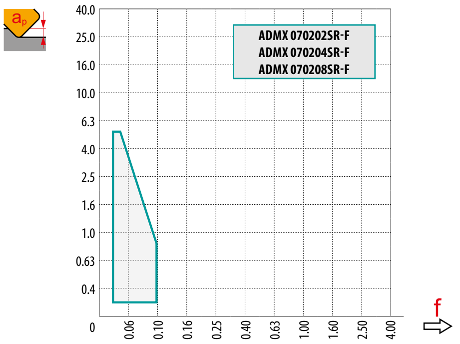


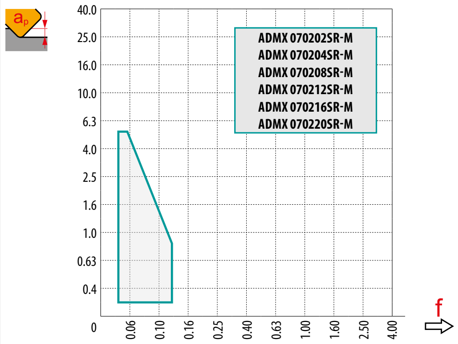


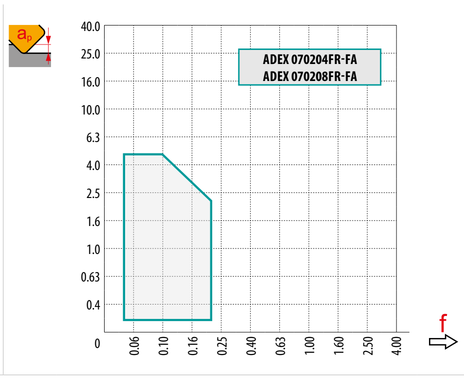
FA geometry with highly positive design for fine-finish to medium machining.

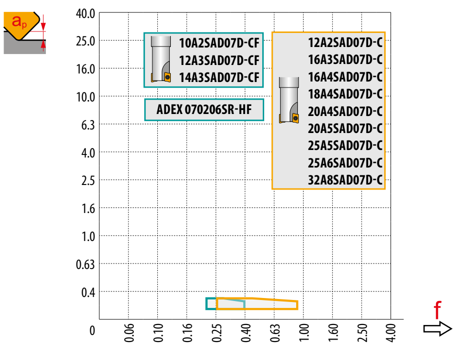
a_e / DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	ADMX 07-F			ADMX 07-M						ADEX 07-HF	ADEX 07-FA	
RE	0.2	0.4	0.8	0.2	0.4	0.8	1.2	1.6	2.0	0.6	0.4	0.8
BS	1.38	0.89	0.54	1.38	0.89	0.54	1.07	0.7	0.33	–	0.94	0.55









ADEX 07-HF

DC	a_p	0	0.1	0.2	0.3
10	DEF	5.6	7.8	8.7	9.4
12		7.6	9.8	10.7	11.4
14		9.6	11.8	12.7	13.4
16		11.6	13.8	14.7	15.4
18		13.6	15.8	16.7	17.4
20		15.6	17.8	18.7	19.4
25		20.6	22.8	23.7	24.4
32		27.6	29.8	30.7	31.4

HFC

a_p	0.1	0.2	0.3
1 f	0.9	0.8	0.6

max
3.0

			HFC		
ap	1.0	3.0	5.0	0.1	0.2	0.3
f	0.13	0.08	0.05	0.7	0.6	0.4

			HFC	
DC	RPMX	APMX/l	RPMX	APMX/l
10	5.2	5.0/56	3.5	0.3/6
12	3.4	5.0/86	2.2	0.3/9
14	2.5	4.2/100	1.6	0.3/12
16	1.9	3.2/100	1.3	0.3/15
18	1.7	2.8/100	1.1	0.3/17
20	1.5	2.5/100	0.9	0.3/21
25	1.1	1.8/100	0.7	0.3/26
32	0.8	1.2/100	0.5	0.3/36

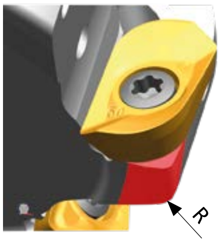
					HFC			
DC	DMIN	DMAX	SMAX DMIN	SMAX DMAX	DMIN	DMAX	SMAX DMIN	SMAX DMAX
10	12.0	20.0	0.5	2.8	12	20	0.30	0.30
12	16.0	24.0	0.7	2.2	16	24	0.30	0.30
14	20.0	28.0	0.8	1.9	20	28	0.30	0.30
16	24.0	32.0	0.8	1.6	24	32	0.30	0.30
18	28.0	36.0	0.9	1.6	28	36	0.30	0.30
20	32.0	40.0	0.9	1.6	32	40	0.30	0.30
25	42.0	50.0	1.0	1.5	42	50	0.30	0.30
32	56.0	64.0	1.0	1.4	56	64	0.30	0.30

ap
0.5

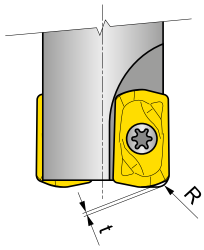
ap	HFC
	0.3

DC	µm	3	5	10	15	20	30	40	50	60	80	100
10		0.346	0.447	0.632	0.775	0.894	1.095	1.265	1.414	1.549	1.789	2.000
12		0.379	0.490	0.693	0.849	0.980	1.200	1.386	1.549	1.697	1.960	2.191
14		0.410	0.529	0.748	0.917	1.058	1.296	1.497	1.673	1.833	2.117	2.366
16	FE	0.438	0.566	0.800	0.980	1.131	1.386	1.600	1.789	1.960	2.263	2.530
18		0.465	0.600	0.849	1.039	1.200	1.470	1.697	1.897	2.078	2.400	2.683
20		0.490	0.632	0.894	1.095	1.265	1.549	1.789	2.000	2.191	2.530	2.828
25		0.548	0.707	1.000	1.225	1.414	1.732	2.000	2.236	2.449	2.828	3.162
32		0.620	0.800	1.131	1.386	1.600	1.960	2.263	2.530	2.771	3.200	3.578

i



ADMX 07	R
ADMX 070216SR-M	1
ADMX 070220SR-M	1.5
ADEX 070206SR-HF	1



ADEX 07	R	t
ADEX 070206SR-HF	0.8	0.18

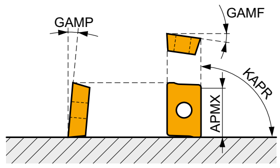
SAD11E

P M K N S H

PRAMET

S

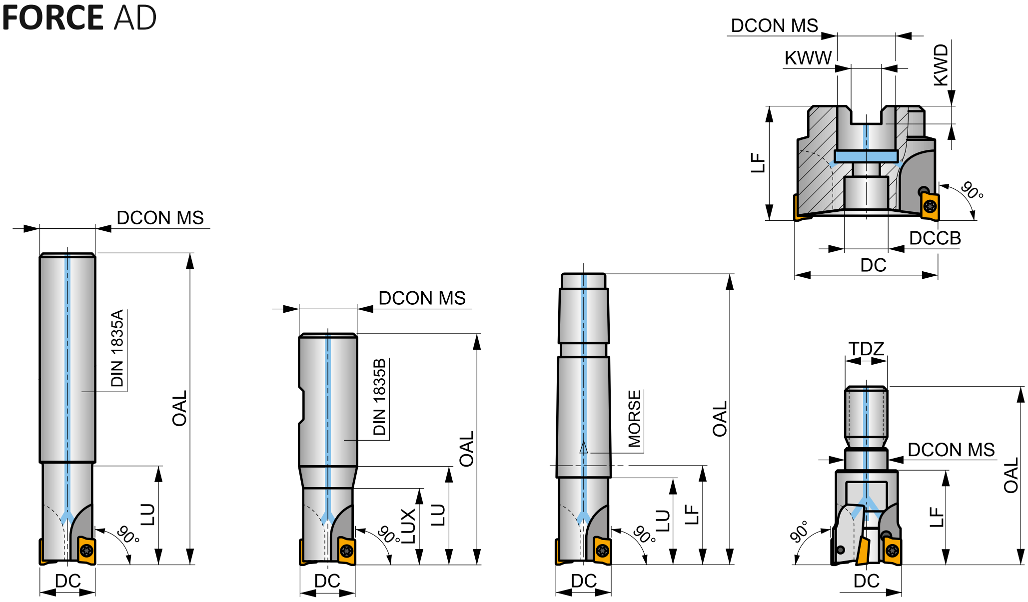
KAPR	90°
APMX	9.0 mm



FORCE AD11 Square Shoulder Mill with Internal Coolant

90° end and shell mills utilising positive AD.. 11 style insert with APMX of 9 mm. Suitable for face, shoulder, slot, helical, trochoidal, ramping and plunge milling. Available in cylindrical, Weldon, Morse taper, modular and arbor (with differential tooth pitch) style, in Ø16 up to Ø125 mm. Body treated for longer tool life.

FORCE AD



h_m 0.08 - 0.16

h_m 0.06 - 0.13

Product	DC	OAL	DCON MS	DCCB	LU	LUX	LF	TDZ	CZC MS	KWW	KWD	GAMF	GAMP			max.		kg			
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[mm]	[mm]	[°]	[°]								
DIN 1835A 16A2R024A14-SAD11E-C	16	160	14	–	24	–	–	–	–	–	–	-12.8	4	2	–	30100	✓	0.21	GI169	SQ025	–
16A2R024A16-SAD11E-C	16	135	16	–	24	–	–	–	–	–	–	-12.8	4	2	–	30100	✓	0.19	GI169	SQ025	–
16A2R050A16-SAD11E-C	16	135	16	–	50	–	–	–	–	–	–	-12.8	4	2	–	30100	✓	0.20	GI169	SQ025	–
18A2R029A20-SAD11E-C	18	150	20	–	29	–	–	–	–	–	–	-12	4.5	2	–	28400	✓	0.35	GI169	SQ025	–
20A2R029A20-SAD11E-C	20	150	20	–	29	–	–	–	–	–	–	-11.5	5	2	–	27000	✓	0.33	GI169	SQ020	–
20A2R070A20-SAD11E-C	20	150	20	–	70	–	–	–	–	–	–	-11.5	5	2	–	27000	✓	0.32	GI169	SQ020	–
20A3R029A18-SAD11E-C	20	200	18	–	29	–	–	–	–	–	–	-11.5	5	3	–	27000	✓	0.38	GI169	SQ025	–
20A3R029A20-SAD11E-C	20	150	20	–	29	–	–	–	–	–	–	-11.5	5	3	–	27000	✓	0.33	GI169	SQ025	–
22A3R029A20-SAD11E-C	22	200	20	–	29	–	–	–	–	–	–	-11.5	5	3	–	25600	✓	0.49	GI169	SQ025	–
25A3R034A25-SAD11E-C	25	170	25	–	34	–	–	–	–	–	–	-10.2	5	3	–	24100	✓	0.42	GI169	SQ020	–
25A3R080A25-SAD11E-C	25	170	25	–	80	–	–	–	–	–	–	-10.2	5	3	–	24100	✓	0.55	GI169	SQ020	–
25A4R034A25-SAD11E-C	25	170	25	–	34	–	–	–	–	–	–	-10.2	5	4	–	24100	✓	0.42	GI169	SQ025	–
25A4R040A25-SAD11E-C	25	250	25	–	40	–	–	–	–	–	–	-10.2	5	4	–	24100	✓	0.86	GI169	SQ025	–
30A3R080A32-SAD11E-C	30	200	32	–	80	–	–	–	–	–	–	-9.3	7	3	–	22000	✓	1.02	GI169	SQ020	–
32A3R090A32-SAD11E-C	32	195	32	–	90	–	–	–	–	–	–	-9	5	3	–	21300	✓	1.01	GI169	SQ020	–
32A5R034A32-SAD11E-C	32	195	32	–	34	–	–	–	–	–	–	-9	8	5	–	21300	✓	1.03	GI169	SQ025	–
35A5R025A32-SAD11E-C	35	200	32	–	25	–	–	–	–	–	–	-9	8	5	–	20300	✓	1.16	GI169	SQ020	–
DIN 1835B 16A2R027B16-SAD11E-C	16	75	16	–	–	27	–	–	–	–	–	-12.8	4	2	–	30100	✓	0.09	GI169	SQ025	–
20A2R032B20-SAD11E-C	20	82	20	–	–	32	–	–	–	–	–	-11.5	5	2	–	27000	✓	0.13	GI169	SQ020	–
20A3R032B20-SAD11E-C	20	82	20	–	–	32	–	–	–	–	–	-11.5	5	3	–	27000	✓	0.13	GI169	SQ025	–
25A3R042B25-SAD11E-C	25	98	25	–	–	42	–	–	–	–	–	-10.2	5	3	–	24100	✓	0.29	GI169	SQ020	–
25A4R042B25-SAD11E-C	25	98	25	–	–	42	–	–	–	–	–	-10.2	5	4	–	24100	✓	0.31	GI169	SQ025	–
32A4R042B32-SAD11E-C	32	102	32	–	–	42	–	–	–	–	–	-9	8	4	–	21300	✓	0.27	GI169	SQ020	–
32A5R042B32-SAD11E-C	32	102	32	–	–	42	–	–	–	–	–	-9	8	5	–	21300	✓	0.52	GI169	SQ025	–
DIN 228A 16A2R030E02-SAD11E-C	16	94	–	–	25	–	30	–	2	–	–	-12.8	4	2	–	30100	✓	0.15	GI169	SQ025	–
20A3R035E03-SAD11E-C	20	116	–	–	30	–	35	–	3	–	–	-11.5	5	3	–	27000	✓	0.28	GI169	SQ025	–
25A4R043E03-SAD11E-C	25	124	–	–	38	–	43	–	3	–	–	-10.2	5	4	–	24100	✓	0.32	GI169	SQ025	–

	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LUX [mm]	LF [mm]	TDZ	CZC MS	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
MODULAR	16A2R024M08-SAD11E-C	16	38	8.5	–	–	–	24	M8	–	–	–	-12.8	4	2	–	–	✓	0.04	GI169	SQ025	–
	20A2R026M10-SAD11E-C	20	45	11	–	–	–	26	M10	–	–	–	-11.5	5	2	–	–	✓	0.09	GI169	SQ020	–
	20A3R026M10-SAD11E-C	20	45	10.5	–	–	–	26	M10	–	–	–	-11.5	5	3	–	–	✓	0.06	GI169	SQ025	–
	25A3R033M12-SAD11E-C	25	55	12.5	–	–	–	33	M12	–	–	–	-10.2	5	3	–	–	✓	0.15	GI169	SQ020	–
	25A4R033M12-SAD11E-C	25	55	12.5	–	–	–	33	M12	–	–	–	-10.2	5	4	–	–	✓	0.09	GI169	SQ025	–
	32A4R043M16-SAD11E-C	32	66	17	–	–	–	43	M16	–	–	–	-9	8	4	–	–	✓	0.21	GI169	SQ020	–
	32A5R043M16-SAD11E-C	32	66	17	–	–	–	43	M16	–	–	–	-9	8	5	–	–	✓	0.19	GI169	SQ025	–
	40A4R043M16-SAD11E-C	40	66	17	–	–	–	43	M16	–	–	–	-8.1	11	4	–	–	✓	0.27	GI169	SQ020	–
	40A6R043M16-SAD11E-C	40	66	17	–	–	–	43	M16	–	–	–	-8.1	11	6	–	–	✓	0.21	GI169	SQ020	–
ISO 6462 DIN 8030	40A04R-S90AD11E-C	40	–	16	14	–	–	40	–	–	8.4	5.6	-8.1	11	4	✓	19100	✓	0.16	GI169	SQ022	–
	40A05R-S90AD11E-C	40	–	16	14	–	–	40	–	–	8.4	5.6	-8.1	11	5	✓	19000	✓	0.32	GI169	SQ022	–
	40A06R-S90AD11E-C	40	–	16	14	–	–	40	–	–	8.4	5.6	-8.1	11	6	✓	19100	✓	0.16	GI169	SQ022	–
	50A05R-S90AD11E-C	50	–	22	18	–	–	40	–	–	10.4	6.3	-7.2	12	5	✓	17000	✓	0.31	GI169	SQ023	–
	50A07R-S90AD11E-C	50	–	22	18	–	–	40	–	–	10.4	6.3	-7.2	12	7	✓	17000	✓	0.45	GI169	SQ023	–
	63A06R-S90AD11E-C	63	–	22	18	–	–	40	–	–	10.4	6.3	-6.5	12	6	✓	15200	✓	0.54	GI169	SQ023	–
	63A09R-S90AD11E-C	63	–	22	18	–	–	40	–	–	10.4	6.3	-6.5	12	9	✓	15200	✓	0.63	GI169	SQ023	–
	80A10R-S90AD11E-C	80	–	27	38	–	–	50	–	–	12.4	7	-6	12	10	✓	13500	✓	1.05	GI169	SQ021	AC001
	100A11R-S90AD11E-C	100	–	32	45	–	–	50	–	–	14.4	8	-5.5	12	11	✓	12100	✓	1.89	GI169	SQ021	AC002
	125A12R-S90AD11E-C	125	–	40	56	–	–	63	–	–	16.4	9	-5.2	12	12	✓	10800	✓	2.97	GI169	SQ021	AC003

GI169	ADMX 11T3..	ADEX 11T3..

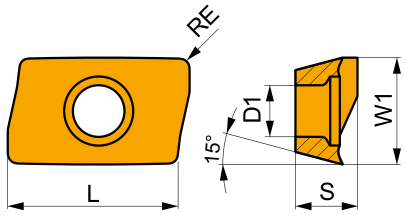
		Nm						
SQ020	US 62506-T07P	1.2	M 2.5	6	–	–	Flag T07P	–
SQ021	US 62506-T07P	1.2	M 2.5	6	D-T07P/T09P	FG-15	–	–
SQ022	US 62506-T07P	1.2	M 2.5	6	D-T07P/T09P	FG-15	–	HS 0830C
SQ023	US 62506-T07P	1.2	M 2.5	6	D-T07P/T09P	FG-15	–	HS 1030C
SQ025	US 62505-T07P	1.2	M 2.5	5	–	–	Flag T07P	–

AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

ADMX 11

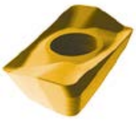
PRAMET

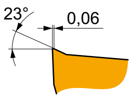
	W1 [mm]	D1 [mm]	L [mm]	S [mm]
11T3	6.530	2.90	11.00	3.97

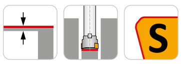


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P				M				K				N				S				H		
				vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]	vc [m/min]	f [mm/tooth]	ap [mm]

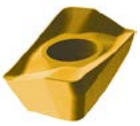


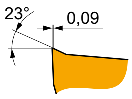




F geometry with very sharp positive design for light machining.

Product	Grade	RE		vc	f	ap		vc	f	ap		vc	f	ap		vc	f	ap		vc	f	ap	vc	f	ap
ADMX 11T304SR-F	8215	0.4	■	245	0.10	2.0	◩	145	0.09	2.0	◩	230	0.10	2.0	◩	735	0.12	2.0	◩	60	0.08	1.6	–	–	–
	M8310	0.4	■	270	0.10	2.0	◩	135	0.09	2.0	◩	255	0.10	2.0		–	–	–		–	–	–	–	–	–
	M8330	0.4	■	240	0.10	2.0	◩	140	0.09	2.0	◩	225	0.10	2.0	◩	720	0.12	2.0	◩	60	0.08	1.6	–	–	–
	M8340	0.4	■	220	0.10	2.0	◩	130	0.09	2.0	◩	205	0.10	2.0		–	–	–	◩	55	0.08	1.6	–	–	–
	M9340	0.4	■	285	0.10	2.0	◩	170	0.09	2.0		–	–	–		–	–	–	◩	70	0.08	1.6	–	–	–
ADMX 11T308SR-F	8215	0.8	■	290	0.10	2.0	◩	170	0.09	2.0	◩	275	0.10	2.0	◩	870	0.12	2.0	◩	70	0.08	1.6	–	–	–
	M8330	0.8	■	285	0.10	2.0	◩	170	0.09	2.0	◩	270	0.10	2.0	◩	855	0.12	2.0	◩	70	0.08	1.6	–	–	–
	M8340	0.8	■	260	0.10	2.0	◩	155	0.09	2.0	◩	245	0.10	2.0		–	–	–	◩	65	0.08	1.6	–	–	–
	M9340	0.8	■	340	0.10	2.0	◩	200	0.09	2.0		–	–	–		–	–	–	◩	85	0.08	1.6	–	–	–

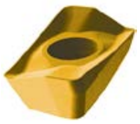


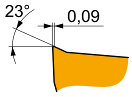


M geometry with positive design for light to medium machining.

Product	Grade	RE		vc	f	ap		vc	f	ap		vc	f	ap		vc	f	ap		vc	f	ap	vc	f	ap
ADMX 11T302SR-M	M8330	0.2	■	190	0.15	4.0	■	110	0.14	4.0	■	180	0.15	4.0		–	–	–	◩	45	0.12	3.2	–	–	–
	M8340	0.2	■	170	0.15	4.0	■	100	0.14	4.0	◩	160	0.15	4.0		–	–	–	◩	40	0.12	3.2	–	–	–
ADMX 11T304SR-M	8215	0.4	■	205	0.15	4.0	◩	120	0.14	4.0	■	190	0.15	4.0		–	–	–	◩	50	0.12	3.2	–	–	–
	M8310	0.4	■	220	0.15	4.0	◩	110	0.14	4.0	■	205	0.15	4.0		–	–	–		–	–	–	–	–	–
	M8330	0.4	■	205	0.15	4.0	■	120	0.14	4.0	■	190	0.15	4.0		–	–	–	◩	50	0.12	3.2	–	–	–
	M8340	0.4	■	185	0.15	4.0	■	110	0.14	4.0	◩	175	0.15	4.0		–	–	–	◩	45	0.12	3.2	–	–	–
	M9325	0.4	■	255	0.15	4.0		–	–	–	■	240	0.15	4.0		–	–	–		–	–	–	–	–	–
	M9340	0.4	■	235	0.15	4.0	■	140	0.14	4.0		–	–	–		–	–	–	◩	55	0.12	3.2	–	–	–
ADMX 11T308SR-M	8215	0.8	■	245	0.15	4.0	◩	145	0.14	4.0	■	230	0.15	4.0		–	–	–	◩	60	0.12	3.2	–	–	–
	M5315	0.8	◩	335	0.15	4.0		–	–	–	■	315	0.15	4.0		–	–	–		–	–	–	–	–	–
	M8310	0.8	■	265	0.15	4.0	◩	135	0.14	4.0	■	250	0.15	4.0		–	–	–		–	–	–	–	–	–
	M8330	0.8	■	245	0.15	4.0	■	145	0.14	4.0	■	230	0.15	4.0		–	–	–	◩	60	0.12	3.2	–	–	–
	M8340	0.8	■	220	0.15	4.0	■	130	0.14	4.0	◩	205	0.15	4.0		–	–	–	◩	55	0.12	3.2	–	–	–
	M9315	0.8	■	330	0.15	4.0		–	–	–	■	310	0.15	4.0		–	–	–		–	–	–	–	–	–
	M9325	0.8	■	305	0.15	4.0		–	–	–	■	285	0.15	4.0		–	–	–		–	–	–	–	–	–
	M9340	0.8	■	275	0.15	4.0	■	165	0.14	4.0		–	–	–		–	–	–	◩	65	0.12	3.2	–	–	–
ADMX 11T310SR-M	M8330	1.0	■	255	0.15	4.0	■	150	0.14	4.0	■	240	0.15	4.0		–	–	–	◩	60	0.12	3.2	–	–	–
	M8340	1.0	■	230	0.15	4.0	■	135	0.14	4.0	◩	215	0.15	4.0		–	–	–	◩	55	0.12	3.2	–	–	–
ADMX 11T312SR-M	8215	1.2	■	255	0.15	4.0	◩	150	0.14	4.0	■	240	0.15	4.0		–	–	–	◩	60	0.12	3.2	–	–	–
	M8330	1.2	■	255	0.15	4.0	■	150	0.14	4.0	■	240	0.15	4.0		–	–	–	◩	60	0.12	3.2	–	–	–
	M8340	1.2	■	230	0.15	4.0	■	135	0.14	4.0	◩	215	0.15	4.0		–	–	–	◩	55	0.12	3.2	–	–	–
ADMX 11T316SR-M	8215	1.6	■	270	0.15	4.0	◩	160	0.14	4.0	■	255	0.15	4.0		–	–	–	◩	65	0.12	3.2	–	–	–
	M6330	1.6	■	230	0.15	4.0	■	165	0.14	4.0		–	–	–		–	–	–	◩	65	0.12	3.2	–	–	–
	M8310	1.6	■	295	0.15	4.0	◩	150	0.14	4.0	■	280	0.15	4.0		–	–	–		–	–	–	–	–	–
	M8330	1.6	■	270	0.15	4.0	■	160	0.14	4.0	■	255	0.15	4.0		–	–	–	◩	65	0.12	3.2	–	–	–
	M8340	1.6	■	240	0.15	4.0	■	140	0.14	4.0	◩	225	0.15	4.0		–	–	–	◩	60	0.12	3.2	–	–	–

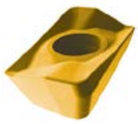
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

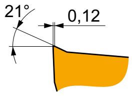




M geometry with positive design for light to medium machining.

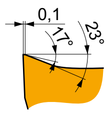
Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T320SR-M	**M6330**	2.0	■	240	0.15	4.0	■	170	0.14	4.0		–	–	–		–	–	–	◩	70	0.12	3.2		–	–	–
	M8330	2.0	■	280	0.15	4.0	■	165	0.14	4.0	■	265	0.15	4.0		–	–	–	◩	70	0.12	3.2		–	–	–
	M8340	2.0	■	255	0.15	4.0	■	150	0.14	4.0	◩	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
ADMX 11T325SR-M	**M6330**	2.5	■	240	0.15	4.0	■	170	0.14	4.0		–	–	–		–	–	–	◩	70	0.12	3.2		–	–	–
	M8340	2.5	■	255	0.15	4.0	■	150	0.14	4.0	◩	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
ADMX 11T330SR-M	**M6330**	3.0	■	240	0.15	4.0	■	170	0.14	4.0		–	–	–		–	–	–	◩	70	0.12	3.2		–	–	–
	M8330	3.0	■	280	0.15	4.0	■	165	0.14	4.0	■	265	0.15	4.0		–	–	–	◩	70	0.12	3.2		–	–	–
	M8340	3.0	■	255	0.15	4.0	■	150	0.14	4.0	◩	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–





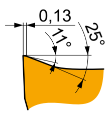
R geometry with positive design for machining conditions in less stable conditions.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T308PR-R	**8215**	0.8	■	230	0.18	4.0	◩	135	0.16	4.0	■	215	0.18	4.0		–	–	–	◩	55	0.16	3.2	◩	45	0.15	1.0
	M5315	0.8	◩	310	0.18	4.0		–	–	–	■	290	0.18	4.0		–	–	–		–	–	–	◩	60	0.15	1.0
	M8310	0.8	■	250	0.18	4.0	◩	125	0.16	4.0	■	235	0.18	4.0		–	–	–		–	–	–	◩	50	0.15	1.0
	M8330	0.8	■	230	0.18	4.0	◩	135	0.16	4.0	■	215	0.18	4.0		–	–	–	◩	55	0.16	3.2	◩	45	0.15	1.0
	M8340	0.8	■	210	0.18	4.0	◩	125	0.16	4.0	◩	195	0.18	4.0		–	–	–	◩	50	0.16	3.2		–	–	–
	M9315	0.8	■	310	0.18	4.0		–	–	–	■	290	0.18	4.0		–	–	–		–	–	–	◩	60	0.15	1.0
	M9325	0.8	■	290	0.18	4.0		–	–	–	■	275	0.18	4.0		–	–	–		–	–	–	◩	55	0.15	1.0
ADMX 11T316PR-R	**8215**	1.6	■	255	0.18	4.0	◩	150	0.16	4.0	■	240	0.18	4.0		–	–	–	◩	60	0.16	3.2	◩	50	0.15	1.0
	M8330	1.6	■	255	0.18	4.0	◩	150	0.16	4.0	■	240	0.18	4.0		–	–	–	◩	60	0.16	3.2	◩	50	0.15	1.0
	M9325	1.6	■	320	0.18	4.0		–	–	–	■	300	0.18	4.0		–	–	–		–	–	–	◩	60	0.15	1.0



MF geometry with highly positive design for light to finish machining.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T304SR-MF	**M6330**	0.4	■	215	0.08	2.5	■	150	0.07	2.5		–	–	–		–	–	–	■	60	0.06	2.0		–	–	–
	M8340	0.4	■	220	0.08	2.5	■	130	0.07	2.5		–	–	–		–	–	–	■	55	0.06	2.0		–	–	–
ADMX 11T308SR-MF	**M6330**	0.8	■	255	0.08	2.5	■	180	0.07	2.5		–	–	–		–	–	–	■	75	0.06	2.0		–	–	–
	M8340	0.8	■	265	0.08	2.5	■	155	0.07	2.5		–	–	–		–	–	–	■	65	0.06	2.0		–	–	–
	M9340	0.8	■	360	0.08	2.5	■	215	0.07	2.5		–	–	–		–	–	–	■	90	0.06	2.0		–	–	–

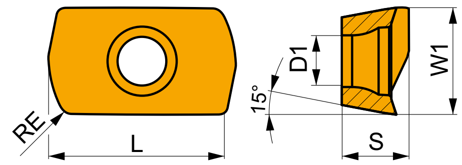


MM geometry with highly positive design for light to medium and finish to semi-rough machining.

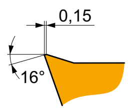
Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T304SR-MM	**M6330**	0.4	■	185	0.14	2.5	■	130	0.13	2.5		–	–	–		–	–	–	■	55	0.11	2.0		–	–	–
	M8340	0.4	■	195	0.14	2.5	■	115	0.13	2.5		–	–	–		–	–	–	■	45	0.11	2.0		–	–	–
	M9340	0.4	■	250	0.14	2.5	■	150	0.13	2.5		–	–	–		–	–	–	■	60	0.11	2.0		–	–	–
ADMX 11T308SR-MM	**M6330**	0.8	■	225	0.14	2.5	■	155	0.13	2.5		–	–	–		–	–	–	■	65	0.11	2.0		–	–	–
	M8340	0.8	■	235	0.14	2.5	■	140	0.13	2.5		–	–	–		–	–	–	■	55	0.11	2.0		–	–	–
	M8345	0.8	■	190	0.14	2.5	■	110	0.13	2.5		–	–	–		–	–	–	■	45	0.11	2.0		–	–	–
	M9340	0.8	■	300	0.14	2.5	■	180	0.13	2.5		–	–	–		–	–	–	■	75	0.11	2.0		–	–	–
ADMX 11T312SR-MM	**M6330**	1.2	■	235	0.14	2.5	■	165	0.13	2.5		–	–	–		–	–	–	■	70	0.11	2.0		–	–	–
	M8340	1.2	■	245	0.14	2.5	■	145	0.13	2.5		–	–	–		–	–	–	■	60	0.11	2.0		–	–	–
	M9340	1.2	■	315	0.14	2.5	■	185	0.13	2.5		–	–	–		–	–	–	■	75	0.11	2.0		–	–	–

ADEX 11-HF

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
11T3	6.450	2.90	10.67	3.82

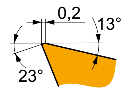


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



HF geometry with highly positive design for high feed machining.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADEX 11T308SR-HF	**8215**	0.8	■	215	0.68	0.4	◪	125	0.61	0.4		–	–	–		–	–	–		–	–	–		–	–	–
	M6330	0.8	■	185	0.68	0.4	◪	130	0.61	0.4		–	–	–		–	–	–		–	–	–		–	–	–
	M8310	0.8	■	220	0.68	0.4	◪	110	0.52	0.4		–	–	–		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	215	0.68	0.4	◪	125	0.61	0.4		–	–	–		–	–	–		–	–	–		–	–	–
	M8340	0.8	■	200	0.68	0.4	◪	120	0.61	0.4		–	–	–		–	–	–		–	–	–		–	–	–
	M9340	0.8	■	220	0.68	0.4	◪	130	0.61	0.4		–	–	–		–	–	–		–	–	–		–	–	–



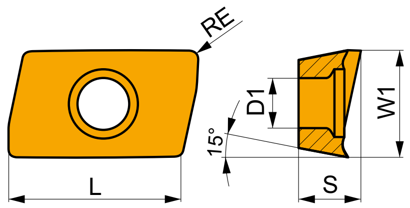
HF2 geometry with positive design for high feed machining.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADEX 11T308SR-HF2	**M8310**	0.8	■	220	0.68	0.4	◪	110	0.61	0.4	◪	205	0.68	0.4		–	–	–		–	–	–	◪	40	0.15	1.0
	M8330	0.8	■	215	0.68	0.4	◪	125	0.61	0.4	◪	200	0.68	0.4		–	–	–	◪	50	0.48	0.3	◪	40	0.15	1.0
	M8340	0.8	■	200	0.68	0.4	◪	120	0.61	0.4	◪	190	0.68	0.4		–	–	–	◪	50	0.48	0.3		–	–	–
	M9325	0.8	■	250	0.68	0.4		–	–	–	◪	235	0.68	0.4		–	–	–		–	–	–	◪	50	0.15	1.0
	M9340	0.8	■	220	0.68	0.4	◪	130	0.61	0.4		–	–	–		–	–	–	◪	55	0.48	0.3		–	–	–

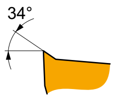
ADEX 11-FA

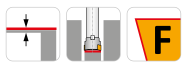
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
11T3	6.450	2.90	9.70	3.91



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.





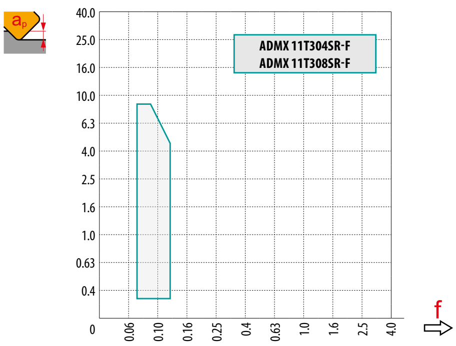
FA geometry with highly positive design for fine-finish to medium machining.

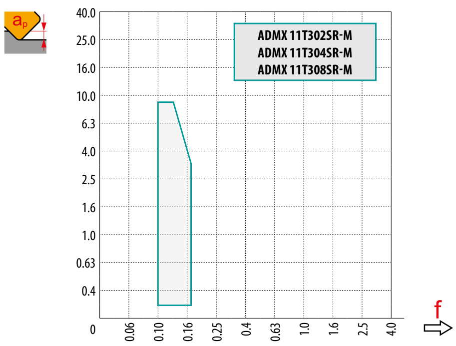
Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 11T304FR-FA	**HF7**	0.4	–	–	–	–	–	–	–	–	–	■	210	0.30	5.0	–	–	–	–	–	–
	M0315	0.4	–	–	–	–	–	–	–	–	–	■	480	0.30	5.0	–	–	–	–	–	–
ADEX 11T308FR-FA	**HF7**	0.8	–	–	–	–	–	–	–	–	–	■	240	0.30	5.0	–	–	–	–	–	–
	M0315	0.8	–	–	–	–	–	–	–	–	–	■	570	0.30	5.0	–	–	–	–	–	–
ADEX 11T312FR-FA	**HF7**	1.2	–	–	–	–	–	–	–	–	–	■	255	0.30	5.0	–	–	–	–	–	–
	M0315	1.2	–	–	–	–	–	–	–	–	–	■	600	0.30	5.0	–	–	–	–	–	–
ADEX 11T316FR-FA	**HF7**	1.6	–	–	–	–	–	–	–	–	–	■	270	0.18	5.0	–	–	–	–	–	–

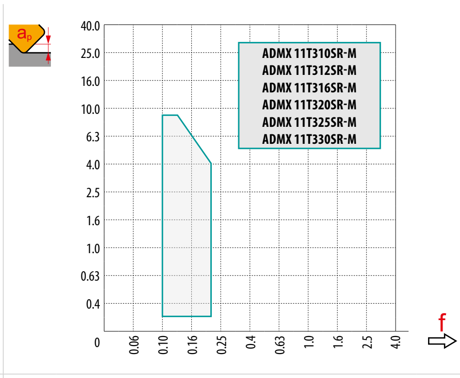
a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
x.v	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

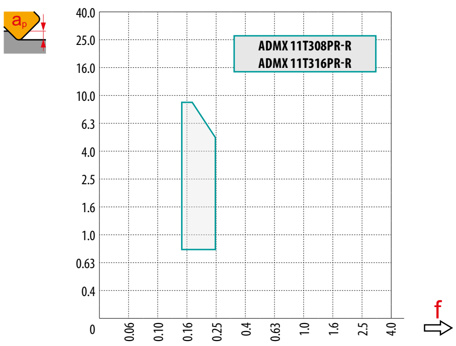
	ADMX 11-F		ADMX 11-M									ADMX 11-R		ADMX 11-MF	
RE	0.4	0.8	0.2	0.4	0.8	1.0	1.2	1.6	2.0	2.5	3.0	0.8	1.6	0.4	0.8
BS	1.89	1.48	2.09	1.89	1.48	1.27	1.08	0.68	1.61	1.13	0.66	1.48	0.68	1.89	1.48

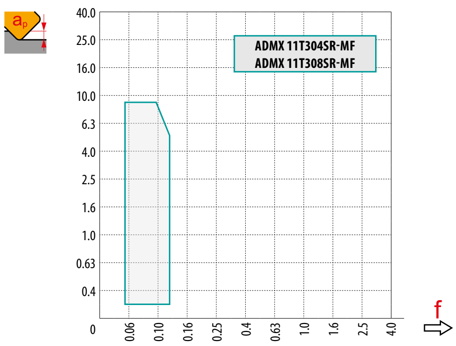
	ADMX 11-MM				ADEX 11-HF	ADEX 11-HF2	ADEX 11-FA			
RE	0.4	0.8	1.2	1.6	0.8	0.8	0.4	0.8	1.2	1.6
BS	1.89	1.48	1.08	0.61	0.17	0.17	1.77	1.39	1.0	0.62

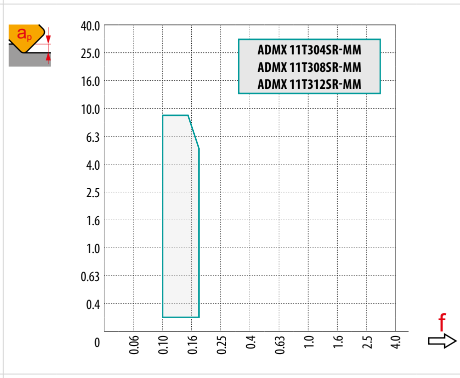


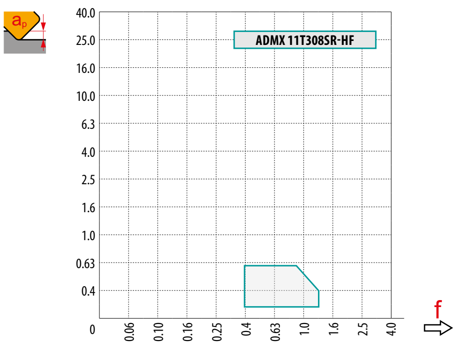


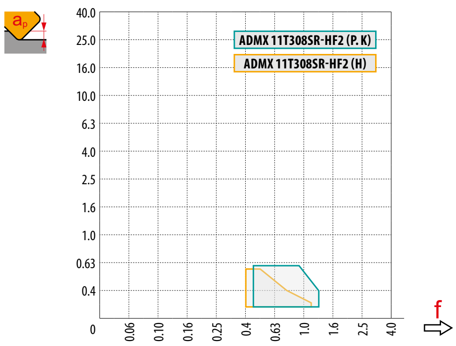


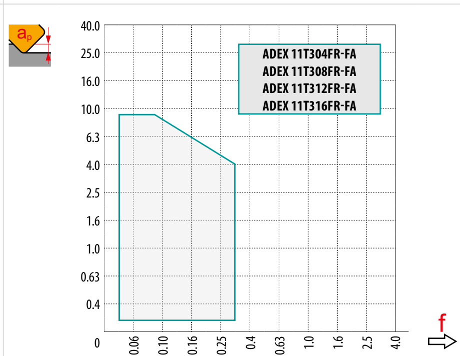












max
4.5

a_p	1.0	5.0	9.0
f	0.20	0.13	0.10

			HFC		
DC	RPMX	APMX/l	RPMX *	RPMX **	APMX/l
16	13.5	9.0/40	4.1	5.7	0.6/8
18	10.0	9.0/53	2.8	4.5	0.6/12
20	9.0	9.0/59	2.3	4.3	0.6/15
25	6.0	9.0/87	1.3	6.7	0.6/26
32	5.3	9.0/99	0.7	4.3	0.6/49
40	3.8	6.5/100	0.3	2.9	0.6/100
50	2.8	4.7/100	0.1	2.1	0.6/100
63	1.8	3.0/100	–	–	–
80	1.6	2.6/100	–	–	–

* HFC milling

** Conventional milling

DC	DMIN	DMAX	SMAX DMIN	SMAX DMAX	HFC DMIN	HFC DMAX	HFC SMAX DMIN	HFC SMAX DMAX
16	27.0	32.0	8.3	9.0	21.0	32.0	0.6	0.6
18	32.0	36.0	7.5	9.0	29.0	36.0	0.6	0.6
20	35.0	40.0	7.5	9.0	29.0	40.0	0.6	0.6
25	45.0	50.0	6.5	7.5	39.0	50.0	0.6	0.6
32	59.0	64.0	4.0	4.5	53.0	64.0	0.6	0.6
40	75.0	80.0	1.5	2.0	68.5	80.0	0.6	0.6
50	–	–	–	–	88.5	100.0	0.6	0.6

a_p
1.7

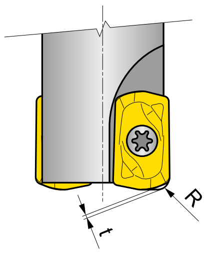
DC	µm	3	5	10	15	20	30	40	50	60	80	100
16	FE	0.438	0.566	0.800	0.980	1.131	1.386	1.600	1.789	1.960	2.263	2.530
18		0.465	0.600	0.849	1.039	1.200	1.470	1.697	1.897	2.078	2.400	2.683
20		0.490	0.632	0.894	1.095	1.265	1.549	1.789	2.000	2.191	2.530	2.828
20		0.490	0.632	0.894	1.095	1.265	1.549	1.789	2.000	2.191	2.530	2.828
25		0.548	0.707	1.000	1.225	1.414	1.732	2.000	2.236	2.449	2.828	3.162
32		0.620	0.800	1.131	1.386	1.600	1.960	2.263	2.530	2.771	3.200	3.578
40		0.693	0.894	1.265	1.549	1.789	2.191	2.530	2.828	3.098	3.578	4.000
50		0.775	1.000	1.414	1.732	2.000	2.449	2.828	3.162	3.464	4.000	4.472
63		0.869	1.122	1.587	1.944	2.245	2.750	3.175	3.550	3.888	4.490	5.020
80		0.980	1.265	1.789	2.191	2.530	3.098	3.578	4.000	4.382	5.060	5.657

RE	µm	3	5	10	15	20	30	40	50	60	80	100
1.0	FE	0.155	0.200	0.283	0.346	0.400	0.490	0.566	0.632	0.693	0.800	0.894
1.2		0.170	0.219	0.310	0.379	0.438	0.537	0.620	0.693	0.759	0.876	0.980
1.6		0.196	0.253	0.358	0.438	0.506	0.620	0.716	0.800	0.876	1.012	1.131
2.0		0.219	0.283	0.400	0.490	0.566	0.693	0.800	0.894	0.980	1.131	1.265
2.5		0.245	0.316	0.447	0.548	0.632	0.775	0.894	1.000	1.095	1.265	1.414
3.0		0.268	0.346	0.490	0.600	0.693	0.849	0.980	1.095	1.200	1.386	1.549

i

ADMX/ADEX 11	R
ADMX 11T320SR-M	1.0
ADMX 11T325SR-M	1.8
ADMX 11T330SR-M	1.8
ADEX 11T308SR-HF	1.4
ADEX 11T308SR-HF2	1.4

i



ADEX 11	R	t
ADEX 11T308SR-HF	1.42	0.35
ADEX 11T308SR-HF2	1.34	0.38

SAD16E

P M K N S H

PRAMET

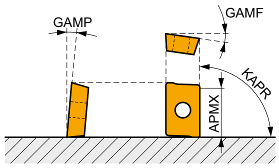
S

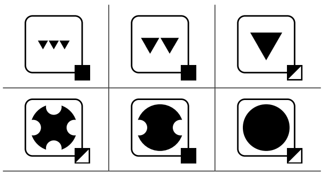
FORCE AD16 Square Shoulder Mill with Internal Coolant

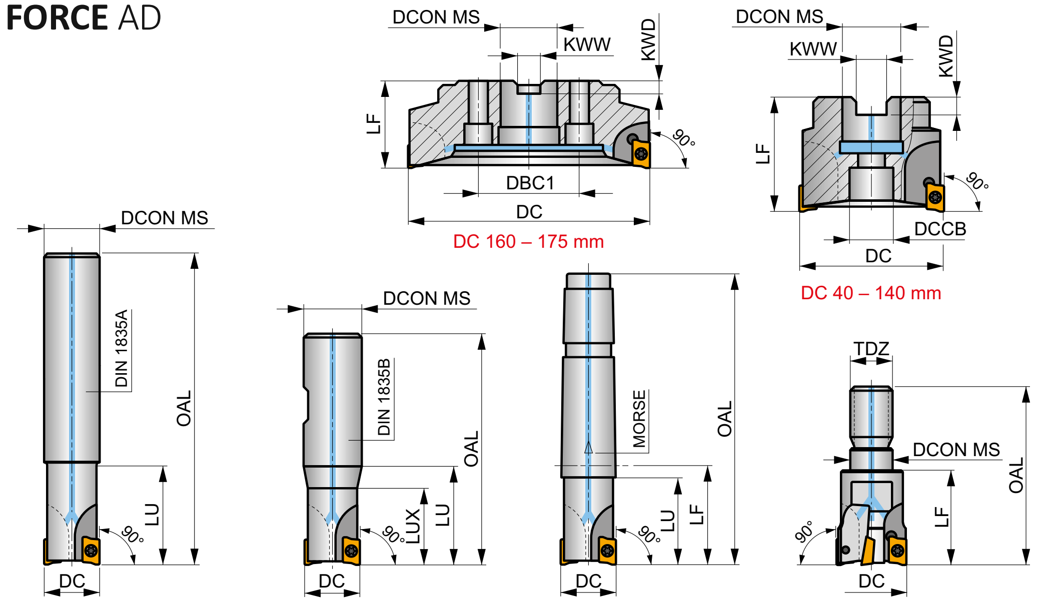
90° end and shell mills utilising positive AD.. 16 style insert with APMX of 13 mm. Suitable for face, shoulder, slot, helical, trochoidal, ramping and plunge milling. Available in cylindrical, Weldon, Morse taper, modular and arbor (with differential tooth pitch) style, in Ø25 up to Ø175 mm. Body treated for longer tool life.

FORCE AD

KAPR	90°
APMX	13.0 mm

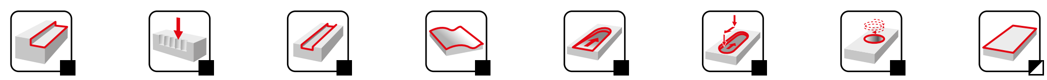






h_m 0.08 - 0.22

h_m 0.06 - 0.18



	Product	DC	OAL	DCON MS	DCCB	DBC1	LU	LUX	LF	TDZ	CZC MS	KWW	KWD	GAMF	GAMP			max.		kg			
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[mm]	[mm]	[°]	[°]								
DIN 1835A	25A2R033A25-SAD16E-C	25	165	25	–	–	33	–	–	–	–	–	–	-13	5	2	–	18700	✓	0.52	GI165	SQ030	–
	25A2R038A25-SAD16E-C	25	200	25	–	–	38	–	–	–	–	–	–	-13	5	2	–	18700	✓	0.71	GI165	SQ030	–
	32A3R033A32-SAD16E-C	32	195	32	–	–	33	–	–	–	–	–	–	-12	7	3	–	16500	✓	1.03	GI165	SQ030	–
	32A3R048A32-SAD16E-C	32	250	32	–	–	48	–	–	–	–	–	–	-12	7	3	–	16500	✓	1.37	GI165	SQ030	–
DIN 1835B	25A2R042B25-SAD16E-C	25	98	25	–	–	–	42	–	–	–	–	–	-13	5	2	–	18700	✓	0.29	GI165	SQ030	–
	32A3R040B32-SAD16E-C	32	100	32	–	–	–	40	–	–	–	–	–	-12	7	3	–	16500	✓	0.50	GI165	SQ030	–
	40A3R050B32-SAD16E-C	40	110	32	–	–	–	50	–	–	–	–	–	-8.2	10.5	3	–	14800	✓	0.59	GI165	SQ030	–
	40A4R050B32-SAD16E-C	40	110	32	–	–	–	50	–	–	–	–	–	-8.2	10.5	4	–	14800	✓	0.65	GI165	SQ030	–
DIN 228A	25A2R043E03-SAD16E-C	25	98	–	–	–	38	–	43	–	3	–	–	-13	5	2	–	18600	✓	0.31	GI165	SQ030	–
	32A3R043E03-SAD16E-C	32	100	–	–	–	38	–	43	–	3	–	–	-12	7	3	–	16500	✓	0.33	GI165	SQ030	–
	40A3R054E04-SAD16E-C	40	110	–	–	–	48	–	54	–	4	–	–	-8.2	10.5	3	–	14700	✓	0.74	GI165	SQ030	–
	40A4R054E04-SAD16E-C	40	110	–	–	–	48	–	54	–	4	–	–	-8.2	10.5	4	–	14700	✓	0.70	GI165	SQ030	–
MODULAR	32A3R043M16-SAD16E-C	32	66	17	–	–	–	–	43	M16	–	–	–	-12	7	3	–	–	✓	0.20	GI165	SQ030	–
	40A4R043M16-SAD16E-C	40	66	17	–	–	–	–	43	M16	–	–	–	-8.2	10.5	4	–	–	✓	0.27	GI165	SQ030	–
ISO 6462 DIN 8030	40A04R-S90AD16E-C	40	–	16	14	–	–	–	40	–	–	8.4	5.6	-8.2	10.5	4	–	14700	✓	0.21	GI165	SQ032	–
	50A03R-S90AD16E-C	50	–	22	18	–	–	–	40	–	–	10.4	6.3	-7	11	3	–	13200	✓	0.43	GI165	SQ033	–
	50A05R-S90AD16E-C	50	–	22	18	–	–	–	40	–	–	10.4	6.3	-7	11	5	✓	13200	✓	0.59	GI165	SQ033	–
	63A04R-S90AD16E-C	63	–	22	18	–	–	–	40	–	–	10.4	6.3	-6	12	4	✓	11800	✓	0.62	GI165	SQ033	–
	63A06R-S90AD16E-C	63	–	22	18	–	–	–	40	–	–	10.4	6.3	-6	12	6	✓	11800	✓	0.46	GI165	SQ033	–
	80A05R-S90AD16E-C	80	–	27	38	–	–	–	50	–	–	12.4	7	-5	12	5	✓	10400	✓	1.01	GI165	SQ031	AC001
	80A07R-S90AD16E-C	80	–	27	38	–	–	–	50	–	–	12.4	7	-5	13	7	✓	10400	✓	0.97	GI165	SQ031	AC001
	100A06R-S90AD16E-C	100	–	32	45	–	–	–	50	–	–	14.4	8	-4	12	6	✓	9300	✓	1.89	GI165	SQ031	AC002
	100A08R-S90AD16E-C	100	–	32	45	–	–	–	50	–	–	14.4	8	-4	12	8	✓	9300	✓	1.69	GI165	SQ031	AC002
	125A09R-S90AD16E-C	125	–	40	56	–	–	–	63	–	–	16.4	9	-3.8	12	9	✓	8400	✓	3.46	GI165	SQ031	AC003
	140A08R-S90AD16E-C	140	–	40	56	–	–	–	63	–	–	16.4	9	-3.8	12	8	✓	7900	✓	4.06	GI165	SQ031	–
	160C10R-S90AD16E-C	160	–	40	–	66.7	–	–	63	–	–	16.4	9.2	-3.8	10	10	✓	7300	✓	6.04	GI165	SQ036	–
	175C10R-S90AD16E-C	175	–	40	–	66.7	–	–	63	–	–	16.4	9.2	-3.8	12	10	✓	7000	✓	7.00	GI165	SQ036	–

GI165	ADMX 1606..	ADEX 1606..

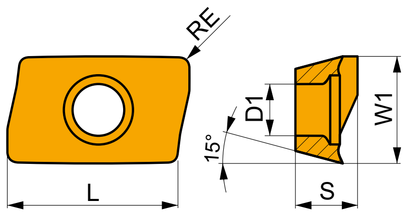
		Nm									
SQ030	US 4008-T15P	3.5	M 4	8	–	–	Flag T15P	–	–	–	–
SQ031	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	–	–	–	–	–
SQ032	US 4008-T15P	3.5	M 4	8	D-T08P/T15P	FG-15	–	HS 0830C	–	–	–
SQ033	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	–	HS 1030C	–	–	–
SQ036	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	–	HS 1240C	CAC 160C	HSD 0825C	HXK 5

AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

ADMX 16

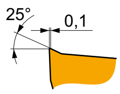
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.950	4.50	16.00	6.25



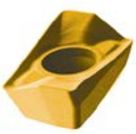
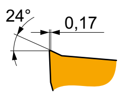
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 160608SR-F	**8215**	0.8	■ 265	0.15	2.0	◩ 155	0.14	2.0	◩ 250	0.15	2.0	◩ 795	0.18	2.0	◩ 65	0.11	1.6	–	–	–
	M8310	0.8	■ 285	0.15	2.0	◩ 145	0.14	2.0	◩ 270	0.15	2.0	–	–	–	–	–	–	–	–	–
	M8330	0.8	■ 260	0.15	2.0	◩ 155	0.14	2.0	◩ 245	0.15	2.0	◩ 780	0.18	2.0	◩ 65	0.11	1.6	–	–	–
	M8340	0.8	■ 235	0.15	2.0	◩ 140	0.14	2.0	◩ 220	0.15	2.0	–	–	–	◩ 55	0.11	1.6	–	–	–
	M9340	0.8	■ 300	0.15	2.0	◩ 180	0.14	2.0	–	–	–	–	–	–	◩ 75	0.11	1.6	–	–	–
ADMX 160604SR-M	**8215**	0.4	■ 190	0.18	5.0	◩ 110	0.16	5.0	■ 180	0.18	5.0	–	–	–	◩ 45	0.13	4.0	–	–	–
	M8330	0.4	■ 190	0.18	5.0	■ 110	0.16	5.0	■ 180	0.18	5.0	–	–	–	◩ 45	0.13	4.0	–	–	–
	M8340	0.4	■ 170	0.18	5.0	■ 100	0.16	5.0	◩ 160	0.18	5.0	–	–	–	◩ 40	0.13	4.0	–	–	–

S

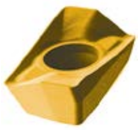
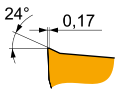
F geometry with highly positive design for light to medium machining.

1 U S

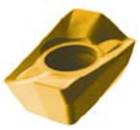
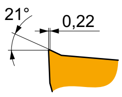
M geometry with positive design for light to medium machining.

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

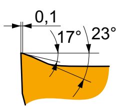
M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 160608SR-M	**8215**	0.8	■	225	0.18	5.0	◩	135	0.16	5.0	■	210	0.18	5.0		–	–	–	◩	55	0.13	4.0		–	–	–
	M5315	0.8	◩	305	0.18	5.0		–	–	–	■	285	0.18	5.0		–	–	–		–	–	–		–	–	–
	M8310	0.8	■	250	0.18	5.0	◩	125	0.16	5.0	■	235	0.18	5.0		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	225	0.18	5.0	■	135	0.16	5.0	■	210	0.18	5.0		–	–	–	◩	55	0.13	4.0		–	–	–
	M8340	0.8	■	205	0.18	5.0	■	120	0.16	5.0	◩	190	0.18	5.0		–	–	–	◩	50	0.13	4.0		–	–	–
	M9315	0.8	■	305	0.18	5.0		–	–	–	■	285	0.18	5.0		–	–	–		–	–	–		–	–	–
	M9325	0.8	■	280	0.18	5.0		–	–	–	■	265	0.18	5.0		–	–	–		–	–	–		–	–	–
	M9340	0.8	■	255	0.18	5.0	■	150	0.16	5.0		–	–	–		–	–	–	◩	60	0.13	4.0		–	–	–
ADMX 160616SR-M	**8215**	1.6	■	250	0.18	5.0	◩	150	0.16	5.0	■	235	0.18	5.0		–	–	–	◩	60	0.13	4.0		–	–	–
	M8310	1.6	■	275	0.18	5.0	◩	140	0.16	5.0	■	260	0.18	5.0		–	–	–		–	–	–		–	–	–
	M8330	1.6	■	250	0.18	5.0	■	150	0.16	5.0	■	235	0.18	5.0		–	–	–	◩	60	0.13	4.0		–	–	–
	M8340	1.6	■	225	0.18	5.0	■	135	0.16	5.0	◩	210	0.18	5.0		–	–	–	◩	55	0.13	4.0		–	–	–
	M9325	1.6	■	310	0.18	5.0		–	–	–	■	290	0.18	5.0		–	–	–		–	–	–		–	–	–
ADMX 160620SR-M	**M6330**	2.0	■	225	0.18	5.0	■	155	0.16	5.0		–	–	–		–	–	–	◩	65	0.13	4.0		–	–	–
	M8330	2.0	■	265	0.18	5.0	■	155	0.16	5.0	■	250	0.18	5.0		–	–	–	◩	65	0.13	4.0		–	–	–
	M8340	2.0	■	240	0.18	5.0	■	140	0.16	5.0	◩	225	0.18	5.0		–	–	–	◩	60	0.13	4.0		–	–	–
ADMX 160630SR-M	**M8330**	3.0	■	265	0.18	5.0	■	155	0.16	5.0	■	250	0.18	5.0		–	–	–	◩	65	0.13	4.0		–	–	–
	M8340	3.0	■	240	0.18	5.0	■	140	0.16	5.0	◩	225	0.18	5.0		–	–	–	◩	60	0.13	4.0		–	–	–
ADMX 160632SR-M	**M6330**	3.2	■	225	0.18	5.0	■	155	0.16	5.0		–	–	–		–	–	–	◩	65	0.13	4.0		–	–	–
	M8330	3.2	■	265	0.18	5.0	■	155	0.16	5.0	■	250	0.18	5.0		–	–	–	◩	65	0.13	4.0		–	–	–
	M8340	3.2	■	240	0.18	5.0	■	140	0.16	5.0	◩	225	0.18	5.0		–	–	–	◩	60	0.13	4.0		–	–	–
	M9325	3.2	■	325	0.18	5.0		–	–	–	■	305	0.18	5.0		–	–	–		–	–	–		–	–	–
ADMX 160640SR-M	**M6330**	4.0	■	225	0.18	5.0	■	155	0.16	5.0		–	–	–		–	–	–	◩	65	0.13	4.0		–	–	–
	M8330	4.0	■	265	0.18	5.0	■	155	0.16	5.0	■	250	0.18	5.0		–	–	–	◩	65	0.13	4.0		–	–	–
	M8340	4.0	■	240	0.18	5.0	■	140	0.16	5.0	◩	225	0.18	5.0		–	–	–	◩	60	0.13	4.0		–	–	–
ADMX 160650SR-M	**M8330**	5.0	■	265	0.18	5.0	■	155	0.16	5.0	■	250	0.18	5.0		–	–	–	◩	65	0.13	4.0		–	–	–
	M8340	5.0	■	240	0.18	5.0	■	140	0.16	5.0	◩	225	0.18	5.0		–	–	–	◩	60	0.13	4.0		–	–	–

R geometry with positive design for medium to less stable machining conditions.

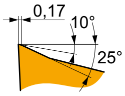
Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 160608PR-R	**8215**	0.8	■	205	0.25	6.0	◩	120	0.23	6.0	■	190	0.25	6.0		–	–	–	◩	50	0.20	4.8	◩	40	0.15	1.0
	M5315	0.8	◩	260	0.25	6.0		–	–	–	■	245	0.25	6.0		–	–	–		–	–	–	◩	50	0.15	1.0
	M8310	0.8	■	220	0.25	6.0	◩	110	0.23	6.0	■	205	0.25	6.0		–	–	–		–	–	–	◩	40	0.15	1.0
	M8330	0.8	■	205	0.25	6.0	◩	120	0.23	6.0	■	190	0.25	6.0		–	–	–	◩	50	0.20	4.8	◩	40	0.15	1.0
	M8340	0.8	■	190	0.25	6.0	◩	110	0.23	6.0	◩	180	0.25	6.0		–	–	–	◩	45	0.20	4.8		–	–	–
	M9315	0.8	■	265	0.25	6.0		–	–	–	■	250	0.25	6.0		–	–	–		–	–	–	◩	50	0.15	1.0
	M9325	0.8	■	250	0.25	6.0		–	–	–	■	235	0.25	6.0		–	–	–		–	–	–	◩	50	0.15	1.0
ADMX 160616PR-R	**M5315**	1.6	◩	290	0.25	6.0		–	–	–	■	275	0.25	6.0		–	–	–		–	–	–	◩	55	0.15	1.0
	M8330	1.6	■	225	0.25	6.0	◩	135	0.23	6.0	■	210	0.25	6.0		–	–	–	◩	55	0.20	4.8	◩	45	0.15	1.0
	M8340	1.6	■	210	0.25	6.0	◩	125	0.23	6.0	◩	195	0.25	6.0		–	–	–	◩	50	0.20	4.8		–	–	–
	M9315	1.6	■	295	0.25	6.0		–	–	–	■	280	0.25	6.0		–	–	–		–	–	–	◩	55	0.15	1.0
	M9325	1.6	■	275	0.25	6.0		–	–	–	■	260	0.25	6.0		–	–	–		–	–	–	◩	55	0.15	1.0

MF geometry with highly positive design for finish machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 160608SR-MF	**M6330**	0.8	■	215	0.08	4.0	■	150	0.07	4.0		–	–	–		–	–	–	■	60	0.06	3.2		–	–	–
	M8340	0.8	■	225	0.08	4.0	■	135	0.07	4.0		–	–	–		–	–	–	■	55	0.06	3.2		–	–	–
	M9340	0.8	■	305	0.08	4.0	■	180	0.07	4.0		–	–	–		–	–	–	■	75	0.06	3.2		–	–	–

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



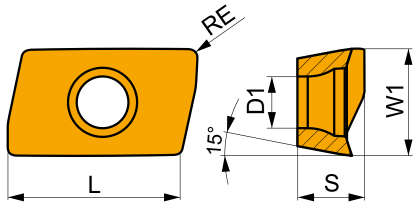
MM geometry with highly positive design for light to medium machining.

Product	Grade	RE	P				M				K				N				S				H			
		[mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 160604SR-MM	**M6330**	0.4	■	145	0.18	4.0	■	105	0.16	4.0		–	–	–		–	–	–	■	40	0.14	3.2		–	–	–
	M8340	0.4	■	160	0.18	4.0	■	95	0.16	4.0		–	–	–		–	–	–	■	40	0.14	3.2		–	–	–
ADMX 160608SR-MM	**M6330**	0.8	■	175	0.18	4.0	■	125	0.16	4.0		–	–	–		–	–	–	■	50	0.14	3.2		–	–	–
	M8340	0.8	■	190	0.18	4.0	■	110	0.16	4.0		–	–	–		–	–	–	■	45	0.14	3.2		–	–	–
	M8345	0.8	■	150	0.18	4.0	■	90	0.16	4.0		–	–	–		–	–	–	■	35	0.14	3.2		–	–	–
	M9340	0.8	■	235	0.18	4.0	■	140	0.16	4.0		–	–	–		–	–	–	■	55	0.14	3.2		–	–	–
ADMX 160616SR-MM	**M6330**	1.6	■	195	0.18	4.0	■	140	0.16	4.0		–	–	–		–	–	–	■	55	0.14	3.2		–	–	–
	M8340	1.6	■	210	0.18	4.0	■	125	0.16	4.0		–	–	–		–	–	–	■	50	0.14	3.2		–	–	–
	M8345	1.6	■	165	0.18	4.0	■	95	0.16	4.0		–	–	–		–	–	–	■	40	0.14	3.2		–	–	–
	M9340	1.6	■	260	0.18	4.0	■	155	0.16	4.0		–	–	–		–	–	–	■	65	0.14	3.2		–	–	–

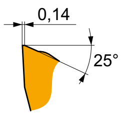
ADEX 16

PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.950	4.50	16.00	6.25



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



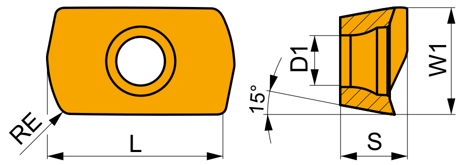
FM geometry with highly positive design for medium machining.

Product	Grade	RE	P				M				K				N				S				H			
		[mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]
ADEX 160608SR-FM	**8215**	0.8	■	260	0.16	2.0	◩	155	0.14	2.0	■	245	0.16	2.0		–	–	–	◩	65	0.11	1.6		–	–	–
	M8330	0.8	■	255	0.16	2.0	◩	150	0.14	2.0	■	240	0.16	2.0		–	–	–	◩	60	0.11	1.6		–	–	–
	M8340	0.8	■	235	0.16	2.0	◩	140	0.14	2.0	◩	220	0.16	2.0		–	–	–	◩	55	0.11	1.6		–	–	–

ADEX 16-HF

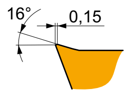
PRAMET

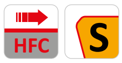
	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.950	4.50	16.00	5.88



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

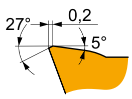
Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 160612SR-HF	**8215**	1.2	■ 195	1.00	0.6	◩ 115	0.90	0.6	–	–	–	–	–	–	–	–	–	–	–	–
	M8310	1.2	■ 205	1.00	0.6	◩ 100	0.77	0.6	–	–	–	–	–	–	–	–	–	–	–	–
	M8330	1.2	■ 200	1.00	0.6	◩ 120	0.90	0.6	–	–	–	–	–	–	–	–	–	–	–	–
	M8340	1.2	■ 185	1.00	0.6	◩ 110	0.90	0.6	–	–	–	–	–	–	–	–	–	–	–	–
	M9340	1.2	■ 195	1.00	0.6	◩ 115	0.90	0.6	–	–	–	–	–	–	–	–	–	–	–	–

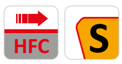





HF geometry with highly positive design for high feed machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 160612SR-HF2	**M8310**	1.2	■ 225	0.70	0.6	◩ 110	0.63	0.6	◩ 210	0.70	0.6	–	–	–	–	–	–	◩ 45	0.15	1.0
	M8330	1.2	■ 215	0.70	0.6	◩ 125	0.63	0.6	◩ 200	0.70	0.6	–	–	–	◩ 50	0.63	0.5	◩ 40	0.15	1.0
	M8340	1.2	■ 205	0.70	0.6	◩ 120	0.63	0.6	◩ 190	0.70	0.6	–	–	–	◩ 50	0.63	0.5	–	–	–
	M9325	1.2	■ 245	0.70	0.6	–	–	–	◩ 230	0.70	0.6	–	–	–	–	–	–	◩ 45	0.15	1.0
	M9340	1.2	■ 215	0.70	0.6	◩ 125	0.63	0.6	–	–	–	–	–	–	◩ 50	0.63	0.5	–	–	–

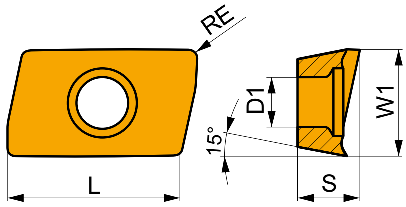


HF2 geometry with positive design for high feed machining.

ADEX 16-FA

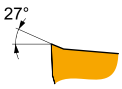
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.950	4.50	16.00	6.17



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 160604FR-FA	**HF7**	0.4	–	–	–	–	–	–	–	–	–	■ 195	0.28	6.0	–	–	–	–	–	–
	M0315	0.4	–	–	–	–	–	–	–	–	–	■ 480	0.28	6.0	–	–	–	–	–	–
ADEX 160608FR-FA	**HF7**	0.8	–	–	–	–	–	–	–	–	–	■ 240	0.28	6.0	–	–	–	–	–	–
	M0315	0.8	–	–	–	–	–	–	–	–	–	■ 570	0.28	6.0	–	–	–	–	–	–
ADEX 160616FR-FA	**HF7**	1.6	–	–	–	–	–	–	–	–	–	■ 255	0.28	6.0	–	–	–	–	–	–
	M0315	1.6	–	–	–	–	–	–	–	–	–	■ 630	0.28	6.0	–	–	–	–	–	–
ADEX 160630FR-FA	**HF7**	3.0	–	–	–	–	–	–	–	–	–	■ 270	0.28	6.0	–	–	–	–	–	–

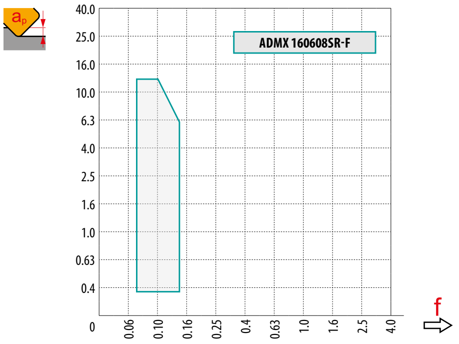


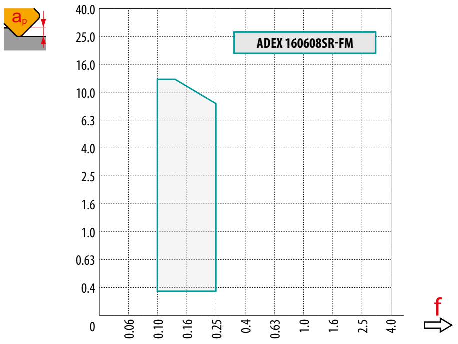
FA geometry with highly positive design for fine-finish to medium machining.

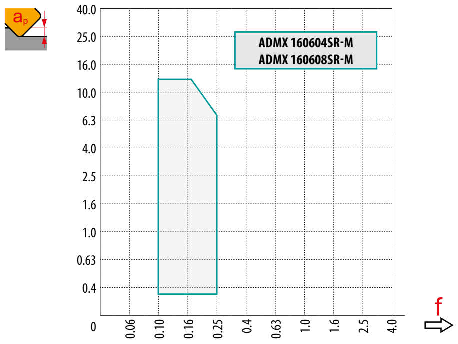
a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
x.v	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

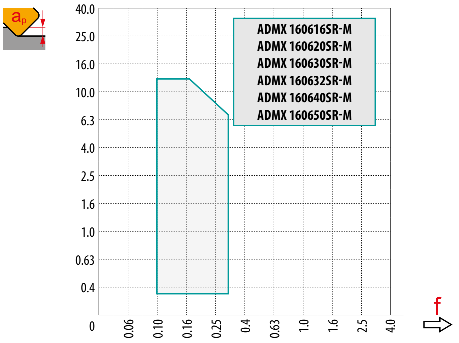
	ADMX 16-F	ADEX 16-FM	ADMX 16-M								ADMX 16-R	
RE	0.8	0.8	0.4	0.8	1.6	2.0	3.0	3.2	4.0	5.0	0.8	1.6
BS	2.99	2.18	3.39	2.99	1.62	1.23	0.28	0.09	2.69	1.52	2.99	1.62

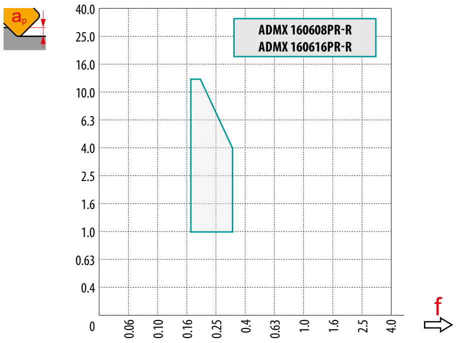
	ADMX 16-MF	ADMX 16-MM			ADEX 16-HF	ADEX 16-HF2	ADEX 16-FA			
RE	0.8	0.4	0.8	1.6	1.2	1.2	0.4	0.8	1.6	3.0
BS	2.99	3.39	2.99	1.62	0.52	0.52	2.84	2.44	1.65	0.69

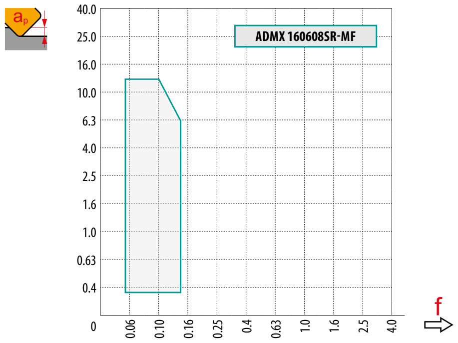


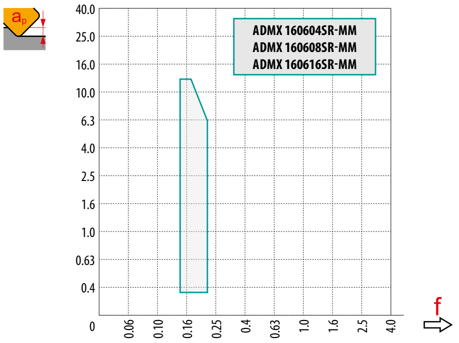


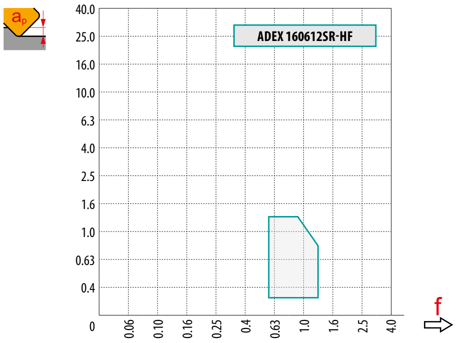


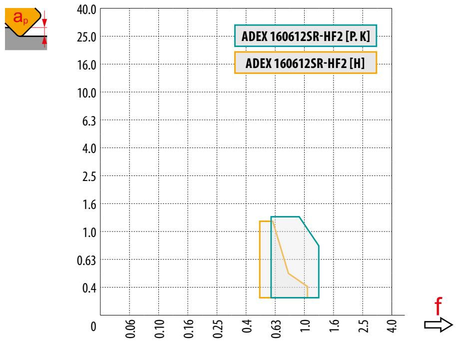


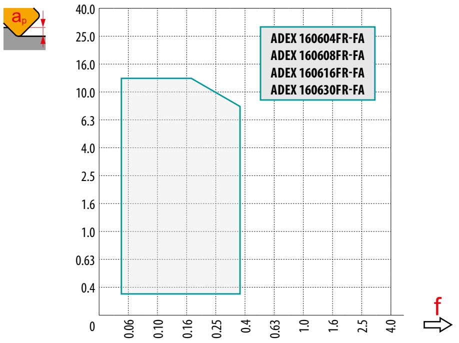












max
7.5

a_p	1.0	6.0	13.0
f	0.28	0.19	0.10

			HFC		
DC	RPMX	APMX/l	RPMX *	RPMX **	APMX/l
25	12.5	13.0/60	4.0	8.0	1.3/19
32	7.5	13.0/100	2.0	7.5	1.3/38
40	5.0	8.6/100	1.2	4.5	1.3/65
50	3.5	6.0/100	0.8	3.0	1.3/100
63	2.5	4.2/100	0.5	2.0	0.8/100
80	2.0	3.3/100	0.4	1.5	0.6/100

* HFC milling

** Conventional milling

DC	DMIN	DMAX	SMAX DMIN	SMAX DMAX	HFC DMIN	HFC DMAX	HFC SMAX DMIN	HFC SMAX DMAX
25	42.0	50.0	10.0	12.5	42.0	50.0	1.3	1.3
32	55.0	64.0	6.5	9.0	55.0	64.0	1.3	1.3
40	72.0	80.0	5.0	8.0	72.0	80.0	1.3	1.3
50	92.0	100.0	4.5	6.0	92.0	100.0	1.3	1.3
63	118.0	126.0	4.0	5.0	118.0	126.0	1.3	1.3
80	136.0	160.0	1.5	2.0	136.0	160.0	1.3	1.3

a_p
2.5

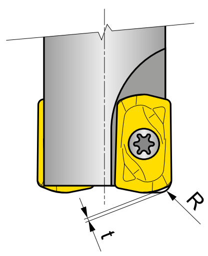
DC	µm	3	5	10	15	20	30	40	50	60	80	100
25	FE	0.548	0.707	1.000	1.225	1.414	1.732	2.000	2.236	2.449	2.828	3.162
32		0.620	0.800	1.131	1.386	1.600	1.960	2.263	2.530	2.771	3.200	3.578
40		0.693	0.894	1.265	1.549	1.789	2.191	2.530	2.828	3.098	3.578	4.000
50		0.775	1.000	1.414	1.732	2.000	2.449	2.828	3.162	3.464	4.000	4.472
63		0.869	1.122	1.587	1.944	2.245	2.750	3.175	3.550	3.888	4.490	5.020
80		0.980	1.265	1.789	2.191	2.530	3.098	3.578	4.000	4.382	5.060	5.657

RE	µm	3	5	10	15	20	30	40	50	60	80	100
1.6	FE	0.196	0.253	0.358	0.438	0.506	0.620	0.716	0.800	0.876	1.012	1.131
2.0		0.219	0.283	0.400	0.490	0.566	0.693	0.800	0.894	0.980	1.131	1.265
3.0		0.268	0.346	0.490	0.600	0.693	0.849	0.980	1.095	1.200	1.386	1.549
3.2		0.277	0.358	0.506	0.620	0.716	0.876	1.012	1.131	1.239	1.431	1.600
4.0		0.310	0.400	0.566	0.693	0.800	0.980	1.131	1.265	1.386	1.600	1.789
5.0		0.346	0.447	0.632	0.775	0.894	1.095	1.265	1.414	1.549	1.789	2.000

i

ADMX/ADEX 16	R
ADMX 160630SR-M	2.5
ADMX 160632SR-M	2.5
ADMX 160640SR-M	4.0
ADMX 160650SR-M	4.5
ADEX 160612SR-HF	3.0
ADEX 160612SR-HF2	3.0

i



ADEX 16	R	t
ADEX 160612SR-HF	2.59	0.56
ADEX 160612SR-HF2	2.48	0.57

SAP10D

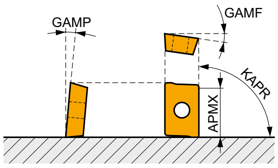
P M K N S

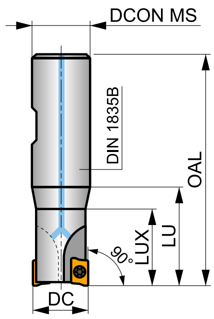
PRAMET

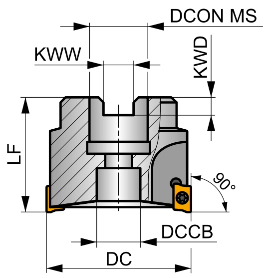
Square Shoulder Mill for APKT 10 Insert with Internal Coolant

90° end and shell mills utilising positive APKT 10 style insert with APMX of 9 mm. Suitable for face, shoulder, slot, helical, trochoidal, ramping and plunge milling. Available in weldon and arbor (with differential tooth pitch) style, in Ø10 up to Ø63 mm. Body treated for longer tool life.

KAPR	90°
APMX	9.0 mm







h_m 0.08 - 0.16

h_m 0.06 - 0.13

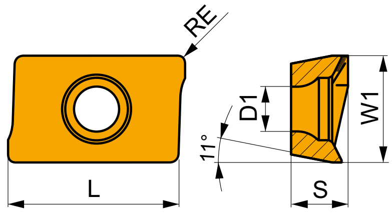
	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LUX [mm]	LF [mm]	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg		
DIN 1835B	10A1R020B16-SAP10D-C	10	78	16	–	30	20	–	–	–	12	2	1	–	39000	✓	0.09	GI081	SQ215
	12A1R027B16-SAP10D-C	12	75	16	–	27	–	–	–	–	12	2	1	–	35600	✓	0.10	GI081	SQ210
	14A1R027B16-SAP10D-C	14	75	16	–	27	–	–	–	–	12	2	1	–	32900	✓	0.13	GI081	SQ210
	16A2R032B16-SAP10D-C	16	80	16	–	32	–	–	–	–	12	4	2	–	30800	✓	0.12	GI081	SQ210
	18A2R032B20-SAP10D-C	18	82	20	–	32	–	–	–	–	12	4	2	–	29100	✓	0.15	GI081	SQ210
	20A3R032B20-SAP10D-C	20	82	20	–	32	–	–	–	–	12	4	3	–	27600	✓	0.15	GI081	SQ210
	25A3R042B25-SAP10D-C	25	98	25	–	42	–	–	–	–	12	4	3	–	24700	✓	0.36	GI081	SQ210
ISO 6462 DIN 8030	40A6R-S90AP10D	40	40	16	14	40	–	–	8.4	5.6	8	3	6	✓	19500	–	0.23	GI081	SQ211
	50A7R-S90AP10D	50	40	22	18	40	–	–	10.4	6.3	8	3	7	✓	17400	–	0.41	GI081	SQ211
	63A9R-S90AP10D	63	50	22	18	40	–	–	10.4	6.3	8	3	9	✓	15500	–	0.57	GI081	SQ211

GI081	APKT 1003..

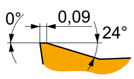
		Nm					
SQ210	US 2506-T07P	1.2	M 2.5	6.3	–	–	Flag T07P
SQ211	US 2506-T07P	1.2	M 2.5	6.3	D-T07P/T09P	FG-15	–
SQ215	US 2505-T07P	1.2	M 2.5	5.2	–	–	Flag T07P

APKT 10

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1003	6.700	2.88	11.00	3.50



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

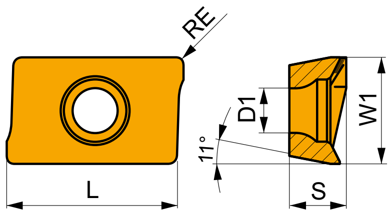


M geometry with highly positive design for light to medium machining.

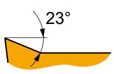
Product		RE [mm]	P				M				K				N				S				H			
				vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]
APKT 1003PDER-M	**8215**	0.5	■	285	0.12	4.0	◩	170	0.11	4.0	■	270	0.12	4.0		–	–	–	◩	70	0.11	3.2		–	–	–
	M8330	0.5	■	285	0.12	4.0	◩	170	0.11	4.0	■	270	0.12	4.0		–	–	–	◩	70	0.11	3.2		–	–	–
	M8340	0.5	■	255	0.12	4.0	◩	150	0.11	4.0	◩	240	0.12	4.0		–	–	–	◩	60	0.11	3.2		–	–	–
	M9315	0.5	■	400	0.12	4.0		–	–	–	■	380	0.12	4.0		–	–	–		–	–	–		–	–	–
	M9325	0.5	■	360	0.12	4.0		–	–	–	■	340	0.12	4.0		–	–	–		–	–	–		–	–	–
	M9340	0.5	■	335	0.12	4.0	◩	200	0.11	4.0		–	–	–		–	–	–	◩	80	0.11	3.2		–	–	–

APKT 10-FA

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1003	6.700	2.88	11.00	3.50



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

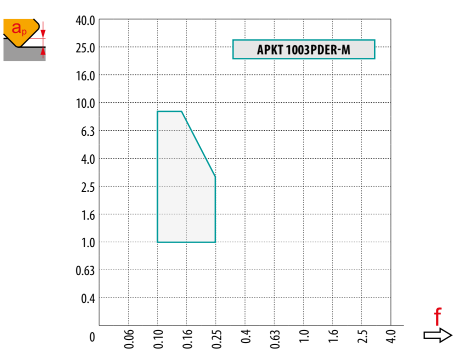


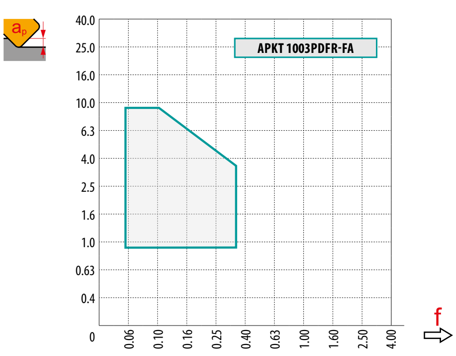
FA geometry with highly positive design for fine-finish to medium machining.

Product		RE [mm]	P				M				K				N				S				H			
				vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]
APKT 1003PDFR-FA	**HF7**	0.5		–	–	–		–	–	–		–	–	–	■	300	0.18	5.0		–	–	–		–	–	–

ae / DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	APKT 10-M	APKT 10-FA
RE	0.5	0.5
BS	0.84	0.84





max
4.5

ap	1.0	3.0	5.0
1 f	0.20	0.13	0.10

DC	RPMX	APMX/l
10	7.3	9.0/72
12	6.2	9.0/84
14	5.3	9.0/99
16	2.4	4.0/100
18	2.3	3.9/100
20	2.2	3.7/100
25	2.2	3.7/100
32	1.6	2.6/100

DC	DMIN	DMAX	SMAX DMIN	SMAX DMAX
10	11.0	20.0	0.4	3.8
12	13.0	24.0	0.3	3.9
14	17.5	28.0	1.0	3.9
16	20.5	32.0	0.6	2.0
18	23.8	36.0	0.7	2.2
20	27.2	40.0	0.9	2.4
25	37.9	50.0	1.6	3.0
32	50.9	64.0	1.7	2.8

ap
0.3

SAP16D

P M K N S

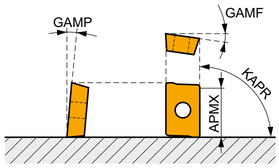
PRAMET

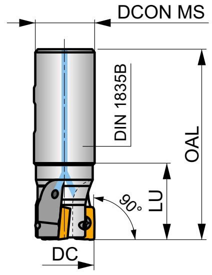
S

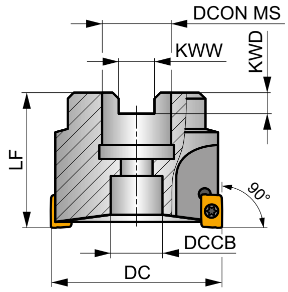
Square Shoulder Mill for APKT 16 Insert with Internal Coolant

90° end and shell mills utilising positive APKT 16 style insert with APMX of 13 mm. Suitable for face, shoulder, slot, helical, trochoidal, ramping and plunge milling. Available in Weldon and arbor (with differential tooth pitch) style, in Ø25 up to Ø160 mm. Body treated for longer tool life.

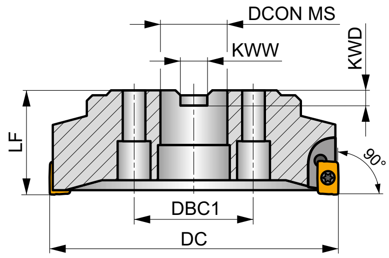
KAPR	90°
APMX	13.0 mm







DC 40 – 125 mm



DC 160 mm

h_m 0.10 - 0.22

h_m 0.06 - 0.18

	Product	DC	OAL	DCON MS	DCCB	DBC1	LU	LF	KWW	KWD	GAMF	GAMP			max.		kg			
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[°]								
DIN 1835B	25A2R042B25-SAP16D-C	25	98	25	–	–	42	–	–	–	0	6	2	–	16800	✓	0.31	GI080	SQ030	–
	32A3R040B32-SAP16D-C	32	100	32	–	–	50	–	–	–	0	8	3	–	14800	✓	0.51	GI080	SQ220	–
	40A3R050B32-SAP16D-C	40	110	32	–	–	50	–	–	–	0	8	3	–	13200	✓	0.65	GI080	SQ220	–
	40A4R050B32-SAP16D-C	40	110	32	–	–	50	–	–	–	0	8	4	–	13200	✓	0.67	GI080	SQ220	–
ISO 6462 DIN 8030	40A4R-S90AP16D	40	40	16	11	–	–	40	8.4	5.6	0	6	4	✓	13200	–	0.23	GI080	SQ031	–
	50A5R-S90AP16D	50	40	22	18	–	–	40	10.4	6.3	0	6	5	✓	11800	–	0.33	GI080	SQ031	–
	63A6R-S90AP16D	63	40	22	18	–	–	40	10.4	6.3	0	6	6	✓	10600	–	0.50	GI080	SQ031	–
	80B5R-S90AP16D	80	50	27	38	–	–	50	12.4	7	0	6	5	✓	9400	–	0.97	GI080	SQ031	AC001
	80B7R-S90AP16D	80	50	27	38	–	–	50	12.4	7	0	6	7	✓	9400	–	1.07	GI080	SQ031	AC001
	100B6R-S90AP16D	100	50	32	45	–	–	50	14.4	8	0	6	6	✓	8400	–	1.60	GI080	SQ031	AC002
	100B8R-S90AP16D	100	50	32	45	–	–	50	14.4	8	0	6	8	✓	8400	–	1.50	GI080	SQ031	AC002
	125B9R-S90AP16D	125	63	40	56	–	–	63	16.4	9	0	6	9	✓	7500	–	2.80	GI080	SQ031	AC003
	160C10R-S90AP16D	160	63	40	–	66.7	–	63	16.4	9	0	6	10	✓	6600	–	5.12	GI080	SQ031	–

GI080	APKT 1604..	APET 1604..

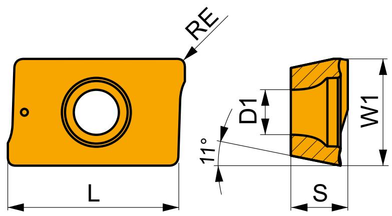
		Nm					
SQ030	US 4008-T15P	3.5	M 4	8	–	–	Flag T15P
SQ031	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	–
SQ220	US 4011-T15P	3.5	M 4	10.6	–	–	Flag T15P

AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

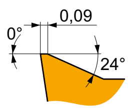
APKT 16

PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1604	9.440	4.60	17.00	5.67

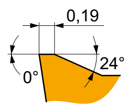


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

GM geometry with highly positive design for light to medium machining.

Product	Grade	RE [mm]	P	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
APKT 1604PDR-GM	**M8330**	0.8	■	235	0.20	8.0	◩	140	0.18	8.0	■	220	0.20	8.0	–	–	–	◩	55	0.16	6.4	–	–	–
	M8340	0.8	■	210	0.20	8.0	◩	125	0.18	8.0	◩	195	0.20	8.0	–	–	–	◩	50	0.16	6.4	–	–	–
	M9315	0.8	■	310	0.20	8.0		–	–	–	■	290	0.20	8.0	–	–	–		–	–	–	–	–	–
	M9325	0.8	■	285	0.20	8.0		–	–	–	■	270	0.20	8.0	–	–	–		–	–	–	–	–	–
	M9340	0.8	■	260	0.20	8.0	◩	155	0.18	8.0		–	–	–	–	–	–	◩	65	0.16	6.4	–	–	–

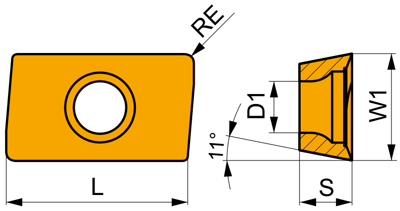
HM geometry with highly positive design for medium and less stable machining conditions.

Product	Grade	RE [mm]	P	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
APKT 160404-HM	**M8340**	0.4	■	160	0.30	6.0	◩	95	0.27	6.0	◩	150	0.30	6.0	–	–	–	◩	40	0.24	4.8	–	–	–
APKT 160416-HM	**M8340**	1.6	■	210	0.30	6.0	◩	125	0.27	6.0	◩	195	0.30	6.0	–	–	–	◩	50	0.24	4.8	–	–	–
APKT 160431-HM	**M8340**	3.1	■	220	0.30	6.0	◩	130	0.27	6.0	◩	205	0.30	6.0	–	–	–	◩	55	0.24	4.8	–	–	–
APKT 1604PDR-HM	**8215**	0.8	■	220	0.30	6.0	◩	130	0.27	6.0	■	205	0.30	6.0	–	–	–	◩	55	0.24	4.8	–	–	–
	M5315	0.8	◩	270	0.30	6.0		–	–	–	■	255	0.30	6.0	–	–	–		–	–	–	–	–	–
	M8330	0.8	■	220	0.30	6.0	◩	130	0.27	6.0	■	205	0.30	6.0	–	–	–	◩	55	0.24	4.8	–	–	–
	M8340	0.8	■	200	0.30	6.0	◩	120	0.27	6.0	◩	190	0.30	6.0	–	–	–	◩	50	0.24	4.8	–	–	–
	M9315	0.8	■	275	0.30	6.0		–	–	–	■	260	0.30	6.0	–	–	–		–	–	–	–	–	–
	M9325	0.8	■	260	0.30	6.0		–	–	–	■	245	0.30	6.0	–	–	–		–	–	–	–	–	–

APET 16-FA

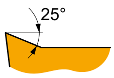
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1604	9.600	4.50	17.00	4.76



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

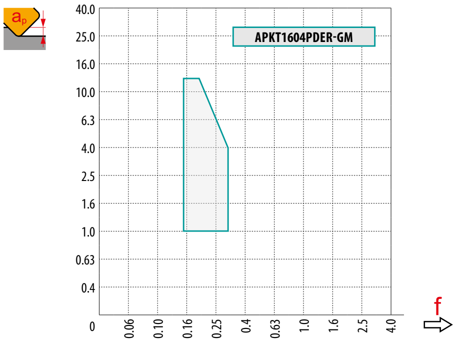
Product		RE [mm]	P				M				K				N				S				H			
				vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]		vc [m/min]	f [mm/tooth]	ap [mm]
APET 160408FR-FA	**HF7**	0.8		–	–	–		–	–	–		–	–	–	■	255	0.24	8.0		–	–	–		–	–	–

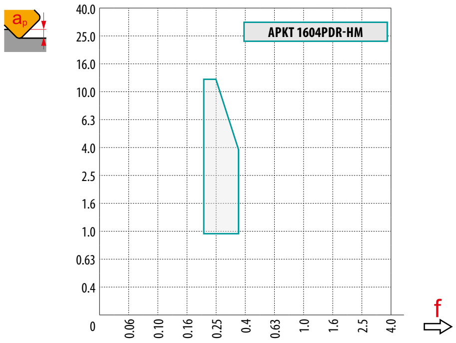


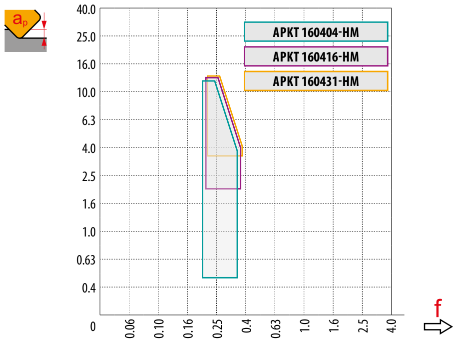
FA geometry with highly positive design for fine-finish to medium machining.

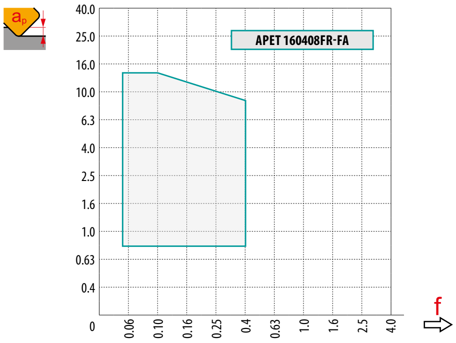
a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	APKT 16-GM	APKT 16-HM				APET 16-FA
RE	0.8	0.8	0.4	1.6	3.1	0.8
BS	1.39	1.48	1.87	0.64	1.30	1.59









max
7.4

a_p	1.0	6.0	13.0
1 f	0.28	0.19	0.13

DC	DMIN	DMAX	SMAX DMIN	SMAX DMAX
25	34.7	50.0	1.2	3.1
32	48.5	64.0	0.9	1.7
40	63.5	80.0	1.3	2.2
50	83.5	100.0	0.9	1.4
63	110.0	126.0	1.0	1.4
80	144.0	160.0	1.1	1.3

DC	RPMX	APMX/l
25	2.3	3.9/100
32	1.0	1.6/100
40	1.0	1.6/100
50	0.5	0.7/100
63	0.4	0.5/100
80	0.3	0.4/100

a_p
0.2

STN10

P M K N S

PRAMET

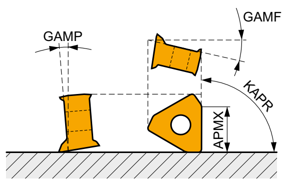
S

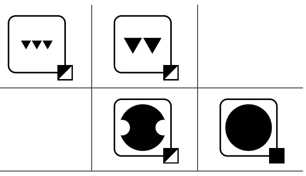
ECON TN10 Square Shoulder Mill with Internal Coolant

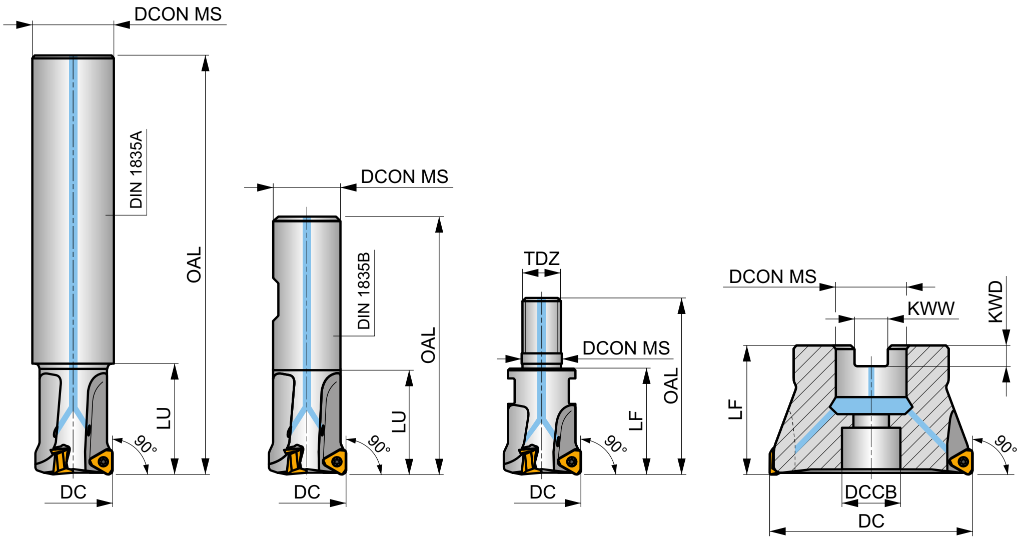
90° end and shell mills utilising double sided TNGX 10 insert with 6 cutting edges and APMX of 5 mm. Suitable for a wide range of applications. Available in cylindrical, weldon, modular and arbor style, in Ø18 up to Ø80 mm, with or without differential tooth pitch. Body treated for longer tool life.

ECON TN

KAPR	90°
APMX	5.0 mm

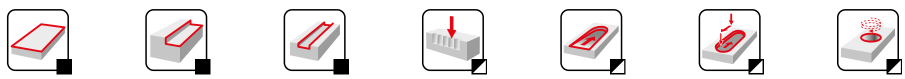






h_m 0.03 - 0.08

h_m 0.03 - 0.06



	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LF [mm]	TDZ	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
DIN 1835A	18A2R050A20-STN10-C	18	180	20	–	50	–	–	–	–	-17.1	-11	2	–	29100	✓	0.40	GI292	SQ300	–
	20A2R029A20-STN10-C	20	150	20	–	29	–	–	–	–	-16.5	-11	2	–	27600	✓	0.35	GI292	SQ300	–
	20A3R029A20-STN10-C	20	150	20	–	29	–	–	–	–	-16.5	-11	3	–	27600	✓	0.34	GI292	SQ300	–
	22A3R050A25-STN10-C	22	180	25	–	50	–	–	–	–	-16.5	-11	3	–	26300	✓	0.59	GI292	SQ300	–
	25A3R034A25-STN10-C	25	170	25	–	34	–	–	–	–	-16	-11	3	–	24700	✓	0.58	GI292	SQ300	–
	25A4R034A25-STN10-C	25	170	25	–	34	–	–	–	–	-16	-11	4	✓	24700	✓	0.59	GI292	SQ300	–
	30A4R050A32-STN10-C	30	200	32	–	50	–	–	–	–	-16	-11	4	✓	22500	✓	1.07	GI292	SQ300	–
	32A4R037A32-STN10-C	32	195	32	–	37	–	–	–	–	-16	-11	4	✓	21800	✓	1.09	GI292	SQ300	–
	32A5R037A32-STN10-C	32	195	32	–	37	–	–	–	–	-16	-11	5	✓	21800	✓	1.09	GI292	SQ300	–
	35A5R080A32-STN10-C	35	200	32	–	80	–	–	–	–	-16	-11	5	✓	20800	✓	0.08	GI292	SQ300	–
DIN 1835B	20A2R032B20-STN10-C	20	90	20	–	32	–	–	–	–	-16.5	-11	2	–	27600	✓	0.20	GI292	SQ300	–
	20A3R032B20-STN10-C	20	90	20	–	32	–	–	–	–	-16.5	-11	3	–	27600	✓	0.20	GI292	SQ300	–
	25A3R042B25-STN10-C	25	100	25	–	42	–	–	–	–	-16	-11	3	–	24700	✓	0.31	GI292	SQ300	–
	25A4R042B25-STN10-C	25	100	25	–	42	–	–	–	–	-16	-11	4	✓	24700	✓	0.31	GI292	SQ300	–
	32A4R042B32-STN10-C	32	110	32	–	42	–	–	–	–	-16	-11	4	✓	21800	✓	0.57	GI292	SQ300	–
	32A5R042B32-STN10-C	32	110	32	–	42	–	–	–	–	-16	-11	5	✓	21800	✓	0.56	GI292	SQ300	–
MODULAR	20A2R026M10-STN10-C	20	45	10.5	–	–	26	M10	–	–	-16.5	-11	2	–	–	✓	0.07	GI292	SQ300	–
	20A3R026M10-STN10-C	20	45	10.5	–	–	26	M10	–	–	-16.5	-11	3	–	–	✓	0.07	GI292	SQ300	–
	25A3R033M12-STN10-C	25	55	12.5	–	–	33	M12	–	–	-16	-11	3	–	–	✓	0.10	GI292	SQ300	–
	25A4R033M12-STN10-C	25	55	12.5	–	–	33	M12	–	–	-16	-11	4	✓	–	✓	0.11	GI292	SQ300	–
	32A4R043M16-STN10-C	32	66	17	–	–	43	M16	–	–	-16	-11	4	✓	–	✓	0.22	GI292	SQ300	–
	32A5R043M16-STN10-C	32	66	17	–	–	43	M16	–	–	-16	-11	5	✓	–	✓	0.22	GI292	SQ300	–
ISO 6462 DIN 8030	40A04R-S90TN10-C	40	–	16	14	–	40	–	8.4	5.6	-15	-11	4	✓	19500	✓	0.35	GI292	SQ302	–
	40A06R-S90TN10-C	40	–	16	14	–	40	–	8.4	5.6	-15	-11	6	✓	19500	✓	0.34	GI292	SQ302	–
	50A05R-S90TN10-C	50	–	22	18	–	40	–	10.4	6.3	-15	-11	5	✓	17400	✓	0.49	GI292	SQ303	–
	50A07R-S90TN10-C	50	–	22	18	–	40	–	10.4	6.3	-15	-11	7	✓	17400	✓	0.50	GI292	SQ303	–
	63A06R-S90TN10-C	63	–	22	18	–	40	–	10.4	6.3	-15	-11	6	✓	15500	✓	0.63	GI292	SQ303	–

	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LF [mm]	TDZ	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
ISO 6462 DIN 8030	63A09R-S90TN10-C	63	–	22	18	–	40	–	10.4	6.3	-15	-11	9	✓	15500	✓	0.64	GI292	SQ303	–
	80A10R-S90TN10-C	80	–	27	38	–	50	–	12.4	7	-15	-11	10	✓	13800	✓	1.11	GI292	SQ301	AC001

GI292	TNGX 1004..

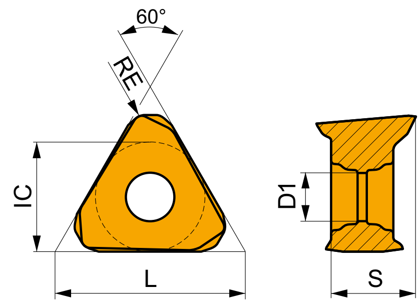
		Nm						
SQ300	US 52506-T07P	0.8	M 2.5	6	–	–	Flag T07P	–
SQ301	US 52506-T07P	0.8	M 2.5	6	D-T07P/T09P	FG-15	–	–
SQ302	US 52506-T07P	0.8	M 2.5	6	D-T07P/T09P	FG-15	–	HS 0830C
SQ303	US 52506-T07P	0.8	M 2.5	6	D-T07P/T09P	FG-15	–	HS 1030C

AC001	KS 1230	K.FMH27

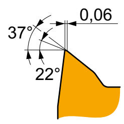
TNGX 10

PRAMET

	IC [mm]	D1 [mm]	L [mm]	S [mm]
1004	6.000	2.80	10.39	4.69



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

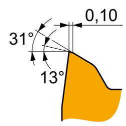


S

F geometry with highly positive design for light machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
TNGX 100402SR-F	M8330	0.2	■ 205	0.09	2.0	◩ 120	0.08	2.0	◩ 190	0.09	2.0	–	–	–	–	–	–	–	–	–
	M8340	0.2	■ 190	0.09	2.0	◩ 110	0.08	2.0	◩ 180	0.09	2.0	–	–	–	–	–	–	–	–	–
TNGX 100404SR-F	8215	0.4	■ 225	0.09	2.0	◩ 135	0.08	2.0	◩ 210	0.09	2.0	–	–	–	–	–	–	–	–	–
	M6330	0.4	■ 190	0.09	2.0	◩ 135	0.08	2.0	–	–	–	–	–	–	–	–	–	–	–	–
	M8330	0.4	■ 220	0.09	2.0	◩ 130	0.08	2.0	◩ 205	0.09	2.0	–	–	–	–	–	–	–	–	–
	M8340	0.4	■ 200	0.09	2.0	◩ 120	0.08	2.0	◩ 190	0.09	2.0	–	–	–	–	–	–	–	–	–
	M9340	0.4	■ 270	0.09	2.0	◩ 160	0.08	2.0	–	–	–	–	–	–	–	–	–	–	–	–
TNGX 100408SR-F	8215	0.8	■ 270	0.09	2.0	◩ 160	0.08	2.0	◩ 255	0.09	2.0	–	–	–	–	–	–	–	–	–
	M6330	0.8	■ 225	0.09	2.0	◩ 160	0.08	2.0	–	–	–	–	–	–	–	–	–	–	–	–
	M8330	0.8	■ 260	0.09	2.0	◩ 155	0.08	2.0	◩ 245	0.09	2.0	–	–	–	–	–	–	–	–	–
	M8340	0.8	■ 240	0.09	2.0	◩ 140	0.08	2.0	◩ 225	0.09	2.0	–	–	–	–	–	–	–	–	–
	M9340	0.8	■ 320	0.09	2.0	◩ 190	0.08	2.0	–	–	–	–	–	–	–	–	–	–	–	–

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



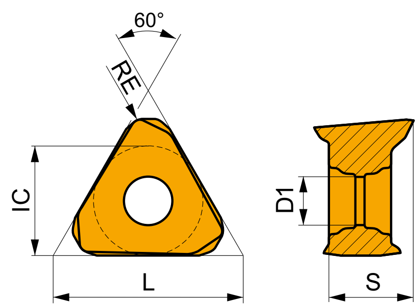
M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
TNGX 100404SR-M	8215	0.4	■	205	0.13	2.0	◩	120	0.12	2.0	◩	190	0.13	2.0		–	–	–	◩	50	0.09	1.6		–	–	–
	M6330	0.4	■	175	0.13	2.0	◩	125	0.12	2.0		–	–	–		–	–	–	◩	50	0.09	1.6		–	–	–
	M8330	0.4	■	205	0.13	2.0	◩	120	0.12	2.0	◩	190	0.13	2.0		–	–	–	◩	50	0.09	1.6		–	–	–
	M8340	0.4	■	185	0.13	2.0	◩	110	0.12	2.0	◩	175	0.13	2.0		–	–	–	◩	45	0.09	1.6		–	–	–
	M8345	0.4	■	150	0.13	2.0	◩	90	0.12	2.0		–	–	–		–	–	–	◩	35	0.09	1.6		–	–	–
	M9340	0.4	■	240	0.13	2.0	◩	140	0.12	2.0		–	–	–		–	–	–	◩	60	0.09	1.6		–	–	–
TNGX 100408SR-M	8215	0.8	■	245	0.13	2.0	◩	145	0.12	2.0	◩	230	0.13	2.0		–	–	–	◩	60	0.09	1.6		–	–	–
	M6330	0.8	■	210	0.13	2.0	◩	150	0.12	2.0		–	–	–		–	–	–	◩	60	0.09	1.6		–	–	–
	M8310	0.8	■	270	0.13	2.0	◩	135	0.12	2.0	◩	255	0.13	2.0		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	245	0.13	2.0	◩	145	0.12	2.0	◩	230	0.13	2.0		–	–	–	◩	60	0.09	1.6		–	–	–
	M8340	0.8	■	220	0.13	2.0	◩	130	0.12	2.0	◩	205	0.13	2.0		–	–	–	◩	55	0.09	1.6		–	–	–
	M8345	0.8	■	180	0.13	2.0	◩	105	0.12	2.0		–	–	–		–	–	–	◩	45	0.09	1.6		–	–	–
	M9340	0.8	■	285	0.13	2.0	◩	170	0.12	2.0		–	–	–		–	–	–	◩	70	0.09	1.6		–	–	–
TNGX 100412SR-M	M8330	1.2	■	255	0.13	2.0	◩	150	0.12	2.0	◩	240	0.13	2.0		–	–	–	◩	60	0.09	1.6		–	–	–
	M8340	1.2	■	230	0.13	2.0	◩	135	0.12	2.0	◩	215	0.13	2.0		–	–	–	◩	55	0.09	1.6		–	–	–
TNGX 100416SR-M	M8310	1.6	■	300	0.13	2.0	◩	150	0.12	2.0	◩	285	0.13	2.0		–	–	–		–	–	–		–	–	–
	M8330	1.6	■	270	0.13	2.0	◩	160	0.12	2.0	◩	255	0.13	2.0		–	–	–	◩	65	0.09	1.6		–	–	–
	M8340	1.6	■	245	0.13	2.0	◩	145	0.12	2.0	◩	230	0.13	2.0		–	–	–	◩	60	0.09	1.6		–	–	–

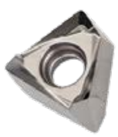
TNGX 10-FA

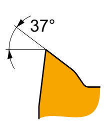
PRAMET

	IC [mm]	D1 [mm]	L [mm]	S [mm]
1004	6.000	2.80	10.39	4.69



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



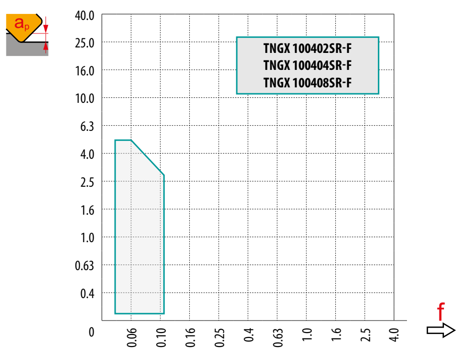


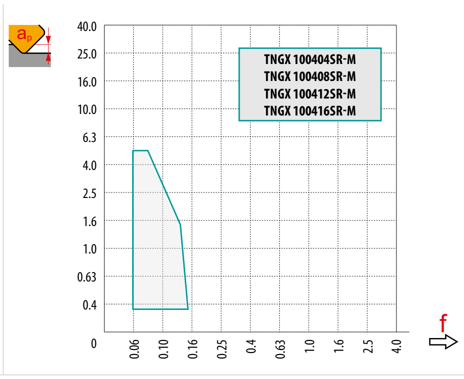
FA geometry with highly positive design for fine-finish to medium machining.

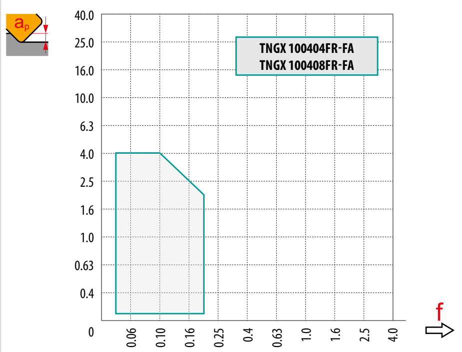
Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
TNGX 100404FR-FA	HF7	0.4		–	–	–		–	–	–		–	–	–	■	345	0.10	1.5		–	–	–		–	–	–
	M0315	0.4		–	–	–		–	–	–		–	–	–	■	780	0.10	1.5		–	–	–		–	–	–
TNGX 100408FR-FA	HF7	0.8		–	–	–		–	–	–		–	–	–	■	345	0.10	1.5		–	–	–		–	–	–
	M0315	0.8		–	–	–		–	–	–		–	–	–	■	780	0.10	1.5		–	–	–		–	–	–

a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	TNGX 10-F			TNGX 10-M		TNGX 10-FA	
RE	0.2	0.4	0.8	0.4	0.8	0.4	0.8
BS	1.53	1.34	0.92	1.34	0.92	1.33	0.93







max
1.5

a_p	1.0	3.0	5.0
f	0.10	0.08	0.04

a_p
0.2

DC	RPMX	APMX/l
18	1.80	3.05/100
20	1.60	2.70/100
22	1.20	2.00/100
25	1.00	1.70/100
30	0.90	1.45/100
32	0.80	1.30/100
35	0.65	1.0/100
40	0.60	0.90/100
50	0.50	0.70/100
63	0.40	0.50/100
80	0.25	0.30/100

DC	DMIN	DMAX	SMAX DMIN	SMAX DMAX
18	33	36	1.2	1.2
20	37	40	1.2	1.2
22	41	44	1.0	1.0
25	47	50	1.0	1.0
30	57	60	1.0	1.0
32	61	64	1.0	1.0
35	67	70	0.9	0.9
40	77	80	0.9	0.9
50	97	100	0.9	0.9
63	123	126	0.9	0.9
80	157	160	0.9	0.9

STN16

P M K N S

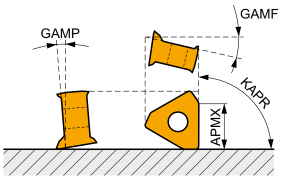
PRAMET

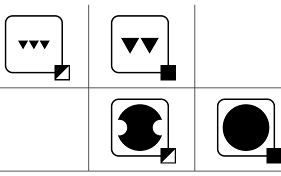
S

ECON TN16 Square Shoulder Mill with Internal Coolant

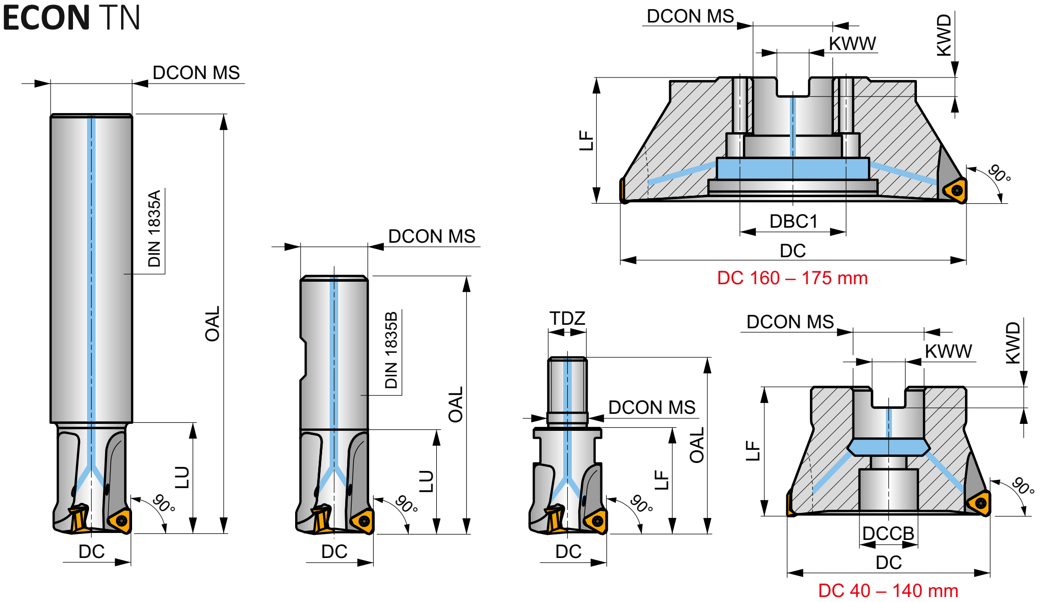
90° end and shell mills utilising double sided TNGX 16 inserts with 6 cutting edges and APMX of 10 mm. Suitable for a wide range of applications. Available in cylindrical, weldon, modular and arbor (with differential tooth pitch) style, in Ø25 up to Ø175 mm. Body treated for longer tool life.

KAPR	90°
APMX	10.0 mm





ECON TN



h_m	0.03 - 0.15
h_m	0.03 - 0.13

	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	DBC1 [mm]	LU [mm]	LF [mm]	TDZ	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg		
DIN 1835A	25A2R034A25-STN16-C	25	170	25	–	–	34	–	–	–	–	-18.5	-9.5	2	–	20000	✓	0.54	GI340	C0382
	32A2R034A32-STN16-C	32	195	32	–	–	34	–	–	–	–	-16	-9.5	2	–	17500	✓	1.05	GI340	C0382
	25A2R080A25-STN16-C	25	170	25	–	–	80	–	–	–	–	-18.5	-9.5	2	–	20000	✓	0.48	GI340	C0382
	32A2R080A32-STN16-C	32	195	32	–	–	80	–	–	–	–	-16	-9.5	2	–	17500	✓	0.96	GI340	C0382
	32A3R034A32-STN16-C	32	195	32	–	–	34	–	–	–	–	-16	-9.5	3	–	17500	✓	1.04	GI340	C0382
	35A3R034A32-STN16-C	35	195	32	–	–	34	–	–	–	–	-16	-9.5	3	–	17000	✓	1.07	GI340	C0382
DIN 1835B	25A2R042B25-STN16-C	25	55	25	–	–	42	–	–	–	–	-18.5	-9.5	2	–	20000	✓	0.30	GI340	C0382
	32A3R042B32-STN16-C	32	110	32	–	–	42	–	–	–	–	-16	-9.5	3	–	17500	✓	0.52	GI340	C0382
	40A4R050B32-STN16-C	40	120	32	–	–	50	–	–	–	–	-16	-9.5	4	–	16000	✓	0.67	GI340	C0382
MODULAR	25A2R033M12-STN16-C	25	55	12.5	–	–	–	33	M12	–	–	-18.5	-9.5	2	–	20000	✓	0.08	GI340	C0382
	32A2R043M16-STN16-C	32	66	17	–	–	–	43	M16	–	–	-16	-9.5	2	–	17500	✓	0.18	GI340	C0382
	32A3R043M16-STN16-C	32	66	17	–	–	–	43	M16	–	–	-16	-9.5	3	–	17500	✓	0.17	GI340	C0382
	40A3R043M16-STN16-C	40	66	17	–	–	–	43	M16	–	–	-16	-9.5	3	–	16000	✓	0.20	GI340	C0382
	40A4R043M16-STN16-C	40	66	17	–	–	–	43	M16	–	–	-16	-9.5	4	–	16000	✓	0.21	GI340	C0382
ISO 6462 DIN 8030	40A03R-S90TN16-C	40	40	16	12.4	–	–	40	–	8.4	5.6	-16	-9.5	3	–	16000	✓	0.20	GI340	C0384
	40A04R-S90TN16-C	40	40	16	12.4	–	–	40	–	8.4	5.6	-16	-9.5	4	–	16000	✓	0.20	GI340	C0384
	50A04R-S90TN16-C	50	40	22	18.1	–	–	40	–	10.4	6.3	-16	-9.5	4	✓	14000	✓	0.34	GI340	C0386
	50A05R-S90TN16-C	50	40	22	18.1	–	–	40	–	10.4	6.3	-16	-9.5	5	✓	14000	✓	0.32	GI340	C0386
	63A04R-S90TN16-C	63	40	22	18.1	–	–	40	–	10.4	6.3	-16	-9.5	4	✓	12500	✓	0.47	GI340	C0386
	63A06R-S90TN16-C	63	40	22	18.1	–	–	40	–	10.4	6.3	-16	-9.5	6	✓	12500	✓	0.48	GI340	C0386
	80A05R-S90TN16-C	80	50	27	22.1	–	–	50	–	12.4	7	-16	-9.5	5	✓	11000	✓	1.02	GI340	C0388
	80A07R-S90TN16-C	80	50	27	22.1	–	–	50	–	12.4	7	-16	-9.5	7	✓	11000	✓	1.05	GI340	C0388
	100A06R-S90TN16-C	100	50	32	45.1	–	–	50	–	14.4	8	-16	-9.5	6	✓	10000	✓	1.79	GI340	C0390
	100A08R-S90TN16-C	100	50	32	45.1	–	–	50	–	14.4	8	-16	-9.5	8	✓	10000	✓	1.66	GI340	C0390
	115A06R-S90TN16-C	115	50	32	45.1	–	–	50	–	14.4	8	-16	-9.5	6	✓	9500	✓	2.04	GI340	C0390
	125A07R-S90TN16-C	125	63	40	56.1	–	–	63	–	16.4	9	-16	-9.5	7	✓	9000	✓	3.05	GI340	C0390
	125A09R-S90TN16-C	125	63	40	56.1	–	–	63	–	16.4	9	-16	-9.5	9	✓	9000	✓	3.14	GI340	C0390

Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	DBC1 [mm]	LU [mm]	LF [mm]	TDZ	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg		
140A08R-S90TN16-C	140	63	40	56.1	–	–	63	–	16.4	9	-16	-9.5	8	✓	8500	✓	3.69	GI340	C0390
160C10R-S90TN16-C	160	63	40	–	66.7	–	63	–	16.4	9.2	-16	-9.5	10	✓	8000	✓	5.16	GI340	C0394
175C10R-S90TN16-C	175	63	40	–	66.7	–	63	–	16.4	9.2	-16	-9.5	10	✓	7500	✓	5.99	GI340	C0394

ISO 6462
DIN 8030

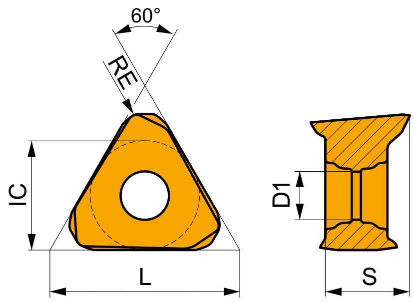
GI340	TNGX1606..

		Nm								
C0382	US 44010-T15P	3.5	M 4	10	–	–	Flag T15P	–	–	–
C0384	US 44010-T15P	3.5	M 4	10	D-T08P/T15P	FG-15	–	HS 90835	–	–
C0386	US 44010-T15P	3.5	M 4	10	D-T08P/T15P	FG-15	–	HS 1030C	–	–
C0388	US 44010-T15P	3.5	M 4	10	D-T08P/T15P	FG-15	–	HS 1230C	–	–
C0390	US 44010-T15P	3.5	M 4	10	D-T08P/T15P	FG-15	–	–	–	–
C0394	US 44010-T15P	3.5	M 4	10	D-T08P/T15P	FG-15	–	HS 1240C	HSD 0825C	CAC 160C

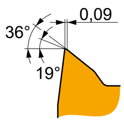
TNGX 16

PRAMET

	IC [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.525	4.40	16.50	6.58



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

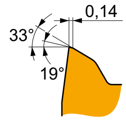


S

F geometry with highly positive design for light machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
TNGX 160604SR-F	M8330	0.4	205	0.10	3.0	120	0.09	3.0	190	0.10	3.0	–	–	–	–	–	–	–	–	–
	M8340	0.4	190	0.10	3.0	110	0.09	3.0	180	0.10	3.0	–	–	–	–	–	–	–	–	–
TNGX 160608SR-F	8215	0.8	250	0.10	3.0	150	0.09	3.0	235	0.10	3.0	–	–	–	–	–	–	–	–	–
	M6330	0.8	215	0.10	3.0	150	0.09	3.0	–	–	–	–	–	–	–	–	–	–	–	–
	M8310	0.8	280	0.10	3.0	140	0.09	3.0	265	0.10	3.0	–	–	–	–	–	–	–	–	–
	M8330	0.8	245	0.10	3.0	145	0.09	3.0	230	0.10	3.0	–	–	–	–	–	–	–	–	–
	M8340	0.8	225	0.10	3.0	135	0.09	3.0	210	0.10	3.0	–	–	–	–	–	–	–	–	–

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



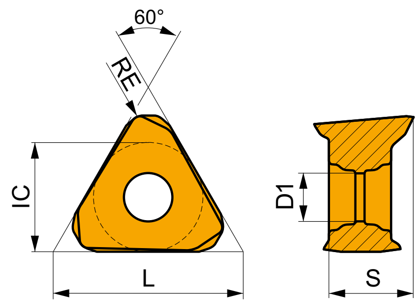
M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H	H vc [m/min]	H f [mm/tooth]	H ap [mm]
TNGX 160604SR-M	**8215**	0.4	■	190	0.15	3.0	◩	110	0.14	3.0	◩	180	0.15	3.0		–	–	–	◩	45	0.11	2.4		–	–	–
	M6330	0.4	■	165	0.15	3.0	◩	115	0.14	3.0		–	–	–		–	–	–	◩	45	0.11	2.4		–	–	–
	M8310	0.4	■	205	0.15	3.0	◩	100	0.14	3.0	◩	190	0.15	3.0		–	–	–		–	–	–		–	–	–
	M8330	0.4	■	190	0.15	3.0	◩	110	0.14	3.0	◩	180	0.15	3.0		–	–	–	◩	45	0.11	2.4		–	–	–
	M8340	0.4	■	170	0.15	3.0	◩	100	0.14	3.0	◩	160	0.15	3.0		–	–	–	◩	40	0.11	2.4		–	–	–
TNGX 160608SR-M	**8215**	0.8	■	230	0.15	3.0	◩	135	0.14	3.0	◩	215	0.15	3.0		–	–	–	◩	55	0.11	2.4		–	–	–
	M6330	0.8	■	195	0.15	3.0	◩	135	0.14	3.0		–	–	–		–	–	–	◩	55	0.11	2.4		–	–	–
	M8310	0.8	■	245	0.15	3.0	◩	120	0.14	3.0	◩	230	0.15	3.0		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	225	0.15	3.0	◩	135	0.14	3.0	◩	210	0.15	3.0		–	–	–	◩	55	0.11	2.4		–	–	–
	M8340	0.8	■	205	0.15	3.0	◩	120	0.14	3.0	◩	190	0.15	3.0		–	–	–	◩	50	0.11	2.4		–	–	–
	M8345	0.8	■	160	0.15	3.0	◩	95	0.14	3.0		–	–	–		–	–	–	◩	40	0.11	2.4		–	–	–
	M9325	0.8	■	285	0.15	3.0		–	–	–	◩	270	0.15	3.0		–	–	–		–	–	–		–	–	–
	M9340	0.8	■	260	0.15	3.0	◩	155	0.14	3.0		–	–	–		–	–	–	◩	65	0.11	2.4		–	–	–
TNGX 160612SR-M	**M8330**	1.2	■	235	0.15	3.0	◩	140	0.14	3.0	◩	220	0.15	3.0		–	–	–	◩	55	0.11	2.4		–	–	–
	M8340	1.2	■	215	0.15	3.0	◩	125	0.14	3.0	◩	200	0.15	3.0		–	–	–	◩	50	0.11	2.4		–	–	–
TNGX 160616SR-M	**M8310**	1.6	■	275	0.15	3.0	◩	140	0.14	3.0	◩	260	0.15	3.0		–	–	–		–	–	–		–	–	–
	M8330	1.6	■	250	0.15	3.0	◩	150	0.14	3.0	◩	235	0.15	3.0		–	–	–	◩	60	0.11	2.4		–	–	–
	M8340	1.6	■	225	0.15	3.0	◩	135	0.14	3.0	◩	210	0.15	3.0		–	–	–	◩	55	0.11	2.4		–	–	–

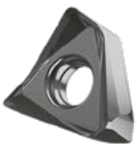
TNGX 16-FA

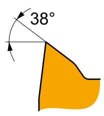
PRAMET

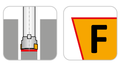
	IC [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.525	4.40	16.50	6.58



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.





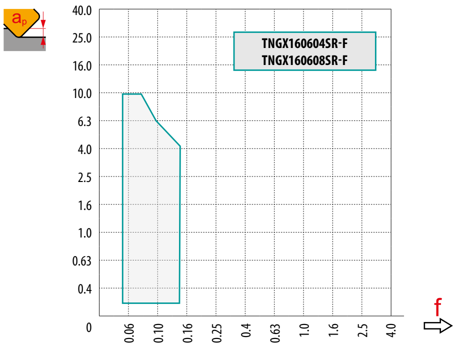


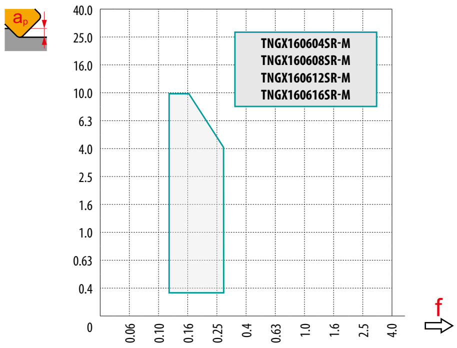
FA geometry with highly positive design for fine-finish to medium machining.

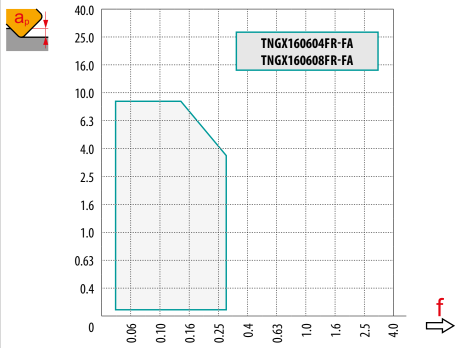
Product	Grade	RE [mm]	P	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H	H vc [m/min]	H f [mm/tooth]	H ap [mm]
TNGX 160604FR-FA	**HF7**	0.4		–	–	–		–	–	–		–	–	–	■	255	0.14	2.0		–	–	–		–	–	–
	M0315	0.4		–	–	–		–	–	–		–	–	–	■	585	0.14	2.0		–	–	–		–	–	–
TNGX 160608FR-FA	**HF7**	0.8		–	–	–		–	–	–		–	–	–	■	300	0.14	2.0		–	–	–		–	–	–
	M0315	0.8		–	–	–		–	–	–		–	–	–	■	690	0.14	2.0		–	–	–		–	–	–

a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	TNGX 16-F		TNGX 16-M				TNGX 16-FA	
RE	0.4	0.8	0.4	0.8	1.2	1.6	0.4	0.8
BS	2.10	1.9	2.10	1.90	1.73	1.14	2.10	1.90



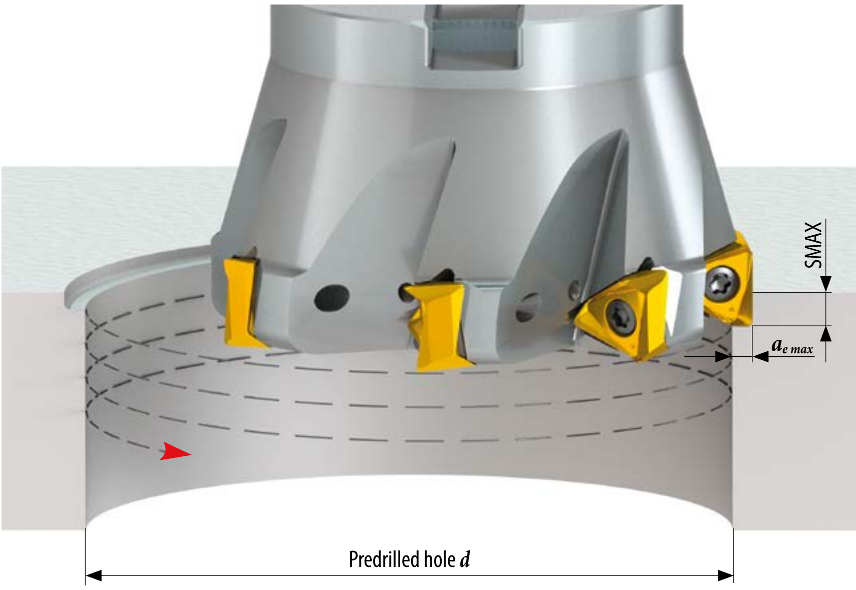




a_p	3.0	4.5	6.0
f	0.18	0.14	0.10

DC		d_{min} = DC *			d = 1.25 DC			d = 1.5 DC			d = 1.75 DC			d ≥ 2 DC	
	min	SMAX	$a_{e\,max}$		SMAX	$a_{e\,max}$		SMAX	$a_{e\,max}$		SMAX	$a_{e\,max}$		SMAX	$a_{e\,max}$
25	25	0.14	1.3	31	0.22	2.2	38	0.33	3.0	44	0.60	4.0	50	0.70	5.0
32	32	0.16	1.5	40	0.33	2.8	48	0.44	4.0	56	0.70	5.0	64	0.90	6.5
40	40	0.22	2.0	50	0.38	3.5	60	0.55	5.0	70	0.90	6.5	80	1.15	8.0
50	50	0.27	2.5	63	0.50	4.5	75	0.70	6.5	88	1.00	8.0	100	1.40	10.0
63	63	0.33	3.2	80	0.60	5.5	95	0.90	8.0	110	1.45	10.0	125	1.80	12.5
80	80	0.55	4.0	100	1.00	7.0	120	1.45	10.0	140	2.15	13.0	160	2.60	16.0
100	100	0.70	5.0	125	1.20	9.0	150	1.80	12.5	175	2.70	16.5	200	3.30	20.0
115	115	0.85	6.0	145	1.50	10.0	175	1.90	14.5	200	2.80	19.0	230	3.80	23.0
125	125	0.90	6.5	155	1.60	11.0	190	2.30	15.5	220	3.10	20.0	250	4.10	25.0
140	140	1.00	7.0	175	1.80	12.5	210	2.60	17.5	245	3.70	23.0	280	4.60	28.0
160	160	1.20	8.0	200	2.00	14.0	240	2.90	20.0	280	4.30	26.0	320	5.30	32.0
175	175	1.30	8.8	220	2.20	15.5	265	3.20	22.0	305	4.70	29.0	350	5.80	35.0

* Check feed rate reduction when hole diameter is between d_{min} - 1.5 DC.

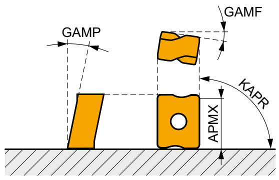


P M K N

PRAMET

S

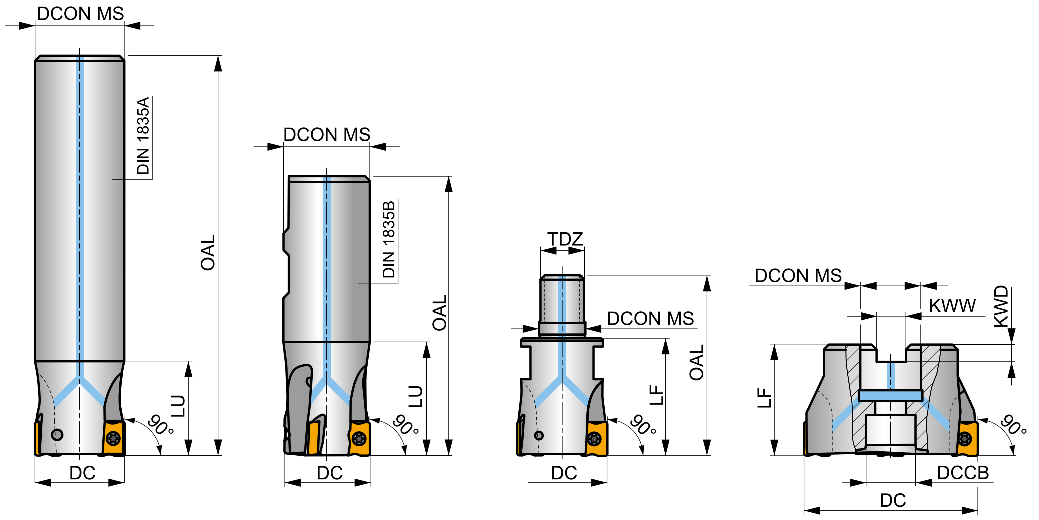
KAPR	90°
APMX	9.0 mm



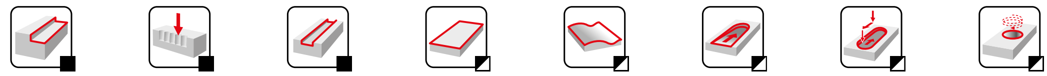
ECON LN12 Square Shoulder Mill with Internal Coolant

90° end and shell mills utilising double sided LN.. 12 inserts with APMX of 9 mm. Suitable for a wide range of applications. Available in cylindrical, Weldon, modular and arbor (with differential tooth pitch) style, in Ø25 up to Ø125 mm. Body treated for longer tool life.

ECON LN



h_m	0.06 - 0.15
h_m	0.06 - 0.13



Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LF [mm]	TDZ	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
25A2R034A25-SLN12-C	25	170	25	–	34	–	–	–	–	-23	-8	2	–	19500	✓	0.58	GI205	SQ340	–
25A2R080A25-SLN12-C	25	170	25	–	80	–	–	–	–	-23	-8	2	–	19500	✓	0.51	GI205	SQ340	–
32A2R034A32-SLN12-C	32	195	32	–	34	–	–	–	–	-15	-6	2	–	17300	✓	1.05	GI205	SQ340	–
32A2R090A32-SLN12-C	32	195	32	–	90	–	–	–	–	-15	-6	2	–	17300	✓	0.98	GI205	SQ340	–
25A2R042B25-SLN12-C	25	99	25	–	42	–	–	–	–	-23	-8	2	–	19500	✓	0.30	GI205	SQ340	–
32A3R042B32-SLN12-C	32	103	32	–	42	–	–	–	–	-15	-6	3	–	17300	✓	0.50	GI205	SQ340	–
40A4R050B32-SLN12-C	40	111	32	–	50	–	–	–	–	-15	-6	4	✓	15500	✓	0.62	GI205	SQ340	–
25A2R033M12-SLN12-C	25	55	12.5	–	–	33	–	–	–	-22	-6	2	–	–	✓	0.12	GI205	SQ340	–
32A2R043M16-SLN12-C	32	66	17	–	–	43	–	–	–	-15	-6	2	–	–	✓	0.22	GI205	SQ340	–
32A3R043M16-SLN12-C	32	66	17	–	–	43	–	–	–	-15	-6	3	–	–	✓	0.23	GI205	SQ340	–
40A3R043M16-SLN12-C	40	66	17	–	–	43	–	–	–	-15	-6	3	–	–	✓	0.30	GI205	SQ340	–
40A04R-S90LN12-C	40	–	16	14	–	40	–	8.4	5.6	-15	-6	4	✓	15500	✓	0.23	GI205	SQ342	–
50A04R-S90LN12-C	50	–	22	18	–	40	–	10.4	6.3	-14.5	-6	4	✓	13800	✓	0.35	GI205	SQ343	–
50A05R-S90LN12-C	50	–	22	18	–	40	–	10.4	6.3	-14.5	-6	5	✓	13800	✓	0.11	GI205	SQ343	–
63A04R-S90LN12-C	63	–	22	18	–	40	–	10.4	6.3	-14	-6	4	✓	12300	✓	0.55	GI205	SQ343	–
63A06R-S90LN12-C	63	–	22	18	–	40	–	10.4	6.3	-14	-6	6	✓	12300	✓	0.50	GI205	SQ343	–
80A05R-S90LN12-C	80	–	27	38	–	50	–	12.4	7	-14	-6	5	✓	10900	✓	1.18	GI205	SQ341	AC001
80A07R-S90LN12-C	80	–	27	38	–	50	–	12.4	7	-14	-6	7	✓	10900	✓	1.02	GI205	SQ341	AC001
100A06R-S90LN12-C	100	–	32	45	–	50	–	14.4	8	-14	-6	6	✓	9800	✓	1.78	GI205	SQ341	AC002
100A08R-S90LN12-C	100	–	32	45	–	50	–	14.4	8	-14	-6	8	✓	9800	✓	2.01	GI205	SQ341	AC002
110A06R-S90LN12-C	110	–	32	45	–	50	–	14.4	8	-14	-6	6	✓	9300	✓	2.09	GI205	SQ341	AC002
125A07R-S90LN12-C	125	–	40	56	–	63	–	16.4	9	-14	-6	7	✓	8700	✓	3.44	GI205	SQ341	AC003
125A09R-S90LN12-C	125	–	40	56	–	63	–	16.4	9	-14	-6	9	✓	8700	✓	3.38	GI205	SQ341	AC003

DIN 1835A · DIN 1835B · MODULAR · ISO 6462 DIN 8030

GI205	LNGX 1205..	LNGU 1205..

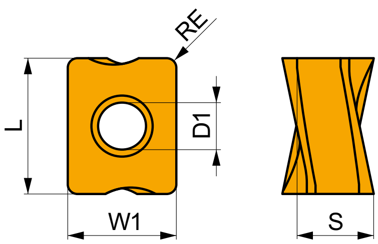
SQ340	US 44012-T15P	3.5	M 4	12	–	–	Flag T15P	–
SQ341	US 44012-T15P	3.5	M 4	12	D-T08P/T15P	FG-15	–	–
SQ342	US 44012-T15P	3.5	M 4	12	D-T08P/T15P	FG-15	–	HS 0830C
SQ343	US 44012-T15P	3.5	M 4	12	D-T08P/T15P	FG-15	–	HS 1030C

AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

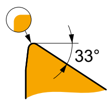
LNGX 12

PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1205	9.500	4.50	12.00	5.96



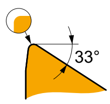
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

E

F geometry with highly positive design for light machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N vc [m/min]	f [mm/tooth]	ap [mm]	S vc [m/min]	f [mm/tooth]	ap [mm]	H vc [m/min]	f [mm/tooth]	ap [mm]
LNGX 120504ER-F	**8215**	0.4	■	200	0.15	1.5	–	–	–	◪	190	0.15	1.5	–	–	–	–	–	–	–	–	–
	M8330	0.4	■	200	0.15	1.5	–	–	–	◪	190	0.15	1.5	–	–	–	–	–	–	–	–	–
	M8340	0.4	■	180	0.15	1.5	–	–	–	◪	170	0.15	1.5	–	–	–	–	–	–	–	–	–
LNGX 120508ER-F	**8215**	0.8	■	240	0.15	1.5	–	–	–	◪	225	0.15	1.5	–	–	–	–	–	–	–	–	–
	M8310	0.8	■	260	0.15	1.5	–	–	–	◪	245	0.15	1.5	–	–	–	–	–	–	–	–	–
	M8330	0.8	■	235	0.15	1.5	–	–	–	◪	220	0.15	1.5	–	–	–	–	–	–	–	–	–
	M8340	0.8	■	215	0.15	1.5	–	–	–	◪	200	0.15	1.5	–	–	–	–	–	–	–	–	–

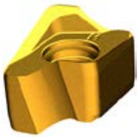



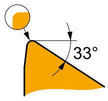
1 E

M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N vc [m/min]	f [mm/tooth]	ap [mm]	S vc [m/min]	f [mm/tooth]	ap [mm]	H vc [m/min]	f [mm/tooth]	ap [mm]
LNGX 120504ER-M	**M8330**	0.4	■	185	0.15	3.0	–	–	–	■	175	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8340	0.4	■	170	0.15	3.0	–	–	–	◪	160	0.15	3.0	–	–	–	–	–	–	–	–	–
LNGX 120508ER-M	**8215**	0.8	■	220	0.15	3.0	–	–	–	■	205	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8310	0.8	■	240	0.15	3.0	–	–	–	■	225	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8330	0.8	■	220	0.15	3.0	–	–	–	■	205	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8340	0.8	■	200	0.15	3.0	–	–	–	◪	190	0.15	3.0	–	–	–	–	–	–	–	–	–
	M9315	0.8	■	300	0.15	3.0	–	–	–	■	285	0.15	3.0	–	–	–	–	–	–	–	–	–
	M9325	0.8	■	280	0.15	3.0	–	–	–	■	265	0.15	3.0	–	–	–	–	–	–	–	–	–
	M9340	0.8	■	250	0.15	3.0	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–
LNGX 120510ER-M	**M8330**	1.0	■	230	0.15	3.0	–	–	–	■	215	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8340	1.0	■	210	0.15	3.0	–	–	–	◪	195	0.15	3.0	–	–	–	–	–	–	–	–	–

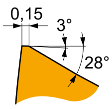
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.





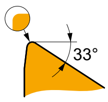
M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
LNGX 120512ER-M	**M8330**	1.2	■ 230	0.15	3.0	–	–	–	■ 215	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8340	1.2	■ 210	0.15	3.0	–	–	–	◪ 195	0.15	3.0	–	–	–	–	–	–	–	–	–
LNGX 120516ER-M	**M8330**	1.6	■ 240	0.15	3.0	–	–	–	■ 225	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8340	1.6	■ 220	0.15	3.0	–	–	–	◪ 205	0.15	3.0	–	–	–	–	–	–	–	–	–
LNGX 120520ER-M	**M8310**	2.0	■ 280	0.15	3.0	–	–	–	■ 265	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8330	2.0	■ 255	0.15	3.0	–	–	–	■ 240	0.15	3.0	–	–	–	–	–	–	–	–	–
	M8340	2.0	■ 230	0.15	3.0	–	–	–	◪ 215	0.15	3.0	–	–	–	–	–	–	–	–	–



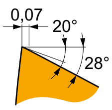
R geometry with positive design for unstable cutting conditions.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
LNGX 120508SR-R	**8215**	0.8	■ 205	0.20	3.5	–	–	–	■ 190	0.20	3.5	–	–	–	–	–	–	–	–	–
	M5315	0.8	◪ 265	0.20	3.5	–	–	–	■ 250	0.20	3.5	–	–	–	–	–	–	–	–	–
	M8310	0.8	■ 220	0.20	3.5	–	–	–	■ 205	0.20	3.5	–	–	–	–	–	–	–	–	–
	M8330	0.8	■ 205	0.20	3.5	–	–	–	■ 190	0.20	3.5	–	–	–	–	–	–	–	–	–
	M8340	0.8	■ 185	0.20	3.5	–	–	–	◪ 175	0.20	3.5	–	–	–	–	–	–	–	–	–
	M9315	0.8	■ 265	0.20	3.5	–	–	–	■ 250	0.20	3.5	–	–	–	–	–	–	–	–	–
	M9325	0.8	■ 250	0.20	3.5	–	–	–	■ 235	0.20	3.5	–	–	–	–	–	–	–	–	–
	M9340	0.8	■ 225	0.20	3.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
LNGX 120516SR-R	**8215**	1.6	■ 225	0.20	3.5	–	–	–	■ 210	0.20	3.5	–	–	–	–	–	–	–	–	–
	M8330	1.6	■ 225	0.20	3.5	–	–	–	■ 210	0.20	3.5	–	–	–	–	–	–	–	–	–
	M8340	1.6	■ 205	0.20	3.5	–	–	–	◪ 190	0.20	3.5	–	–	–	–	–	–	–	–	–
	M9325	1.6	■ 275	0.20	3.5	–	–	–	■ 260	0.20	3.5	–	–	–	–	–	–	–	–	–



MF geometry with highly positive design for light machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
LNGX 120504ER-MF	**M6330**	0.4	◪ 175	0.15	1.0	■ 125	0.14	1.0	–	–	–	–	–	–	–	–	–	–	–	–
	M8340	0.4	◪ 190	0.15	1.0	■ 110	0.14	1.0	–	–	–	–	–	–	–	–	–	–	–	–
	M9340	0.4	◪ 240	0.15	1.0	■ 140	0.14	1.0	–	–	–	–	–	–	–	–	–	–	–	–
LNGX 120508ER-MF	**M6330**	0.8	◪ 210	0.15	1.0	■ 150	0.14	1.0	–	–	–	–	–	–	–	–	–	–	–	–
	M8340	0.8	◪ 225	0.15	1.0	■ 135	0.14	1.0	–	–	–	–	–	–	–	–	–	–	–	–
	M9340	0.8	◪ 285	0.15	1.0	■ 170	0.14	1.0	–	–	–	–	–	–	–	–	–	–	–	–



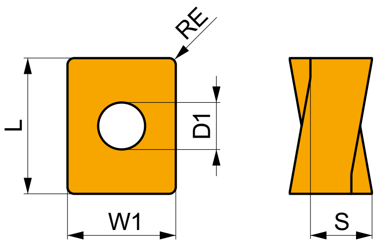
MM geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
LNGX 120508SR-MM	**M6330**	0.8	■ 190	0.15	2.8	■ 135	0.14	2.8	–	–	–	–	–	–	–	–	–	–	–	–
	M8340	0.8	■ 200	0.15	2.8	■ 120	0.14	2.8	–	–	–	–	–	–	–	–	–	–	–	–
	M8345	0.8	■ 160	0.15	2.8	■ 95	0.14	2.8	–	–	–	–	–	–	–	–	–	–	–	–
	M9340	0.8	■ 255	0.15	2.8	■ 150	0.14	2.8	–	–	–	–	–	–	–	–	–	–	–	–

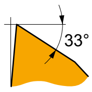
LNGU 12

PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1205	9.500	4.50	12.00	5.96



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



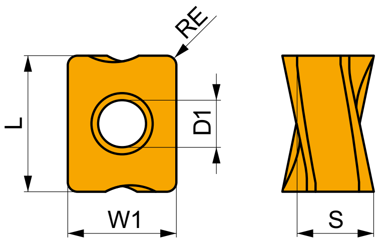
M geometry with positive design for medium machining.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
LNGU 120525ER-M	**M8330**	2.5	■	255	0.15	3.0		–	–	–	■	240	0.15	3.0		–	–	–		–	–	–		–	–	–
	M8340	2.5	■	230	0.15	3.0		–	–	–	◪	215	0.15	3.0		–	–	–		–	–	–		–	–	–
LNGU 120530ER-M	**M8330**	3.0	■	255	0.15	3.0		–	–	–	■	240	0.15	3.0		–	–	–		–	–	–		–	–	–
	M8340	3.0	■	230	0.15	3.0		–	–	–	◪	215	0.15	3.0		–	–	–		–	–	–		–	–	–

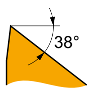
LNGX 12-FA

PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1205	9.500	4.50	12.00	5.96



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



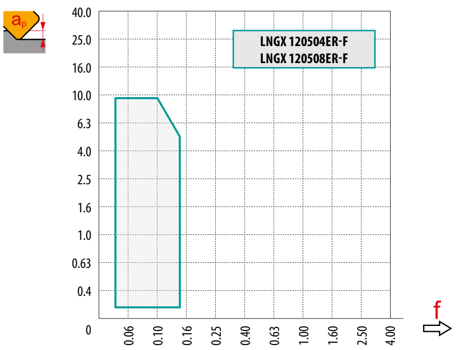
FA geometry with highly positive design for fine-finish to medium machining.

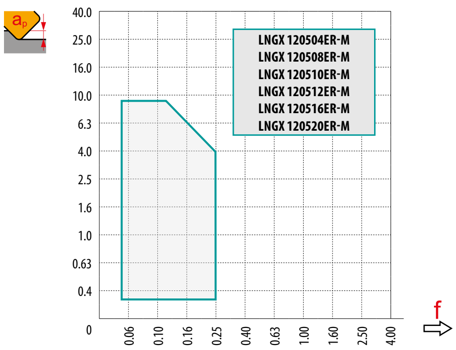
Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
LNGX 120504FR-FA	**HF7**	0.4		–	–	–		–	–	–		–	–	–	■	270	0.30	2.0		–	–	–		–	–	–
LNGX 120508FR-FA	**HF7**	0.8		–	–	–		–	–	–		–	–	–	■	315	0.30	2.0		–	–	–		–	–	–
	M0315	0.8		–	–	–		–	–	–		–	–	–	■	720	0.30	2.0		–	–	–		–	–	–

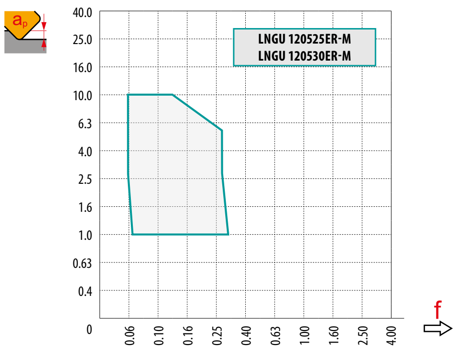
a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

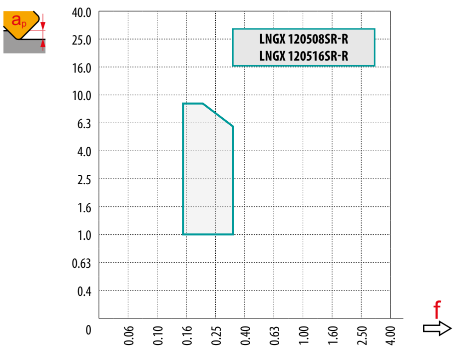
	LNGX 12-F		LNGX 12-M						LNGU 12-M	
RE	0.4	0.8	0.4	0.8	1.0	1.2	1.6	2.0	2.5	3.0
BS	2.29	1.89	2.29	1.89	1.69	1.49	1.09	0.68	0.87	0.36

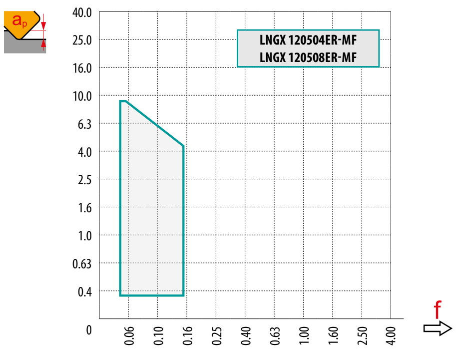
	LNGX 12-R		LNGX 12-MF		LNGX 12-MM	LNGX 12-FA	
RE	0.8	1.6	0.4	0.8	0.8	0.4	0.8
BS	1.88	1.08	2.28	1.88	1.88	2.30	1.89

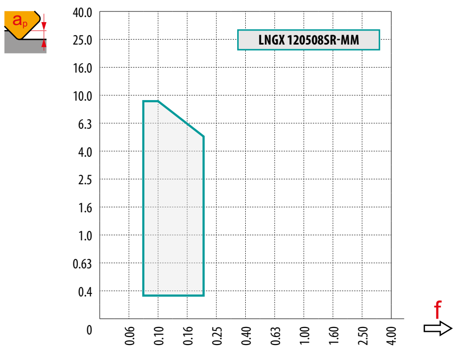


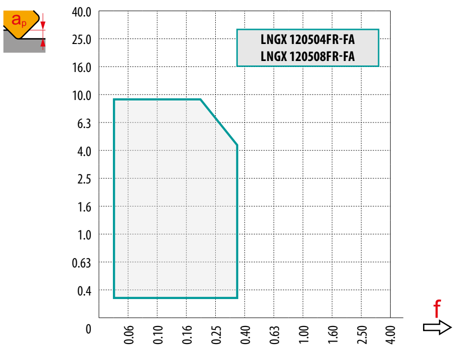












max
3.5

a_p	1.0	5.0	9.0
f	0.19	0.13	0.08

LNGX 12

DC	RPMX	APMX/l
25	1.3	2.1/100
32	0.7	1.1/100
40	0.5	0.7/100
50	0.4	0.5/100
63	0.2	0.3/100
80	0.2	0.2/100

LNGX 12

DC	DMIN	DMAX	SMAX DMIN	SMAX DMAX
25	35.0	50.0	0.7	1.7
32	49.0	64.0	0.6	1.2
40	65.0	80.0	0.6	1.0
50	85.0	100.0	0.7	1.0
63	111.0	126.0	0.6	0.8
80	145.0	160.0	0.7	0.8

a_p
0.2

DC	µm	3	5	10	15	20	30	40	50	60	80	100
25	FE	0.548	0.707	1.000	1.225	1.414	1.732	2.000	2.236	2.449	2.828	3.162
32		0.620	0.800	1.131	1.386	1.600	1.960	2.263	2.530	2.771	3.200	3.578
40		0.693	0.894	1.265	1.549	1.789	2.191	2.530	2.828	3.098	3.578	4.000
50		0.775	1.000	1.414	1.732	2.000	2.449	2.828	3.162	3.464	4.000	4.472
63		0.869	1.122	1.587	1.944	2.245	2.750	3.175	3.550	3.888	4.490	5.020
80		0.980	1.265	1.789	2.191	2.530	3.098	3.578	4.000	4.382	5.060	5.657

RE	µm	3	5	10	15	20	30	40	50	60	80	100
1.6	FE	0.196	0.253	0.358	0.438	0.506	0.620	0.716	0.800	0.876	1.012	1.131
2.0		0.219	0.283	0.400	0.490	0.566	0.693	0.800	0.894	0.980	1.131	1.265
2.5		0.245	0.316	0.447	0.548	0.632	0.775	0.894	1.000	1.095	1.265	1.414
3.0		0.268	0.346	0.490	0.600	0.693	0.849	0.980	1.095	1.200	1.386	1.549

⏮

SLN16

P K N H

PRAMET

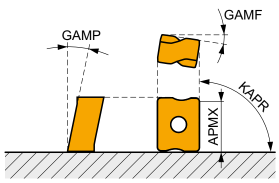
S

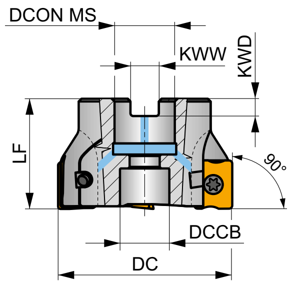
ECON LN16 Square Shoulder Mill with Internal Coolant

90° shell mill utilising double sided LN.. 16 inserts with APMX of 13 mm. Suitable for a wide range of applications. Available in arbor style in Ø63 up to Ø175 mm with differential tooth pitch. Body treated for longer tool life.

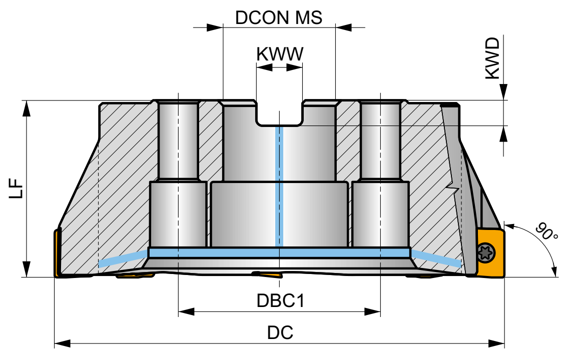
ECON LN

KAPR	90°
APMX	13.0 mm





DC 63 – 140 mm



DC 160 – 175 mm

h_m 0.08 - 0.2

Product	DC [mm]	LF [mm]	DCON MS [mm]	DCCB [mm]	DBC1 [mm]	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
63A04R-S90LN16-C	63	40	22	18	–	10.4	6.3	-10.5	-6	4	✓	7600	✓	0.46	GI207	SQ353	–
63A05R-S90LN16-C	63	40	22	18	–	10.4	6.3	-10.5	-6	5	✓	7600	✓	0.46	GI207	SQ353	–
80A04R-S90LN16-C	80	50	27	38	–	12.4	7	-10.5	-6	4	✓	6800	✓	0.98	GI207	SQ351	AC001
80A06R-S90LN16-C	80	50	27	38	–	12.4	7	-10.5	-6	6	✓	6800	✓	0.89	GI207	SQ351	AC001
100A05R-S90LN16-C	100	50	32	45	–	14.4	8	-10.5	-6	5	✓	6100	✓	0.98	GI207	SQ351	AC002
100A07R-S90LN16-C	100	50	32	45	–	14.4	8	-10.5	-6	7	✓	6100	✓	1.84	GI207	SQ351	AC002
125A06R-S90LN16-C	125	63	40	56	–	16.4	9	-10.5	-6	6	✓	5400	✓	3.44	GI207	SQ351	AC003
125A08R-S90LN16-C	125	63	40	56	–	16.4	9	-10.5	-6	8	✓	5400	✓	3.33	GI207	SQ351	AC003
140A06R-S90LN16-C	140	63	40	56	–	16.4	9	-10.5	-6	6	✓	5100	✓	3.91	GI207	SQ351	AC003
160C08R-S90LN16-C	160	63	40	–	66.7	16.4	9	-10.5	-6	8	✓	4700	✓	6.19	GI207	SQ356	–
175C08R-S90LN16-C	175	63	40	–	66.7	16.4	9	-10.5	-6	8	✓	4500	✓	7.11	GI207	SQ356	–

ISO 6462 DIN 8030

GI207	LNMU 1607..	LNGU 1607..

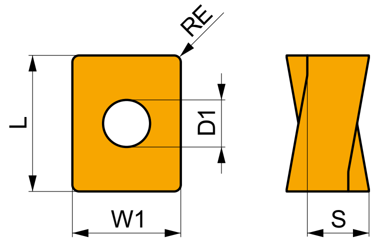
		Nm							
SQ351	US 45012-T20P	5.0	M 5	12	SDR T20P-T	–	–	–	–
SQ353	US 45012-T20P	5.0	M 5	12	SDR T20P-T	HS 1030C	–	–	–
SQ356	US 45012-T20P	5.0	M 5	12	SDR T20P-T	HS 1240C	CAC 160C	HSD 0825C	HXK 5

AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

LNMU 16

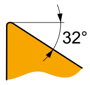
PRAMET

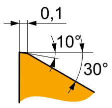
	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1607	13.200	5.70	16.60	7.50

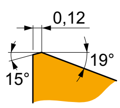


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
F geometry with highly positive design for light machining.																										
LNMU 160708ER-F	**8215**	0.8	■	235	0.16	1.7		–	–	–		–	–	–		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	230	0.16	1.7		–	–	–		–	–	–		–	–	–		–	–	–		–	–	–
	M8340	0.8	■	210	0.16	1.7		–	–	–		–	–	–		–	–	–		–	–	–		–	–	–
M geometry with positive design for medium machining.																										
LNMU 160708SR-M	**8215**	0.8	■	200	0.18	5.0		–	–	–	■	190	0.18	5.0		–	–	–		–	–	–		–	–	–
	M6330	0.8	■	170	0.18	5.0		–	–	–		–	–	–		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	200	0.18	5.0		–	–	–	■	190	0.18	5.0		–	–	–		–	–	–		–	–	–
	M8340	0.8	■	180	0.18	5.0		–	–	–	◩	170	0.18	5.0		–	–	–		–	–	–		–	–	–
	M9325	0.8	■	250	0.18	5.0		–	–	–	■	235	0.18	5.0		–	–	–		–	–	–		–	–	–
LNMU 160720SR-M	**M8330**	2.0	■	230	0.18	5.0		–	–	–	■	215	0.18	5.0		–	–	–		–	–	–		–	–	–
	M8340	2.0	■	210	0.18	5.0		–	–	–	◩	195	0.18	5.0		–	–	–		–	–	–		–	–	–
LNMU 160730SR-M	**M8330**	3.0	■	230	0.18	5.0		–	–	–	■	215	0.18	5.0		–	–	–		–	–	–		–	–	–
	M8340	3.0	■	210	0.18	5.0		–	–	–	◩	195	0.18	5.0		–	–	–		–	–	–		–	–	–
LNMU 160740SR-M	**M8330**	4.0	■	230	0.18	5.0		–	–	–	■	215	0.18	5.0		–	–	–		–	–	–		–	–	–
	M8340	4.0	■	210	0.18	5.0		–	–	–	◩	195	0.18	5.0		–	–	–		–	–	–		–	–	–
R geometry with positive stable design for medium machining.																										
LNMU 160708SR-R	**M5315**	0.8	◩	265	0.18	6.3		–	–	–	■	250	0.18	6.3		–	–	–		–	–	–	◩	50	0.15	1.0
	M8310	0.8	■	215	0.18	6.3		–	–	–	■	200	0.18	6.3		–	–	–		–	–	–	◩	40	0.15	1.0
	M8330	0.8	■	195	0.18	6.3		–	–	–	■	185	0.18	6.3		–	–	–		–	–	–	◩	35	0.15	1.0
	M8340	0.8	■	175	0.18	6.3		–	–	–	◩	165	0.18	6.3		–	–	–		–	–	–		–	–	–
	M9315	0.8	■	260	0.18	6.3		–	–	–	■	245	0.18	6.3		–	–	–		–	–	–	◩	50	0.15	1.0
	M9325	0.8	■	240	0.18	6.3		–	–	–	■	225	0.18	6.3		–	–	–		–	–	–	◩	45	0.15	1.0

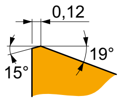



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
LNMU 160716SR-R	**M8330**	1.6	■	215	0.18	6.3	–	–	–	■	200	0.18	6.3	–	–	–	–	–	–	◩	40	0.15	1.0
	M8340	1.6	■	195	0.18	6.3	–	–	–	◩	185	0.18	6.3	–	–	–	–	–	–		–	–	–
	M9315	1.6	■	285	0.18	6.3	–	–	–	■	270	0.18	6.3	–	–	–	–	–	–	◩	55	0.15	1.0
	M9325	1.6	■	265	0.18	6.3	–	–	–	■	250	0.18	6.3	–	–	–	–	–	–	◩	50	0.15	1.0

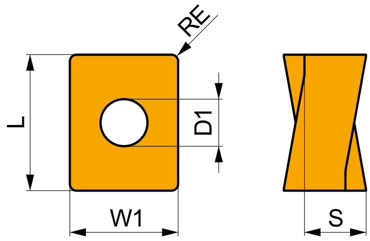


R geometry with positive stable design for medium machining.

LNGU 16

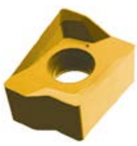
PRAMET

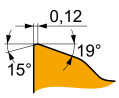
	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1607	13.200	5.70	16.60	7.50



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
LNGU 160708SR-M	**8215**	0.8	■	200	0.18	5.0	–	–	–	■	190	0.18	5.0	–	–	–	–	–	–	◩	40	0.15	1.0
	M8340	0.8	■	180	0.18	5.0	–	–	–	◩	170	0.18	5.0	–	–	–	–	–	–		–	–	–
	M9315	0.8	■	265	0.18	5.0	–	–	–	■	250	0.18	5.0	–	–	–	–	–	–	◩	50	0.15	1.0
	M9325	0.8	■	250	0.18	5.0	–	–	–	■	235	0.18	5.0	–	–	–	–	–	–	◩	50	0.15	1.0



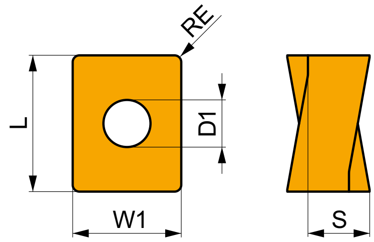


M geometry with highly positive design for medium machining.

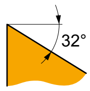
LNGU 16-FA

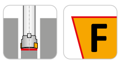
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1607	13.200	5.70	16.60	7.50



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



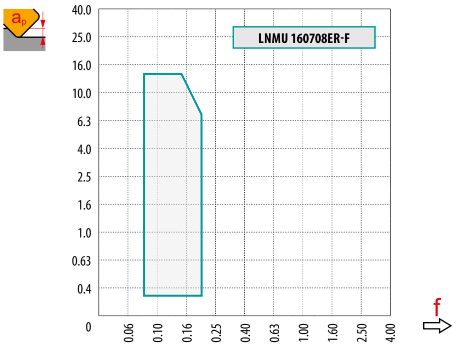


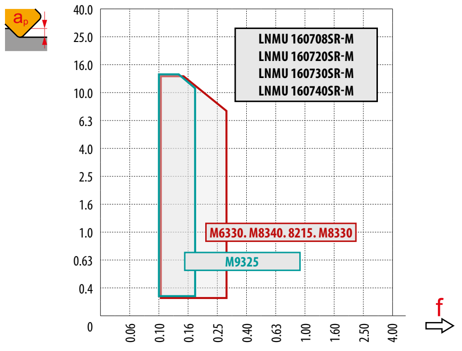
FA geometry with highly positive design for fine-finish to medium machining.

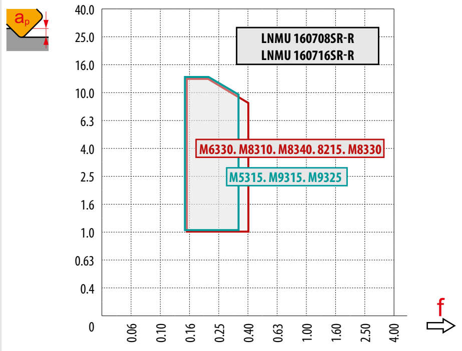
Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
LNGU 160708FR-FA	**HF7**	0.8	–	–	–	–	–	–	–	–	–	■ 300	0.30	3.0	–	–	–	–	–	–

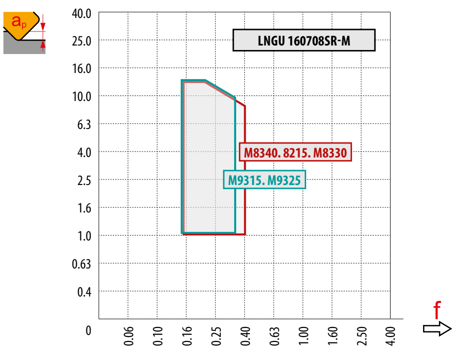
a_e / DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
x.v	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

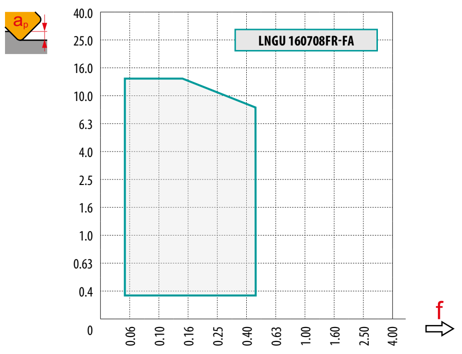
	LNMU 16-F	LNMU 16-M				LNMU 16-R		LNGU 16-M	LNGU 16-FA
RE	0.8	0.8	2.0	3.0	4.0	0.8	1.6	0.8	0.8
BS	3.30	3.30	2.11	1.12	0.10	3.30	2.50	3.24	3.30











max
7.0

a_p	1.0	6.0	13.0
1 f	0.31	0.24	0.13

SSO050

P M K S

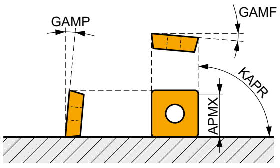
PRAMET

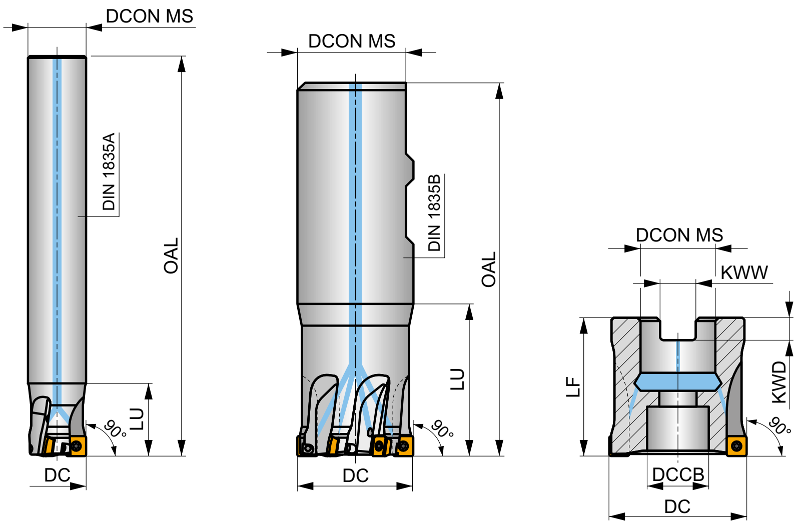
S

90° Square Shoulder Mill for SOMT 05 Insert with Internal Coolant

90˚ end and shell mills utilising positive SOMT 05 inserts with APMX of 4.5 mm. Suitable for face, shoulder, slot and plunge milling. Available in cylindrical, Weldon and arbor style, in Ø12 up to Ø40 mm and with differential tooth pitch. Body treated for longer tool life.

KAPR	90°
APMX	4.5 mm





h_m 0.04 - 0.08

h_m 0.04 - 0.06

	Product	DC	OAL	DCON MS	DCCB	LU	LF	KWW	KWD	GAMF	GAMP			max.		kg		
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	[°]							
DIN 1835A	12A2R018A10-SSO050-C	12	90	10	–	18	–	–	–	-8	8	2	–	58000	✓	0.05	GI327	SQ330
	12A2R018A12-SSO050-C	12	90	12	–	18	–	–	–	-8	8	2	–	58000	✓	0.07	GI327	SQ330
	16A3R020A14-SSO050-C	16	110	14	–	20	–	–	–	-5	8	3	–	50300	✓	0.12	GI327	SQ330
	16A3R020A16-SSO050-C	16	110	16	–	20	–	–	–	-5	8	3	–	50300	✓	0.15	GI327	SQ330
	20A4R020A18-SSO050-C	20	125	18	–	20	–	–	–	-5	8	4	✓	45000	✓	0.21	GI327	SQ330
	20A4R020A20-SSO050-C	20	125	20	–	20	–	–	–	-5	8	4	✓	45000	✓	0.26	GI327	SQ330
	25A5R024A25-SSO050-C	25	140	25	–	24	–	–	–	-5	8	5	✓	40200	✓	0.48	GI327	SQ330
DIN 1835B	20A4R032B20-SSO050-C	20	83	20	–	32	–	–	–	-5	8	4	✓	45000	✓	0.16	GI327	SQ330
	25A5R042B25-SSO050-C	25	99	25	–	42	–	–	–	-5	8	5	✓	40200	✓	0.31	GI327	SQ330
	32A6R042B32-SSO050-C	32	103	32	–	42	–	–	–	-4.5	8	6	✓	35500	✓	0.54	GI327	SQ330
ISO 6462 DIN 8030	32A06R-S90SO050-C	32	–	16	12.4	–	32	8.4	5.6	-4.5	8	6	✓	35500	✓	0.10	GI327	SQ332
	40A08R-S90SO050-C	40	–	22	18.1	–	40	10.4	6.3	-4	8	8	✓	31800	✓	0.19	GI327	SQ333

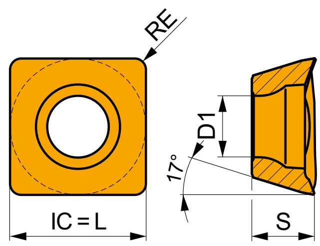
GI327	SOMT 0502..

		Nm						
SQ330	US 62204-T07P	0.8	M 2.2	4.1	Flag T07P	–	–	–
SQ332	US 62204-T07P	0.8	M 2.2	4.1	–	D-T07P/T09P	FG-15	HS 90835
SQ333	US 62204-T07P	0.8	M 2.2	4.1	–	D-T07P/T09P	FG-15	HS 1030C

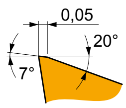
SOMT 05

PRAMET

	IC	D1	L	S
	[mm]	[mm]	[mm]	[mm]
0502	5.570	2.50	5.57	2.63



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

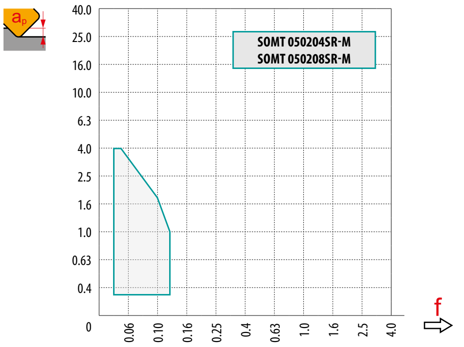


M geometry with positive design for light to medium machining.

Product	Grade	RE	P				M				K				N			S				H		
				vc	f	ap		vc	f	ap		vc	f	ap	vc	f	ap		vc	f	ap	vc	f	ap
		[mm]		[m/min]	[mm/tooth]	[mm]		[m/min]	[mm/tooth]	[mm]		[m/min]	[mm/tooth]	[mm]	[m/min]	[mm/tooth]	[mm]		[m/min]	[mm/tooth]	[mm]	[m/min]	[mm/tooth]	[mm]
SOMT 050204SR-M	**M6330**	0.4	■	255	0.05	2.5	■	180	0.05	2.5		–	–	–	–	–	–	◩	75	0.04	2.0	–	–	–
	M8330	0.4	■	290	0.05	2.5	■	170	0.05	2.5	◩	275	0.05	2.5	–	–	–	◩	70	0.04	2.0	–	–	–
	M8340	0.4	■	260	0.05	2.5	■	155	0.05	2.5	◩	245	0.05	2.5	–	–	–	◩	65	0.04	2.0	–	–	–
SOMT 050208SR-M	**M6330**	0.8	■	300	0.05	2.5	■	210	0.05	2.5		–	–	–	–	–	–	◩	85	0.04	2.0	–	–	–
	M8330	0.8	■	350	0.05	2.5	■	210	0.05	2.5	◩	330	0.05	2.5	–	–	–	◩	85	0.04	2.0	–	–	–
	M8340	0.8	■	310	0.05	2.5	■	185	0.05	2.5	◩	290	0.05	2.5	–	–	–	◩	75	0.04	2.0	–	–	–

a_e / DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	SOMT 05-M	
RE	0.4	0.8
BS	–	–



max
1.5

a_p	1.0	2.0	4.0
f	0.12	0.08	0.03

SSO09

P M K S

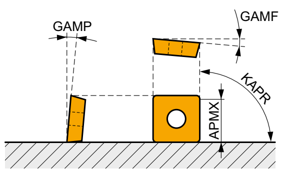
PRAMET

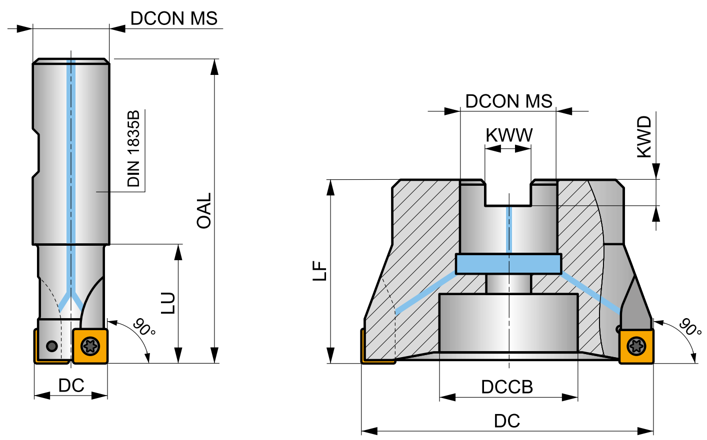
S

90° Square Shoulder Mill for SOMT 09 Insert with Internal Coolant

90° end and shell mills utilising positive SOMT 09 inserts with APMX of 8 mm. Suitable for face, shoulder, slot and plunge milling. Available in Weldon and arbor style, in Ø20 up to Ø125 mm. Differential tooth pitch available. Body treated for longer tool life.

KAPR	90°
APMX	8.0 mm





h_m	0.07 - 0.22
h_m	0.07 - 0.18

	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LF [mm]	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
DIN 1835B	20A2R032B20-SS009-C	20	82	20	–	32	–	–	–	-12	6	2	–	23800	✓	0.21	GI146	SQ400	–
	25A3R042B25-SS009-C	25	98	25	–	42	–	–	–	-12	6	3	–	21300	✓	0.31	GI146	SQ400	–
	32A4R042B32-SS009-C	32	102	32	–	42	–	–	–	-10	10	4	✓	18800	✓	0.55	GI146	SQ400	–
ISO 6462 DIN 8030	40A05R-S90SO09-C	40	–	16	14	–	40	8.4	5.6	-9.1	10	5	–	16800	✓	0.29	GI146	SQ402	–
	50A06R-S90SO09-C	50	–	22	18	–	40	10.4	6.4	-8.8	10	6	–	15100	✓	0.33	GI146	SQ403	–
	63A07R-S90SO09-C	63	–	22	18	–	40	10.4	6.4	-8.6	10	7	–	13400	✓	0.86	GI146	SQ403	–
	80A09R-S90SO09-C	80	–	27	38	–	50	12.4	7	-8.1	10	9	–	11900	✓	1.03	GI146	SQ401	AC001
	100A10R-S90SO09-C	100	–	32	45	–	50	14.4	8	-8.1	10	10	–	10700	✓	1.79	GI146	SQ401	AC002
	125A12R-S90SO09-C	125	–	40	56	–	63	16.4	9	-8.1	10	12	–	9500	✓	3.62	GI146	SQ401	AC003

GI146	SOMT 09T3..

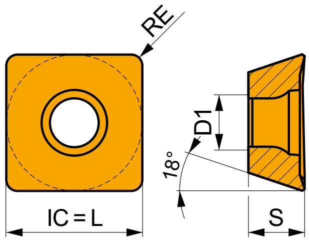
		Nm						
SQ400	US 3006-T09P	2.0	M 3	6	–	–	Flag T09P	–
SQ401	US 3006-T09P	2.0	M 3	6	D-T07P/T09P	FG-15	–	–
SQ402	US 3006-T09P	2.0	M 3	6	D-T07P/T09P	FG-15	–	HS 0830C
SQ403	US 3006-T09P	2.0	M 3	6	D-T07P/T09P	FG-15	–	HS 1030C

AC001	KS 1230	K.FMH27

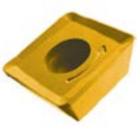
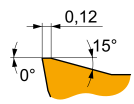
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

SOMT 09

	IC [mm]	D1 [mm]	L [mm]	S [mm]
09T3	9.550	3.50	9.55	3.97

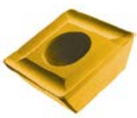
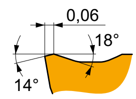


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Conditions are valid for setting angle 90°. Refer to our Machining Calculator app for further calculations.

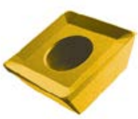
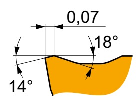
M geometry with positive design for medium machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
SOMT 09T308-M	**8215**	0.8	■	275	0.14	2.5	◩	165	0.13	2.5	◩	260	0.14	2.5		–	–	–	◩	65	0.13	2.0		–	–	–
	M5315	0.8	◩	390	0.14	2.5		–	–	–	◩	370	0.14	2.5		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	270	0.14	2.5	■	160	0.13	2.5	◩	255	0.14	2.5		–	–	–	◩	65	0.13	2.0		–	–	–
	M8340	0.8	■	250	0.14	2.5	■	150	0.13	2.5	◩	235	0.14	2.5		–	–	–	◩	60	0.13	2.0		–	–	–
	M9315	0.8	■	380	0.14	2.5		–	–	–	◩	360	0.14	2.5		–	–	–		–	–	–		–	–	–

MI geometry with stable positive design for medium machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
SOMT 09T304-MI	**8215**	0.4	■	230	0.14	2.5	◩	135	0.13	2.5	◩	215	0.14	2.5		–	–	–	◩	55	0.10	2.0		–	–	–
	M8310	0.4	■	255	0.14	2.5	◩	130	0.13	2.5	◩	240	0.14	2.5		–	–	–		–	–	–		–	–	–
	M8330	0.4	■	230	0.14	2.5	■	135	0.13	2.5	◩	215	0.14	2.5		–	–	–	◩	55	0.10	2.0		–	–	–
	M8340	0.4	■	210	0.14	2.5	■	125	0.13	2.5	◩	195	0.14	2.5		–	–	–	◩	50	0.10	2.0		–	–	–
	M9315	0.4	■	320	0.14	2.5		–	–	–	◩	300	0.14	2.5		–	–	–		–	–	–		–	–	–
	M9340	0.4	■	265	0.14	2.5	■	155	0.13	2.5		–	–	–		–	–	–	◩	65	0.10	2.0		–	–	–

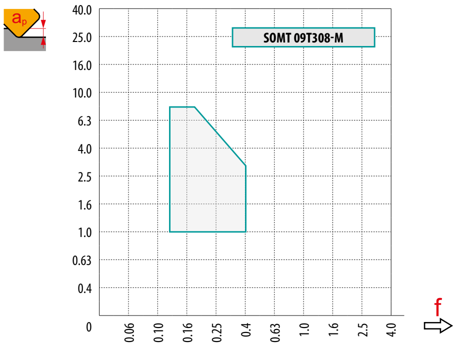



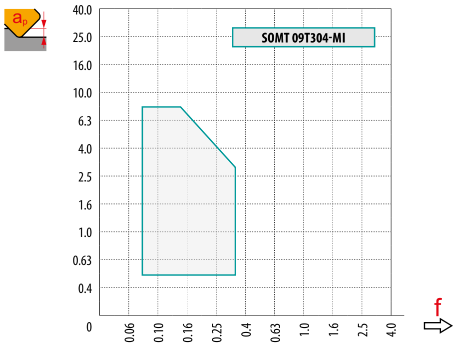
P geometry with highly positive design for medium machining.

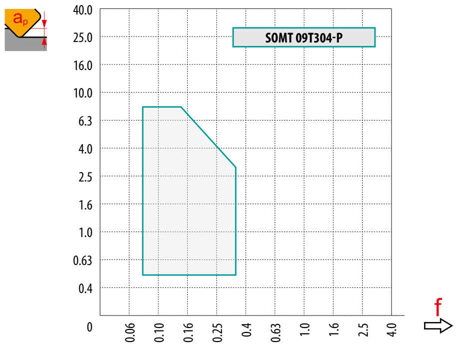
Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
SOMT 09T304-P	**M8330**	0.4	■	250	0.14	2.5	◩	150	0.13	2.5	◩	235	0.14	2.5		–	–	–	◩	60	0.10	2.0		–	–	–
	M8340	0.4	■	230	0.14	2.5	◩	135	0.13	2.5	◩	215	0.14	2.5		–	–	–	◩	55	0.10	2.0		–	–	–
	M9325	0.4	■	320	0.14	2.5		–	–	–	◩	300	0.14	2.5		–	–	–		–	–	–		–	–	–

a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	SOMT 09-M	SOMT 09-MI	SOMT 09-P
RE	0.8	0.4	0.4
BS	0.90	1.30	1.30







max
6.0

a_p	1.0	4.0	8.0
f	0.28	0.19	0.09

SSD12

P M K N S

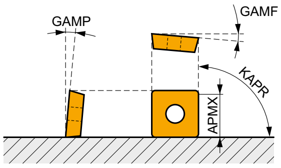
PRAMET

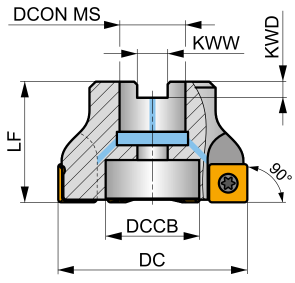
S

90° Square Shoulder Mill for SDMT 12 Insert with Internal Coolant

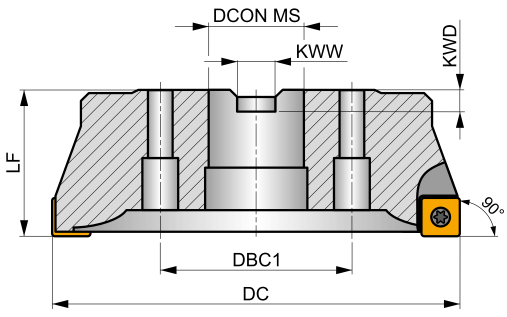
90° shell mill utilising positive SDMT 12 inserts with APMX of 10 mm. Suitable for face, shoulder, slot and plunge milling. Available in arbor style only in Ø50 up to Ø160 mm. Body treated for longer tool life.

KAPR	90°
APMX	10.0 mm





DC 50 - 125 mm



DC 160 mm

h_m 0.09 - 0.25

Product	DC [mm]	LF [mm]	DCON MS [mm]	DCCB [mm]	DBC1 [mm]	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
50A05R-S90SD12-C	50	40	22	18	–	10.4	6.3	-5	8	5	–	13000	✓	0.34	GI057	SQ413	–
63A06R-S90SD12-C	63	40	22	18	–	10.4	6.3	-5	8	6	–	11600	✓	0.53	GI057	SQ413	–
80A06R-S90SD12-C	80	50	27	38	–	12.4	7	-5	8	6	–	10300	✓	0.92	GI057	SQ411	AC001
100A08R-S90SD12-C	100	50	32	45	–	14.4	8	-5	8	8	–	9200	✓	1.69	GI057	SQ411	AC002
125A09R-S90SD12-C	125	63	40	56	–	16.4	9	-5	8	9	–	8300	✓	3.29	GI057	SQ411	AC003
160C12R-S90SD12	160	63	40	–	66.7	16.4	9	-5	8	12	–	7300	–	5.74	GI057	SQ411	–

ISO 6462 DIN 8030

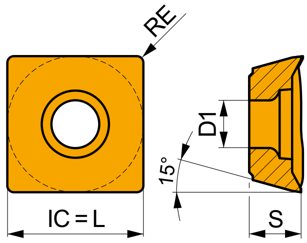
GI057	SDMT 1205..

					Nm					
SQ411	SSN 100312	MS 3510	HXK 3,5	US 3511-T15	3.0	M 3.5	11	D-T07/T15	FG-15	–
SQ413	–	–	–	US 3511-T15	3.0	M 3.5	11	D-T07/T15	FG-15	HS 1030C

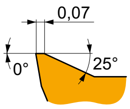
AC001	KS 1230	K.FMH27
AC002	KS 1635	K.FMH32
AC003	KS 2040	K.FMH40

SDMT 12

	IC [mm]	D1 [mm]	L [mm]	S [mm]
1205	12.700	4.40	12.70	5.00

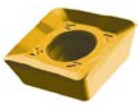


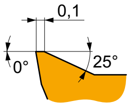
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.



F geometry with positive design for light to medium machining.

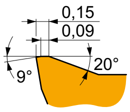
Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SDMT 120508SR-F	M8330	0.8	■ 275	0.10	3.0	◩ 165	0.09	3.0	◩ 260	0.10	3.0	◩ 825	0.12	3.0	◩ 65	0.08	2.4	–	–	–
	M8340	0.8	■ 250	0.10	3.0	◩ 150	0.09	3.0	◩ 235	0.10	3.0	–	–	–	◩ 60	0.08	2.4	–	–	–





M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SDMT 120508SR-M	8215	0.8	■ 245	0.16	3.5	◩ 145	0.14	3.5	◩ 230	0.16	3.5	–	–	–	◩ 60	0.11	2.8	–	–	–
	M8330	0.8	■ 240	0.16	3.5	■ 140	0.14	3.5	◩ 225	0.16	3.5	–	–	–	◩ 60	0.11	2.8	–	–	–
	M8340	0.8	■ 220	0.16	3.5	■ 130	0.14	3.5	◩ 205	0.16	3.5	–	–	–	◩ 55	0.11	2.8	–	–	–
	M9325	0.8	■ 305	0.16	3.5	–	–	–	◩ 285	0.16	3.5	–	–	–	–	–	–	–	–	–

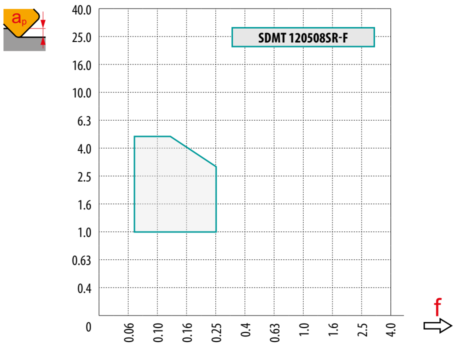


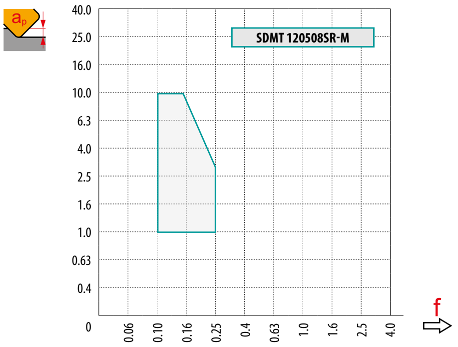
R geometry with stable positive design for medium machining.

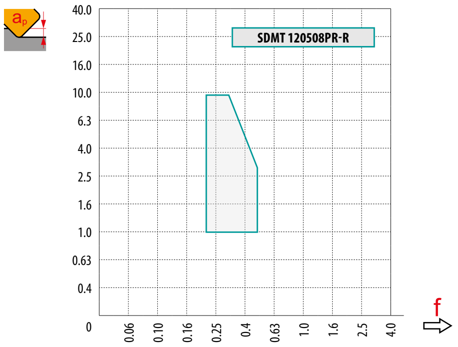
Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SDMT 120508PR-R	M8330	0.8	■ 220	0.25	3.5	◩ 130	0.23	3.5	■ 205	0.25	3.5	–	–	–	◩ 55	0.23	2.8	–	–	–
	M8340	0.8	■ 195	0.25	3.5	◩ 115	0.23	3.5	◩ 185	0.25	3.5	–	–	–	◩ 45	0.23	2.8	–	–	–
	M9315	0.8	■ 280	0.25	3.5	–	–	–	■ 265	0.25	3.5	–	–	–	–	–	–	–	–	–
	M9325	0.8	■ 265	0.25	3.5	–	–	–	■ 250	0.25	3.5	–	–	–	–	–	–	–	–	–

a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
x.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	SDMT 12-F	SDMT 12-M	SDMT 12-R
RE	0.8	0.8	0.8
BS	–	–	–







max
8.0

a_p	1.0	5.0	10.0
1 f	0.39	0.25	0.14

FTB27X

P M K

PRAMET

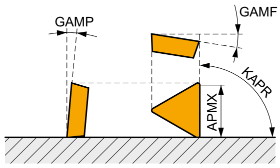
F

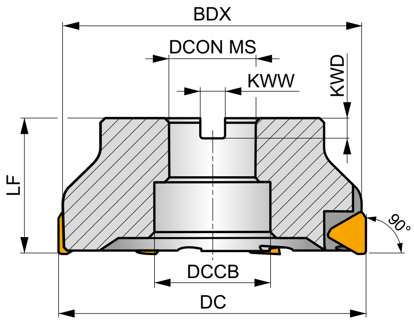
ROUGH TB Square Shoulder Face Mill for TBMR 27 Insert for Heavy Milling

90° shell mill utilising positive TBMR 27 inserts with APMX of 18 mm. Suitable for heavy face, shoulder and slot milling. Available in arbor style only in Ø140 up to Ø260 mm and with differential tooth pitch. Body treated for longer tool life.

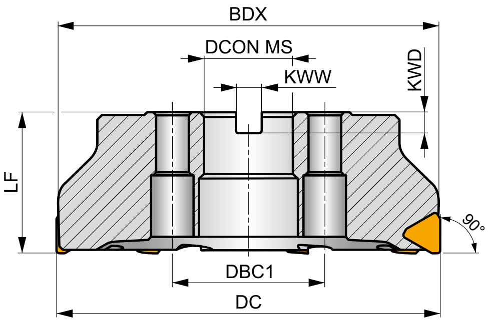
ROUGH TB

KAPR	90°
APMX	18.0 mm





DC 140 mm



DC 175 – 260 mm

h_m 0.15 - 0.38

Product	DC [mm]	BDX [mm]	LF [mm]	DCON MS [mm]	DCCB [mm]	DBC1 [mm]	KWW [mm]	KWD [mm]	GAMF [°]	GAMP [°]			max.		kg			
140B07R-F90TB27X	140	135.7	63	40	56	–	16.4	9	-9	9	7	✓	–	–	4.75	GI163	SQ421	AC003
175C08R-F90TB27X	175	169.6	63	40	–	66.7	16.4	16.4	-9	9	8	✓	–	–	7.59	GI163	SQ424	–
210C10R-F90TB27X	210	204.1	63	60	–	101.6	25.7	25.7	-9	9	10	✓	–	–	10.80	GI163	SQ425	–
260C12R-F90TB27X	260	253.4	63	60	–	101.6	25.7	25.7	-9	9	12	✓	–	–	18.21	GI163	SQ425	–

ISO 6462 DIN 8030

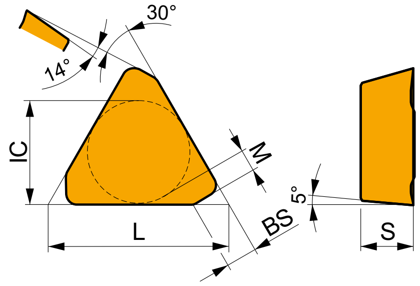
GI163	TBMR 2707PZ..

SQ421	LNK 220616	US 6013-T20P	SDR T20P-T	KU TBMR 2707	DS 01Z	KL 04	–
SQ424	LNK 220616	US 6013-T20P	SDR T20P-T	KU TBMR 2707	DS 01Z	KL 04	HS 1240
SQ425	LNK 220616	US 6013-T20P	SDR T20P-T	KU TBMR 2707	DS 01Z	KL 04	HS 1655

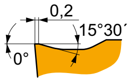
AC003	KS 2040	K.FMH40

TBMR 27

	BS [mm]	IC [mm]	L [mm]	M [mm]	S [mm]
2707	4.61	15.875	27.50	3	7.94



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

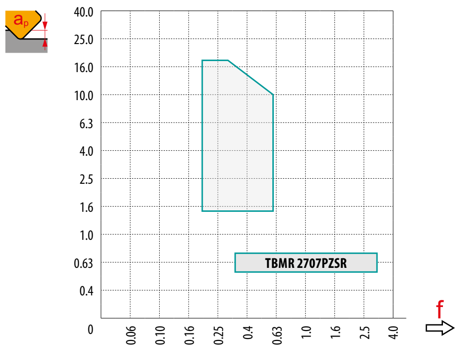


Strong design for heavy machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
TBMR 2707PZSR	**M8326**	–	◪ 130	0.20	11.0	–	–	–	◪ 120	0.20	11.0	–	–	–	–	–	–	–	–	–
	M8346	–	■ 110	0.20	11.0	◪ 65	0.20	11.0	–	–	–	–	–	–	–	–	–	–	–	–

a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
x.f	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
x.f	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

	TBMR 27
RE	–
BS	2.70



a_p	1.5	8.0	18.0
1 f	0.60	0.39	0.24

DORMER PRAMET

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INDEXABLE DEEP SHOULDER MILLS

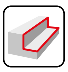
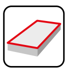
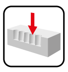
DEEP SHOULDER MILLING

>>>

	J(T)-SAD11E	J(T)-SAD16E	J(T)-SLSN	J(T)-SSAP	J(T)-2416
	90°	90°	90°	90°	90°
	APMX [mm] 37.0 – 56.0	APMX [mm] 40.0 – 108.0	APMX [mm] 104.0 – 134.0	APMX [mm] 58 ,0– 95.0	APMX [mm] 40.0 – 63.0
	DC [mm] 25 – 50	DC [mm] 50 – 100	DC [mm] 63 - 80	DC [mm] 50 – 80	DC [mm] 20 – 40
Weldon	 DC = 25 – 40 [mm]				
Morse taper	 DC = 25 – 40 [mm]				
Arbor		 DC = 50 – 80 [mm]			
Shell mill	 DC = 50 [mm]	 DC = 50 – 100 [mm]			
Page	🕮 482	🕮 488	🕮 494	🕮 498	🕮 503
ISO	P M K N S H	P M K N S H	P K	P M K N S H	P M K N
Insert shape					–
Inserts	AD 11T3	AD.. 1606	LNET 1606 SN.. 1305	APE. 150412 SPE. 1204	–
No. of cutting edges	2	2	2 / 8	2 / 4	–
Deep shoulder milling	■	■	■	■	■
Deep slot milling	■	■	■	■	◪
Face milling	◪	◪	◪	◪	◪
Plunge milling	◪	◪	◪	◪	

<<<

DEEP SHOULDER MILLING

	J(T)-CSD12X					
	90°					
	APMX [mm] 44.1 – 87.3					
	DC [mm] 40 – 63					
	 DC = 40 – 50 [mm]					
	 DC = 50 [mm]					
	 DC = 40 – 63 [mm]					
	 DC = 50 – 80 [mm]					
	📖 505					
	P M S					
						
	SD.X 1205					
	4					
	■					
	■					
	◩					
						

J(T)-SAD11E

P M K N S

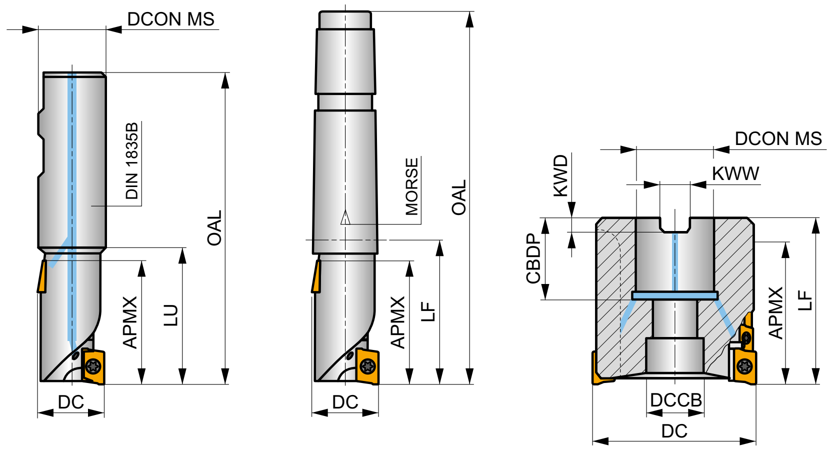
PRAMET

S

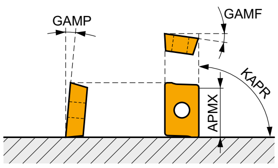
HELICAL AD11 Long Edge Mill with Internal Coolant

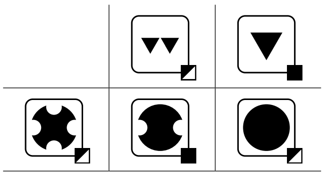
90° long edge end mill utilising positive ADMX 11 inserts with APMX of 36 up to 56 mm with internal coolant. Suitable for shoulder, slot, face or plunge milling. Available in Weldon, Morse taper and arbor style in Ø25 up to Ø50 mm. Body treated for longer tool life.

FORCE AD



KAPR	90°
APMX	37.0 - 56.0 mm





h_m	0.05 - 0.08
h_m	0.05 - 0.08

	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LF [mm]	APMX [mm]	CBDP [mm]	CZC MS	GAMF [°]	GAMP [°]	NOF			max.		kg		
DIN 1835B	25J2R50B25-SAD11E38-C	25	106	25	–	50	–	38.00	–	–	-10.5	5	2	8	–	24100	✓	0.32	GI184	SQ210
	32J2R60B32-SAD11E47-C	32	120	32	–	60	–	47.00	–	–	-9	8	2	10	–	21300	✓	0.60	GI184	SQ210
	40J2R60B40-SAD11E47-C	40	130	40	–	60	–	47.00	–	–	-8.1	11	2	10	–	19100	✓	1.12	GI184	SQ210
	40J3R70B32-SAD11E56-C	40	130	32	–	70	–	56.00	–	–	-8.1	11	3	18	–	19100	✓	0.76	GI184	SQ210
	40J3R70B40-SAD11E56-C	40	140	40	–	70	–	56.00	–	–	-8.1	11	3	18	–	19100	✓	1.12	GI184	SQ210
DIN 228A	25J2R55E03-SAD11E38-C	25	136	–	–	–	55	38.00	–	3	-10.5	5	2	8	–	24100	✓	0.38	GI184	SQ210
	32J2R65E04-SAD11E47-C	32	167.5	–	–	–	65	47.00	–	4	-9	8	2	10	–	21300	✓	0.72	GI184	SQ210
	40J3R75E04-SAD11E56-C	40	177.5	–	–	–	75	56.00	–	4	-8.1	11	3	18	–	19100	✓	0.85	GI184	SQ210
ISO 6462 DIN 8030	50T03R-S90AD11E37-C	50	–	22	18	–	58	37.00	21	–	-7.2	12	3	12	–	17000	✓	0.67	GI184	SQ903

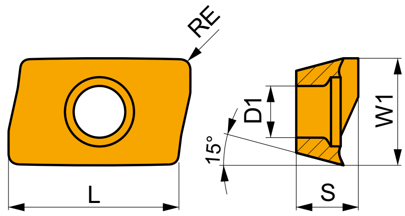
GI184	ADMX 11T3..	ADEX 11T3..-FA

		Nm						
SQ210	US 2506-T07P	1.2	M 2.5	6.3	–	–	Flag T07P	–
SQ903	US 2506-T07P	1.2	M 2.5	6.3	D-T07P/T09P	FG-15	–	HS 1030C

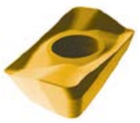
ADMX 11

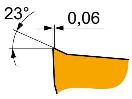
	W1 [mm]	D1 [mm]	L [mm]	S [mm]
11T3	6.530	2.90	11.00	3.97

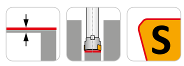
PRAMET



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

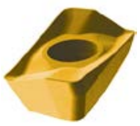


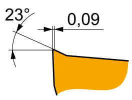




F geometry with very sharp positive design for light machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T304SR-F	**8215**	0.4	■	245	0.10	2.0	◩	145	0.09	2.0	◩	230	0.10	2.0	◩	735	0.12	2.0	◩	60	0.08	1.6		–	–	–
	M8310	0.4	■	270	0.10	2.0	◩	135	0.09	2.0	◩	255	0.10	2.0		–	–	–		–	–	–		–	–	–
	M8330	0.4	■	240	0.10	2.0	◩	140	0.09	2.0	◩	225	0.10	2.0	◩	720	0.12	2.0	◩	60	0.08	1.6		–	–	–
	M8340	0.4	■	220	0.10	2.0	◩	130	0.09	2.0	◩	205	0.10	2.0		–	–	–	◩	55	0.08	1.6		–	–	–
	M9340	0.4	■	285	0.10	2.0	◩	170	0.09	2.0		–	–	–		–	–	–	◩	70	0.08	1.6		–	–	–
ADMX 11T308SR-F	**8215**	0.8	■	290	0.10	2.0	◩	170	0.09	2.0	◩	275	0.10	2.0	◩	870	0.12	2.0	◩	70	0.08	1.6		–	–	–
	M8330	0.8	■	285	0.10	2.0	◩	170	0.09	2.0	◩	270	0.10	2.0	◩	855	0.12	2.0	◩	70	0.08	1.6		–	–	–
	M8340	0.8	■	260	0.10	2.0	◩	155	0.09	2.0	◩	245	0.10	2.0		–	–	–	◩	65	0.08	1.6		–	–	–
	M9340	0.8	■	340	0.10	2.0	◩	200	0.09	2.0		–	–	–		–	–	–	◩	85	0.08	1.6		–	–	–





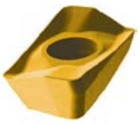
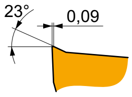
M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T302SR-M	**M8330**	0.2	■	190	0.15	4.0	■	110	0.14	4.0	■	180	0.15	4.0		–	–	–	◩	45	0.12	3.2		–	–	–
	M8340	0.2	■	170	0.15	4.0	■	100	0.14	4.0	◩	160	0.15	4.0		–	–	–	◩	40	0.12	3.2		–	–	–
ADMX 11T304SR-M	**8215**	0.4	■	205	0.15	4.0	◩	120	0.14	4.0	■	190	0.15	4.0		–	–	–	◩	50	0.12	3.2		–	–	–
	M8310	0.4	■	220	0.15	4.0	◩	110	0.14	4.0	■	205	0.15	4.0		–	–	–		–	–	–		–	–	–
	M8330	0.4	■	205	0.15	4.0	■	120	0.14	4.0	■	190	0.15	4.0		–	–	–	◩	50	0.12	3.2		–	–	–
	M8340	0.4	■	185	0.15	4.0	■	110	0.14	4.0	◩	175	0.15	4.0		–	–	–	◩	45	0.12	3.2		–	–	–
	M9325	0.4	■	255	0.15	4.0		–	–	–	■	240	0.15	4.0		–	–	–		–	–	–		–	–	–
	M9340	0.4	■	235	0.15	4.0	■	140	0.14	4.0		–	–	–		–	–	–	◩	55	0.12	3.2		–	–	–
ADMX 11T308SR-M	**8215**	0.8	■	245	0.15	4.0	◩	145	0.14	4.0	■	230	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
	M5315	0.8	◩	335	0.15	4.0		–	–	–	■	315	0.15	4.0		–	–	–		–	–	–		–	–	–
	M8310	0.8	■	265	0.15	4.0	◩	135	0.14	4.0	■	250	0.15	4.0		–	–	–		–	–	–		–	–	–
	M8330	0.8	■	245	0.15	4.0	■	145	0.14	4.0	■	230	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
	M8340	0.8	■	220	0.15	4.0	■	130	0.14	4.0	◩	205	0.15	4.0		–	–	–	◩	55	0.12	3.2		–	–	–
	M9315	0.8	■	330	0.15	4.0		–	–	–	■	310	0.15	4.0		–	–	–		–	–	–		–	–	–
	M9325	0.8	■	305	0.15	4.0		–	–	–	■	285	0.15	4.0		–	–	–		–	–	–		–	–	–
	M9340	0.8	■	275	0.15	4.0	■	165	0.14	4.0		–	–	–		–	–	–	◩	65	0.12	3.2		–	–	–
ADMX 11T310SR-M	**M8330**	1.0	■	255	0.15	4.0	■	150	0.14	4.0	■	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
	M8340	1.0	■	230	0.15	4.0	■	135	0.14	4.0	◩	215	0.15	4.0		–	–	–	◩	55	0.12	3.2		–	–	–
ADMX 11T312SR-M	**8215**	1.2	■	255	0.15	4.0	◩	150	0.14	4.0	■	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
	M8330	1.2	■	255	0.15	4.0	■	150	0.14	4.0	■	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
	M8340	1.2	■	230	0.15	4.0	■	135	0.14	4.0	◩	215	0.15	4.0		–	–	–	◩	55	0.12	3.2		–	–	–
ADMX 11T316SR-M	**8215**	1.6	■	270	0.15	4.0	◩	160	0.14	4.0	■	255	0.15	4.0		–	–	–	◩	65	0.12	3.2		–	–	–
	M6330	1.6	■	230	0.15	4.0	■	165	0.14	4.0		–	–	–		–	–	–	◩	65	0.12	3.2		–	–	–
	M8310	1.6	■	295	0.15	4.0	◩	150	0.14	4.0	■	280	0.15	4.0		–	–	–		–	–	–		–	–	–
	M8330	1.6	■	270	0.15	4.0	■	160	0.14	4.0	■	255	0.15	4.0		–	–	–	◩	65	0.12	3.2		–	–	–
	M8340	1.6	■	240	0.15	4.0	■	140	0.14	4.0	◩	225	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–

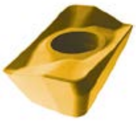
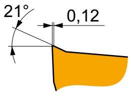
⏮

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T320SR-M	M6330	2.0	■	240	0.15	4.0	■	170	0.14	4.0		–	–	–		–	–	–	◩	70	0.12	3.2		–	–	–
	M8330	2.0	■	280	0.15	4.0	■	165	0.14	4.0	■	265	0.15	4.0		–	–	–	◩	70	0.12	3.2		–	–	–
	M8340	2.0	■	255	0.15	4.0	■	150	0.14	4.0	◩	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
ADMX 11T325SR-M	M6330	2.5	■	240	0.15	4.0	■	170	0.14	4.0		–	–	–		–	–	–	◩	70	0.12	3.2		–	–	–
	M8340	2.5	■	255	0.15	4.0	■	150	0.14	4.0	◩	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–
ADMX 11T330SR-M	M6330	3.0	■	240	0.15	4.0	■	170	0.14	4.0		–	–	–		–	–	–	◩	70	0.12	3.2		–	–	–
	M8330	3.0	■	280	0.15	4.0	■	165	0.14	4.0	■	265	0.15	4.0		–	–	–	◩	70	0.12	3.2		–	–	–
	M8340	3.0	■	255	0.15	4.0	■	150	0.14	4.0	◩	240	0.15	4.0		–	–	–	◩	60	0.12	3.2		–	–	–

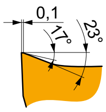



M geometry with positive design for light to medium machining.

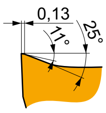
R geometry with positive design for machining conditions in less stable conditions.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T308PR-R	8215	0.8	■	230	0.18	4.0	◩	135	0.16	4.0	■	215	0.18	4.0		–	–	–	◩	55	0.16	3.2	◩	45	0.15	1.0
	M5315	0.8	◩	310	0.18	4.0		–	–	–	■	290	0.18	4.0		–	–	–		–	–	–	◩	60	0.15	1.0
	M8310	0.8	■	250	0.18	4.0	◩	125	0.16	4.0	■	235	0.18	4.0		–	–	–		–	–	–	◩	50	0.15	1.0
	M8330	0.8	■	230	0.18	4.0	◩	135	0.16	4.0	■	215	0.18	4.0		–	–	–	◩	55	0.16	3.2	◩	45	0.15	1.0
	M8340	0.8	■	210	0.18	4.0	◩	125	0.16	4.0	◩	195	0.18	4.0		–	–	–	◩	50	0.16	3.2		–	–	–
	M9315	0.8	■	310	0.18	4.0		–	–	–	■	290	0.18	4.0		–	–	–		–	–	–	◩	60	0.15	1.0
	M9325	0.8	■	290	0.18	4.0		–	–	–	■	275	0.18	4.0		–	–	–		–	–	–	◩	55	0.15	1.0
ADMX 11T316PR-R	8215	1.6	■	255	0.18	4.0	◩	150	0.16	4.0	■	240	0.18	4.0		–	–	–	◩	60	0.16	3.2	◩	50	0.15	1.0
	M8330	1.6	■	255	0.18	4.0	◩	150	0.16	4.0	■	240	0.18	4.0		–	–	–	◩	60	0.16	3.2	◩	50	0.15	1.0
	M9325	1.6	■	320	0.18	4.0		–	–	–	■	300	0.18	4.0		–	–	–		–	–	–	◩	60	0.15	1.0

MF geometry with highly positive design for light to finish machining.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T304SR-MF	M6330	0.4	■	215	0.08	2.5	■	150	0.07	2.5		–	–	–		–	–	–	■	60	0.06	2.0		–	–	–
	M8340	0.4	■	220	0.08	2.5	■	130	0.07	2.5		–	–	–		–	–	–	■	55	0.06	2.0		–	–	–
ADMX 11T308SR-MF	M6330	0.8	■	255	0.08	2.5	■	180	0.07	2.5		–	–	–		–	–	–	■	75	0.06	2.0		–	–	–
	M8340	0.8	■	265	0.08	2.5	■	155	0.07	2.5		–	–	–		–	–	–	■	65	0.06	2.0		–	–	–
	M9340	0.8	■	360	0.08	2.5	■	215	0.07	2.5		–	–	–		–	–	–	■	90	0.06	2.0		–	–	–

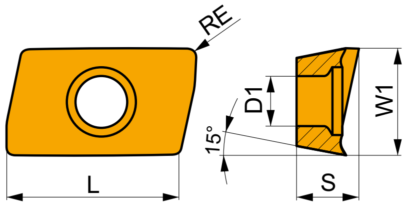



MM geometry with highly positive design for light to medium and finish to semi-rough machining.

Product		RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M	vc [m/min]	f [mm/tooth]	ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N	vc [m/min]	f [mm/tooth]	ap [mm]	S	vc [m/min]	f [mm/tooth]	ap [mm]	H	vc [m/min]	f [mm/tooth]	ap [mm]
ADMX 11T304SR-MM	M6330	0.4	■	185	0.14	2.5	■	130	0.13	2.5		–	–	–		–	–	–	■	55	0.11	2.0		–	–	–
	M8340	0.4	■	195	0.14	2.5	■	115	0.13	2.5		–	–	–		–	–	–	■	45	0.11	2.0		–	–	–
	M9340	0.4	■	250	0.14	2.5	■	150	0.13	2.5		–	–	–		–	–	–	■	60	0.11	2.0		–	–	–
ADMX 11T308SR-MM	M6330	0.8	■	225	0.14	2.5	■	155	0.13	2.5		–	–	–		–	–	–	■	65	0.11	2.0		–	–	–
	M8340	0.8	■	235	0.14	2.5	■	140	0.13	2.5		–	–	–		–	–	–	■	55	0.11	2.0		–	–	–
	M8345	0.8	■	190	0.14	2.5	■	110	0.13	2.5		–	–	–		–	–	–	■	45	0.11	2.0		–	–	–
	M9340	0.8	■	300	0.14	2.5	■	180	0.13	2.5		–	–	–		–	–	–	■	75	0.11	2.0		–	–	–
ADMX 11T312SR-MM	M6330	1.2	■	235	0.14	2.5	■	165	0.13	2.5		–	–	–		–	–	–	■	70	0.11	2.0		–	–	–
	M8340	1.2	■	245	0.14	2.5	■	145	0.13	2.5		–	–	–		–	–	–	■	60	0.11	2.0		–	–	–
	M9340	1.2	■	315	0.14	2.5	■	185	0.13	2.5		–	–	–		–	–	–	■	75	0.11	2.0		–	–	–

ADEX 11-FA

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
11T3	6.450	2.90	9.70	3.91



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

FA geometry with highly positive design for fine-finish to medium machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 11T304FR-FA	**HF7**	0.4	–	–	–	–	–	–	–	–	–	■	210	0.30	5.0	–	–	–	–	–	–
	M0315	0.4	–	–	–	–	–	–	–	–	–	■	480	0.30	5.0	–	–	–	–	–	–
ADEX 11T308FR-FA	**HF7**	0.8	–	–	–	–	–	–	–	–	–	■	240	0.30	5.0	–	–	–	–	–	–
	M0315	0.8	–	–	–	–	–	–	–	–	–	■	570	0.30	5.0	–	–	–	–	–	–
ADEX 11T312FR-FA	**HF7**	1.2	–	–	–	–	–	–	–	–	–	■	255	0.30	5.0	–	–	–	–	–	–
	M0315	1.2	–	–	–	–	–	–	–	–	–	■	600	0.30	5.0	–	–	–	–	–	–
ADEX 11T316FR-FA	**HF7**	1.6	–	–	–	–	–	–	–	–	–	■	270	0.18	5.0	–	–	–	–	–	–

ae/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	0.89	0.81	0.76	0.73	0.71	0.70	0.67	0.65	0.63	0.62	0.60	0.60	0.60	0.45

ae max	1		2.5		5		7.5		10		15		20	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
25	0.25	0.40	0.16	0.26	0.12	0.19	0.10	0.15	0.09	0.14	0.07	0.12	0.07	0.11
32	0.28	0.45	0.18	0.29	0.13	0.21	0.11	0.17	0.09	0.15	0.08	0.13	0.07	0.12
40	0.32	0.51	0.20	0.32	0.14	0.23	0.12	0.19	0.10	0.17	0.09	0.14	0.08	0.13
50	0.35	0.57	0.23	0.36	0.16	0.26	0.13	0.21	0.12	0.19	0.10	0.15	0.09	0.14

ae max	25		32		40		50	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
25	0.08	0.13	–	–	–	–	–	–
32	0.07	0.11	0.08	0.13	–	–	–	–
40	0.07	0.12	0.07	0.11	0.08	0.13	–	–
50	0.08	0.13	0.07	0.12	0.07	0.11	0.08	0.13

	ADMX 11-F		ADMX 11-M									ADMX 11-R		ADMX 11-MF		ADMX 11-MM			ADEX 11-FA			
RE	0.4	0.8	0.2	0.4	0.8	1.0	1.2	1.6	2.0	2.5	3.0	0.8	1.6	0.4	0.8	0.4	0.8	1.2	0.4	0.8	1.2	1.6
BS	1.89	1.48	2.09	1.89	1.48	1.27	1.08	0.68	1.61	1.13	0.66	1.48	0.68	1.89	1.48	1.89	1.48	1.08	1.77	1.39	1.0	0.62

ISO	DC		APMX	a_p
25J2R50B25-SAD11E38-C	25	2	38	34.5
32J2R60B32-SAD11E47-C	32	2	47	43.5
40J2R60B40-SAD11E47-C	40	2	47	43.5
40J3R70B32-SAD11E56-C	40	3	56	52.5
40J3R70B40-SAD11E56-C	40	3	56	52.5
25J2R55E03-SAD11E38-C	25	2	38	34.5
32J2R65E04-SAD11E47-C	32	2	47	43.5
40J3R75E04-SAD11E56-C	40	3	56	52.5
50T03R-S90AD11E37-C	50	3	37	33.5

max
4.5

ADMX/ADEX 11	R
ADMX 11T320SR-M	1.0
ADMX 11T325SR-M	1.8
ADMX 11T330SR-M	1.8

J(T)-SAD16E

P M K N S

PRAMET

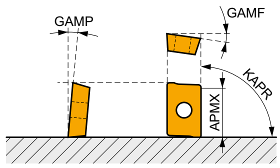
S

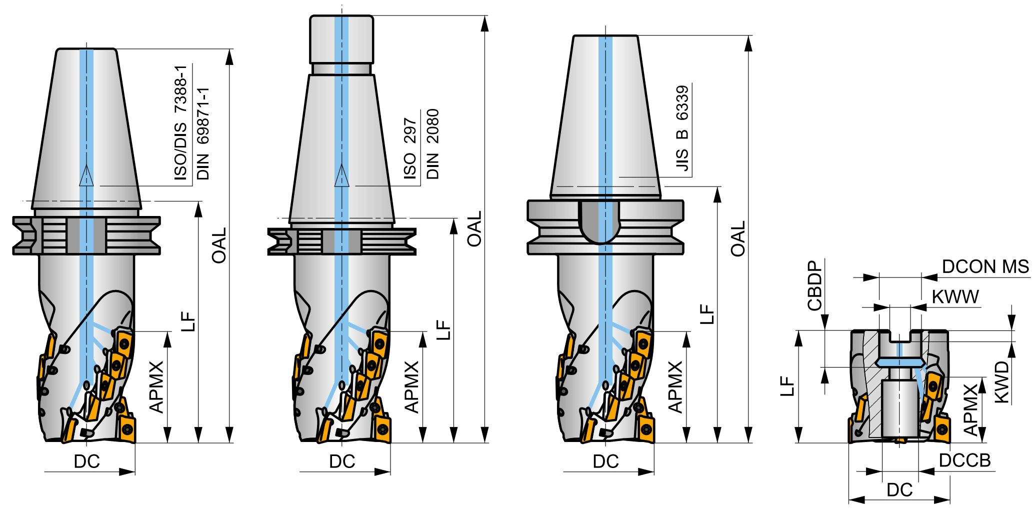
HELICAL AD16 Long Edge Mill with Internal Coolant

90˚ long edge end mill utilising positive AD.. 16 inserts with APMX of 40 up to 108 mm with internal coolant. Suitable for shoulder, slot, face or plunge milling. Available in arbor, DIN 69871, BT and DIN 2080 taper style, in Ø50 up to Ø100 mm, with or without differential tooth pitch. Body treated for longer tool life.

FORCE AD

KAPR	90°
APMX	40.0 - 108.0 mm





h_m	0.08 - 0.1
h_m	0.08 - 0.1

	Product	DC	OAL	DCON MS	DCCB	LU	LF	APMX	CBDP	CZC MS	GAMF	GAMP	NOF			max.		kg		
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[°]	[°]								
ISO/DIS 7388-1	50J3R100H50-SAD16E54-C	50	202	–	–	–	100	54.00	–	50	-6	12	3	12	–	13200	✓	4.08	GI282	SQ031
	50J3R140H50-SAD16E80-C	50	242	–	–	–	140	80.00	–	50	-6	12	3	18	–	13200	✓	4.38	GI282	SQ031
	63J3R140H50-SAD16E68-C	63	242	–	–	–	140	68.00	–	50	-6	12	3	15	–	11700	✓	5.34	GI282	SQ031
	63J3R155H50-SAD16E95-C	63	257	–	–	–	155	95.00	–	50	-6	12	3	21	–	11700	✓	5.43	GI282	SQ031
	80J4R165H50-SAD16E108-C	80	257	–	–	–	165	108.00	–	50	-6	12	4	32	✓	10400	✓	7.37	GI282	SQ031
ISO 297	50J3R140G50-SAD16E80-C	50	267	–	–	–	140	80.00	–	50	-6	12	3	18	–	13200	✓	4.48	GI282	SQ031
	63J3R155G50-SAD16E95-C	63	282	–	–	–	155	95.00	–	50	-6	12	3	21	–	11700	✓	5.52	GI282	SQ031
	80J4R165G50-SAD16E108-C	80	292	–	–	–	165	108.00	–	50	-6	12	4	32	✓	10400	✓	7.51	GI282	SQ031
JIS B 6339	50J3R140X50-SAD16E68-C	50	242	–	–	–	140	68.00	–	50	-6	12	3	15	–	13200	✓	5.28	GI282	SQ031
	63J3R155X50-SAD16E80-C	63	257	–	–	–	155	80.00	–	50	-6	12	3	18	–	11700	✓	6.19	GI282	SQ031
	80J4R165X50-SAD16E95-C	80	267	–	–	–	165	95.00	–	50	-6	12	4	28	✓	10400	✓	7.84	GI282	SQ031
ISO 6462 DIN 8030	50T03R-S90AD16E40-C	50	–	22	18	–	70	40.00	21	–	-6	12	3	9	–	13200	✓	1.11	GI282	SQ913
	63T04R-S90AD16E40-C	63	–	27	22	–	70	40.00	22	–	-6	12	4	12	✓	11700	✓	1.50	GI282	SQ914
	63T04R-S90AD16E68-C	63	–	27	22	–	100	68.00	22	–	-6	12	4	20	✓	11700	✓	1.86	GI282	SQ914
	80T04R-S90AD16E55-C	80	–	32	30	–	85	55.00	25	–	-6	12	4	16	✓	10400	✓	2.56	GI282	SQ915
	80T04R-S90AD16E80-C	80	–	32	30	–	115	80.00	25	–	-6	12	4	24	✓	10400	✓	3.17	GI282	SQ915
	100T05R-S90AD16E80-C	100	–	40	36	–	120	80.00	30	–	-6	12	5	30	✓	9300	✓	5.73	GI282	SQ916

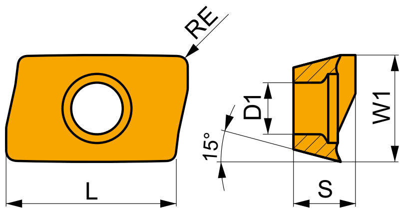
GI282	ADMX 1606..	ADEX 1606..-FA	ADEX 1606..-FM

SQ031	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	–
SQ913	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	HS 1030C
SQ914	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	HS 1230C
SQ915	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	HS 1630C
SQ916	US 4011-T15P	3.5	M 4	10.6	D-T08P/T15P	FG-15	HS 2040C

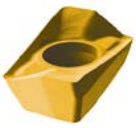
ADMX 16

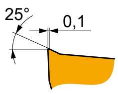
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.950	4.50	16.00	6.25



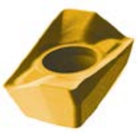
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

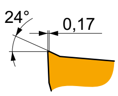




F geometry with highly positive design for light to medium machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 160608SR-F	**8215**	0.8	■ 265	0.15	2.0	◪ 155	0.14	2.0	◪ 250	0.15	2.0	◪ 795	0.18	2.0	◪ 65	0.11	1.6	–	–	–
	M8310	0.8	■ 285	0.15	2.0	◪ 145	0.14	2.0	◪ 270	0.15	2.0	–	–	–	–	–	–	–	–	–
	M8330	0.8	■ 260	0.15	2.0	◪ 155	0.14	2.0	◪ 245	0.15	2.0	◪ 780	0.18	2.0	◪ 65	0.11	1.6	–	–	–
	M8340	0.8	■ 235	0.15	2.0	◪ 140	0.14	2.0	◪ 220	0.15	2.0	–	–	–	◪ 55	0.11	1.6	–	–	–
	M9340	0.8	■ 300	0.15	2.0	◪ 180	0.14	2.0	–	–	–	–	–	–	◪ 75	0.11	1.6	–	–	–

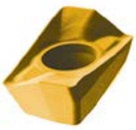
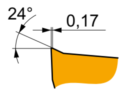




M geometry with positive design for light to medium machining.

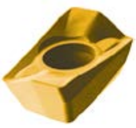
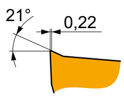
Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 160604SR-M	**8215**	0.4	■ 190	0.18	5.0	◪ 110	0.16	5.0	■ 180	0.18	5.0	–	–	–	◪ 45	0.13	4.0	–	–	–
	M8330	0.4	■ 190	0.18	5.0	■ 110	0.16	5.0	■ 180	0.18	5.0	–	–	–	◪ 45	0.13	4.0	–	–	–
	M8340	0.4	■ 170	0.18	5.0	■ 100	0.16	5.0	◪ 160	0.18	5.0	–	–	–	◪ 40	0.13	4.0	–	–	–
ADMX 160608SR-M	**8215**	0.8	■ 225	0.18	5.0	◪ 135	0.16	5.0	■ 210	0.18	5.0	–	–	–	◪ 55	0.13	4.0	–	–	–
	M5315	0.8	◪ 305	0.18	5.0	–	–	–	■ 285	0.18	5.0	–	–	–	–	–	–	–	–	–
	M8310	0.8	■ 250	0.18	5.0	◪ 125	0.16	5.0	■ 235	0.18	5.0	–	–	–	–	–	–	–	–	–
	M8330	0.8	■ 225	0.18	5.0	■ 135	0.16	5.0	■ 210	0.18	5.0	–	–	–	◪ 55	0.13	4.0	–	–	–
	M8340	0.8	■ 205	0.18	5.0	■ 120	0.16	5.0	◪ 190	0.18	5.0	–	–	–	◪ 50	0.13	4.0	–	–	–
	M9315	0.8	■ 305	0.18	5.0	–	–	–	■ 285	0.18	5.0	–	–	–	–	–	–	–	–	–
	M9325	0.8	■ 280	0.18	5.0	–	–	–	■ 265	0.18	5.0	–	–	–	–	–	–	–	–	–
	M9340	0.8	■ 255	0.18	5.0	■ 150	0.16	5.0	–	–	–	–	–	–	◪ 60	0.13	4.0	–	–	–
ADMX 160616SR-M	**8215**	1.6	■ 250	0.18	5.0	◪ 150	0.16	5.0	■ 235	0.18	5.0	–	–	–	◪ 60	0.13	4.0	–	–	–
	M8310	1.6	■ 275	0.18	5.0	◪ 140	0.16	5.0	■ 260	0.18	5.0	–	–	–	–	–	–	–	–	–
	M8330	1.6	■ 250	0.18	5.0	■ 150	0.16	5.0	■ 235	0.18	5.0	–	–	–	◪ 60	0.13	4.0	–	–	–
	M8340	1.6	■ 225	0.18	5.0	■ 135	0.16	5.0	◪ 210	0.18	5.0	–	–	–	◪ 55	0.13	4.0	–	–	–
	M9325	1.6	■ 310	0.18	5.0	–	–	–	■ 290	0.18	5.0	–	–	–	–	–	–	–	–	–
ADMX 160620SR-M	**M6330**	2.0	■ 225	0.18	5.0	■ 155	0.16	5.0	–	–	–	–	–	–	◪ 65	0.13	4.0	–	–	–
	M8330	2.0	■ 265	0.18	5.0	■ 155	0.16	5.0	■ 250	0.18	5.0	–	–	–	◪ 65	0.13	4.0	–	–	–
	M8340	2.0	■ 240	0.18	5.0	■ 140	0.16	5.0	◪ 225	0.18	5.0	–	–	–	◪ 60	0.13	4.0	–	–	–

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

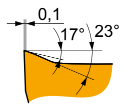
M geometry with positive design for light to medium machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 160630SR-M	**M8330**	3.0	■ 265	0.18	5.0	■ 155	0.16	5.0	■ 250	0.18	5.0	–	–	–	◩ 65	0.13	4.0	–	–	–
	M8340	3.0	■ 240	0.18	5.0	■ 140	0.16	5.0	◩ 225	0.18	5.0	–	–	–	◩ 60	0.13	4.0	–	–	–
ADMX 160632SR-M	**M6330**	3.2	■ 225	0.18	5.0	■ 155	0.16	5.0	–	–	–	–	–	–	◩ 65	0.13	4.0	–	–	–
	M8330	3.2	■ 265	0.18	5.0	■ 155	0.16	5.0	■ 250	0.18	5.0	–	–	–	◩ 65	0.13	4.0	–	–	–
	M8340	3.2	■ 240	0.18	5.0	■ 140	0.16	5.0	◩ 225	0.18	5.0	–	–	–	◩ 60	0.13	4.0	–	–	–
	M9325	3.2	■ 325	0.18	5.0	–	–	–	■ 305	0.18	5.0	–	–	–	–	–	–	–	–	–
ADMX 160640SR-M	**M6330**	4.0	■ 225	0.18	5.0	■ 155	0.16	5.0	–	–	–	–	–	–	◩ 65	0.13	4.0	–	–	–
	M8330	4.0	■ 265	0.18	5.0	■ 155	0.16	5.0	■ 250	0.18	5.0	–	–	–	◩ 65	0.13	4.0	–	–	–
	M8340	4.0	■ 240	0.18	5.0	■ 140	0.16	5.0	◩ 225	0.18	5.0	–	–	–	◩ 60	0.13	4.0	–	–	–
ADMX 160650SR-M	**M8330**	5.0	■ 265	0.18	5.0	■ 155	0.16	5.0	■ 250	0.18	5.0	–	–	–	◩ 65	0.13	4.0	–	–	–
	M8340	5.0	■ 240	0.18	5.0	■ 140	0.16	5.0	◩ 225	0.18	5.0	–	–	–	◩ 60	0.13	4.0	–	–	–

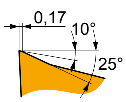
R geometry with positive design for medium to less stable machining conditions.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 160608PR-R	**8215**	0.8	■ 205	0.25	6.0	◩ 120	0.23	6.0	■ 190	0.25	6.0	–	–	–	◩ 50	0.20	4.8	◩ 40	0.15	1.0
	M5315	0.8	◩ 260	0.25	6.0	–	–	–	■ 245	0.25	6.0	–	–	–	–	–	–	◩ 50	0.15	1.0
	M8310	0.8	■ 220	0.25	6.0	◩ 110	0.23	6.0	■ 205	0.25	6.0	–	–	–	–	–	–	◩ 40	0.15	1.0
	M8330	0.8	■ 205	0.25	6.0	◩ 120	0.23	6.0	■ 190	0.25	6.0	–	–	–	◩ 50	0.20	4.8	◩ 40	0.15	1.0
	M8340	0.8	■ 190	0.25	6.0	◩ 110	0.23	6.0	◩ 180	0.25	6.0	–	–	–	◩ 45	0.20	4.8	–	–	–
	M9315	0.8	■ 265	0.25	6.0	–	–	–	■ 250	0.25	6.0	–	–	–	–	–	–	◩ 50	0.15	1.0
	M9325	0.8	■ 250	0.25	6.0	–	–	–	■ 235	0.25	6.0	–	–	–	–	–	–	◩ 50	0.15	1.0
ADMX 160616PR-R	**M5315**	1.6	◩ 290	0.25	6.0	–	–	–	■ 275	0.25	6.0	–	–	–	–	–	–	◩ 55	0.15	1.0
	M8330	1.6	■ 225	0.25	6.0	◩ 135	0.23	6.0	■ 210	0.25	6.0	–	–	–	◩ 55	0.20	4.8	◩ 45	0.15	1.0
	M8340	1.6	■ 210	0.25	6.0	◩ 125	0.23	6.0	◩ 195	0.25	6.0	–	–	–	◩ 50	0.20	4.8	–	–	–
	M9315	1.6	■ 295	0.25	6.0	–	–	–	■ 280	0.25	6.0	–	–	–	–	–	–	◩ 55	0.15	1.0
	M9325	1.6	■ 275	0.25	6.0	–	–	–	■ 260	0.25	6.0	–	–	–	–	–	–	◩ 55	0.15	1.0

MF geometry with highly positive design for finish machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 160608SR-MF	**M6330**	0.8	■ 215	0.08	4.0	■ 150	0.07	4.0	–	–	–	–	–	–	■ 60	0.06	3.2	–	–	–
	M8340	0.8	■ 225	0.08	4.0	■ 135	0.07	4.0	–	–	–	–	–	–	■ 55	0.06	3.2	–	–	–
	M9340	0.8	■ 305	0.08	4.0	■ 180	0.07	4.0	–	–	–	–	–	–	■ 75	0.06	3.2	–	–	–

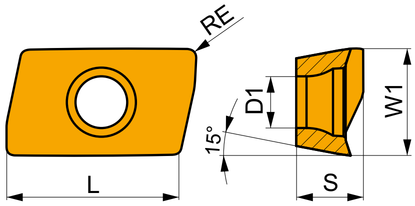
MM geometry with highly positive design for light to medium machining.

Product	Grade	RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADMX 160604SR-MM	**M6330**	0.4	■ 145	0.18	4.0	■ 105	0.16	4.0	–	–	–	–	–	–	■ 40	0.14	3.2	–	–	–
	M8340	0.4	■ 160	0.18	4.0	■ 95	0.16	4.0	–	–	–	–	–	–	■ 40	0.14	3.2	–	–	–
ADMX 160608SR-MM	**M6330**	0.8	■ 175	0.18	4.0	■ 125	0.16	4.0	–	–	–	–	–	–	■ 50	0.14	3.2	–	–	–
	M8340	0.8	■ 190	0.18	4.0	■ 110	0.16	4.0	–	–	–	–	–	–	■ 45	0.14	3.2	–	–	–
	M8345	0.8	■ 150	0.18	4.0	■ 90	0.16	4.0	–	–	–	–	–	–	■ 35	0.14	3.2	–	–	–
	M9340	0.8	■ 235	0.18	4.0	■ 140	0.16	4.0	–	–	–	–	–	–	■ 55	0.14	3.2	–	–	–
ADMX 160616SR-MM	**M6330**	1.6	■ 195	0.18	4.0	■ 140	0.16	4.0	–	–	–	–	–	–	■ 55	0.14	3.2	–	–	–
	M8340	1.6	■ 210	0.18	4.0	■ 125	0.16	4.0	–	–	–	–	–	–	■ 50	0.14	3.2	–	–	–
	M8345	1.6	■ 165	0.18	4.0	■ 95	0.16	4.0	–	–	–	–	–	–	■ 40	0.14	3.2	–	–	–
	M9340	1.6	■ 260	0.18	4.0	■ 155	0.16	4.0	–	–	–	–	–	–	■ 65	0.14	3.2	–	–	–

ADEX 16

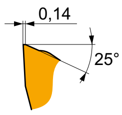
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.950	4.50	16.00	6.25



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 160608SR-FM	**8215**	0.8	■ 260	0.16	2.0	◩ 155	0.14	2.0	■ 245	0.16	2.0	–	–	–	◩ 65	0.11	1.6	–	–	–
	M8330	0.8	■ 255	0.16	2.0	◩ 150	0.14	2.0	■ 240	0.16	2.0	–	–	–	◩ 60	0.11	1.6	–	–	–
	M8340	0.8	■ 235	0.16	2.0	◩ 140	0.14	2.0	◩ 220	0.16	2.0	–	–	–	◩ 55	0.11	1.6	–	–	–



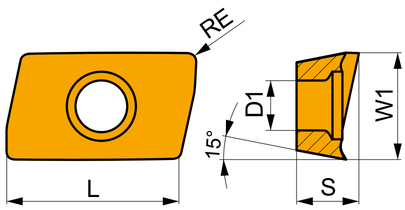
S

FM geometry with highly positive design for medium machining.

ADEX 16-FA

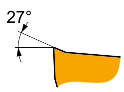
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	9.950	4.50	16.00	6.17



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
ADEX 160604FR-FA	**HF7**	0.4	–	–	–	–	–	–	–	–	–	■ 195	0.28	6.0	–	–	–	–	–	–
	M0315	0.4	–	–	–	–	–	–	–	–	–	■ 480	0.28	6.0	–	–	–	–	–	–
ADEX 160608FR-FA	**HF7**	0.8	–	–	–	–	–	–	–	–	–	■ 240	0.28	6.0	–	–	–	–	–	–
	M0315	0.8	–	–	–	–	–	–	–	–	–	■ 570	0.28	6.0	–	–	–	–	–	–
ADEX 160616FR-FA	**HF7**	1.6	–	–	–	–	–	–	–	–	–	■ 255	0.28	6.0	–	–	–	–	–	–
	M0315	1.6	–	–	–	–	–	–	–	–	–	■ 630	0.28	6.0	–	–	–	–	–	–
ADEX 160630FR-FA	**HF7**	3.0	–	–	–	–	–	–	–	–	–	■ 270	0.28	6.0	–	–	–	–	–	–



F

FA geometry with highly positive design for fine-finish to medium machining.

ae / DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	0.89	0.81	0.76	0.73	0.71	0.70	0.66	0.65	0.63	0.62	0.60	0.60	0.60	0.45

a_{emax}	1		2.5		5		7.5		10		15		20	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
50	0.57	0.71	0.36	0.45	0.26	0.32	0.21	0.27	0.19	0.23	0.15	0.19	0.14	0.17
63	0.64	0.80	0.40	0.51	0.29	0.36	0.24	0.30	0.21	0.26	0.17	0.21	0.15	0.19
80	0.72	0.90	0.45	0.57	0.32	0.40	0.27	0.33	0.23	0.29	0.19	0.24	0.17	0.21
100	0.80	1.00	0.51	0.64	0.36	0.45	0.30	0.37	0.26	0.32	0.21	0.27	0.19	0.23

a_{emax}	25		32		40		50		63		80		100	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
50	0.13	0.16	0.12	0.14	0.11	0.14	0.13	0.16	-	-	-	-	-	-
63	0.14	0.17	0.12	0.16	0.12	0.15	0.11	0.14	0.13	0.16	-	-	-	-
80	0.15	0.19	0.14	0.17	0.13	0.16	0.12	0.15	0.11	0.14	0.13	0.16	-	-
100	0.17	0.21	0.15	0.19	0.14	0.17	0.13	0.16	0.12	0.15	0.11	0.14	0.13	0.16

	ADMX 16-F	ADEX 16-FM	ADMX 16-M								ADMX 16-R	
RE	0.8	0.8	0.4	0.8	1.6	2.0	3.0	3.2	4.0	5.0	0.8	1.6
BS	2.99	2.18	3.39	2.99	1.62	1.23	0.28	0.09	2.69	1.52	2.99	1.62

	ADMX 16-MF	ADMX 16-MM			ADEX 16-FA			
RE	0.8	0.4	0.8	1.6	0.4	0.8	1.6	3.0
BS	2.99	3.39	2.99	1.62	2.84	2.44	1.65	0.69

ISO	DC		APMX	a_p
50J3R100H50-SAD16E54-C	50	3	54	50.5
50J3R140H50-SAD16E80-C	50	3	80	76.5
63J3R140H50-SAD16E68-C	63	3	68	64.5
63J3R155H50-SAD16E95-C	63	3	95	91.5
80J4R165H50-SAD16E108-C	80	4	108	104.5
50J3R140G50-SAD16E80-C	50	3	80	76.5
63J3R155G50-SAD16E95-C	63	3	95	91.5
80J4R165G50-SAD16E108-C	80	4	108	104.5
50J3R140X50-SAD16E68-C	50	3	68	64.5
63J3R155X50-SAD16E80-C	63	3	80	76.5
80J4R165X50-SAD16E95-C	80	4	95	91.5
50T03R-S90AD16E40-C	50	3	40	36.5
63T04R-S90AD16E40-C	63	4	40	36.5
63T04R-S90AD16E68-C	63	4	68	64.5
80T04R-S90AD16E55-C	80	4	55	51.5
80T04R-S90AD16E80-C	80	4	80	76.5
100T05R-S90AD16E80-C	100	5	80	76.5

max
7.5

ADMX/ADEX 16	R
ADMX 160630SR-M	2.5
ADMX 160632SR-M	2.5
ADMX 160640SR-M	4.0
ADMX 160650SR-M	4.5

J(T)-SLSN

P K

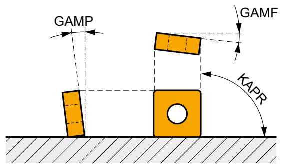
PRAMET

S

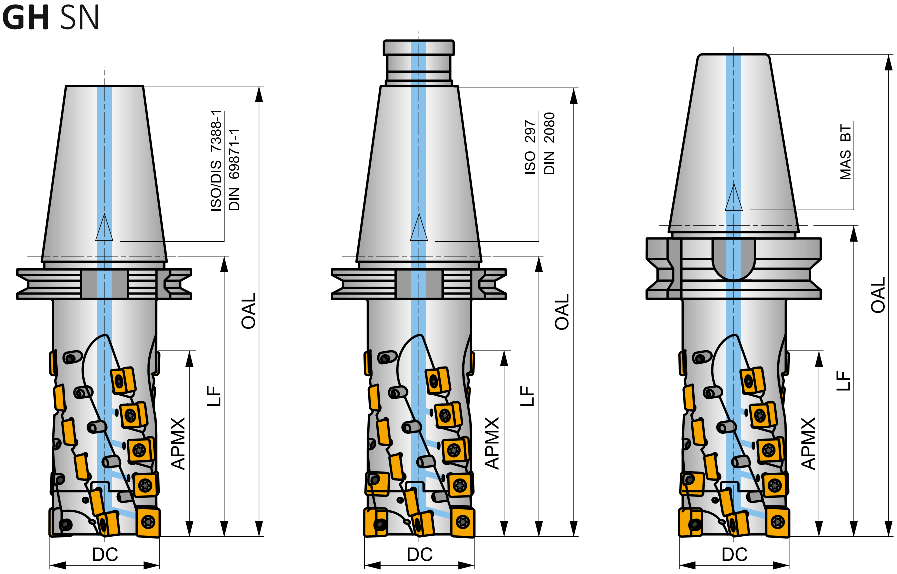
ROUGH SN Long Edge Mill for Heavy Milling with Internal Coolant

90° long edge end mill utilising LNET 16 and SN.. 13 inserts with APMX of 104 up to 134 mm. Body has exchangeable end piece. Suitable for shoulder, slot, face and plunge milling. Available in DIN 69871, BT and DIN 2080 50 taper style, in Ø63 and Ø80 mm. Body treated for longer tool life.

KAPR	90°
APMX	104.0 - 134.0 mm



ROUGH SN



h_m 0.08 - 0.22

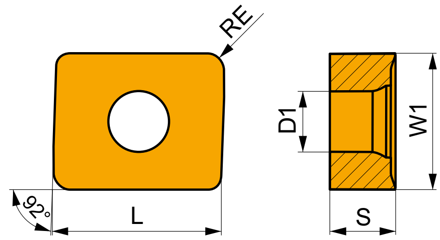
Product	DC [mm]	OAL [mm]	APMX [mm]	LF [mm]	GAMF [°]	GAMP [°]	CZC MS	NOF	LN	SN		max.		kg		
ISO/DIS 7388-1 63J2R155H50-SLSN104-C	63	257	104.00	155	-9	-10	50	4	2	20	–	8500	✓	5.03	GI209	SQ934
80J2R190H50-SLSN134-C	80	292	134.00	190	-9	-10	50	4	2	26	–	7500	✓	7.45	GI209	SQ935
ISO 297 63J2R155G50-SLSN104-C	63	282	104.00	155	-9	-10	50	4	2	20	–	8500	✓	5.20	GI209	SQ934
80J2R190G50-SLSN134-C	80	317	134.00	190	-9	-10	50	4	2	26	–	7500	✓	7.40	GI209	SQ935
JIS B 6339 63J2R175X50-SLSN104-C	63	277	104.00	175	-9	-10	50	4	2	20	–	8500	✓	6.10	GI209	SQ934
80J2R210X50-SLSN134-C	80	312	134.00	210	-9	-10	50	4	2	26	–	7500	✓	8.50	GI209	SQ935

GI209	LNET 1606..	SN.. 1305..

					Nm			
SQ934	EH6326-SL-C	HS 1230	HXK 10	US 45012-T20P	5.0	M 5	12	SDR T20P-T
SQ935	EH8036-SL-C	HS 1640	HXK 14	US 45012-T20P	5.0	M 5	12	SDR T20P-T

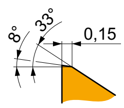
LNET 16

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1606	13.200	5.90	16.40	6.38

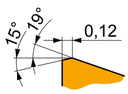


Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]		P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]		K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
LNET 160616SR-M	M8330	1.6	■	110	0.15	15.0	–	–	–	■	100	0.15	15.0	–	–	–	–	–	–	–	–	–
	M8340	1.6	■	105	0.15	15.0	–	–	–	◪	95	0.15	15.0	–	–	–	–	–	–	–	–	–
LNET 160616SR-R	M8330	1.6	■	100	0.15	15.0	–	–	–	■	95	0.15	15.0	–	–	–	–	–	–	–	–	–
	M8340	1.6	■	95	0.15	15.0	–	–	–	◪	90	0.15	15.0	–	–	–	–	–	–	–	–	–



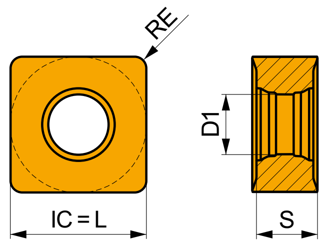
M geometry with highly positive design for medium machining.



R geometry with highly positive design for medium machining.

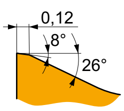
SNGX 13

	IC [mm]	D1 [mm]	S [mm]
1305	13.200	5.90	5.96



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

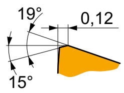
Product		RE [mm]		P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]		K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SNGX 130512SN-M	M8330	1.2	■	105	0.15	12.0	–	–	–	◪	95	0.15	12.0	–	–	–	–	–	–	–	–	–
	M8340	1.2	■	105	0.15	12.0	–	–	–	◪	95	0.15	12.0	–	–	–	–	–	–	–	–	–



M geometry with positive design for light machining.

Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SNGX 130512PN-R	**M8330**	1.2	■	95	0.15	12.0	–	–	–	■	90	0.15	12.0	–	–	–	–	–	–	–	–	–
	M8340	1.2	■	95	0.15	12.0	–	–	–	◪	90	0.15	12.0	–	–	–	–	–	–	–	–	–

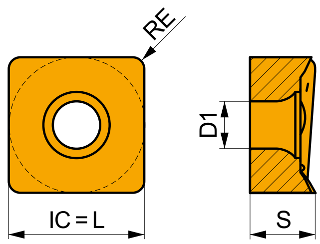


R geometry with positive design for rough machining and unstable conditions.

SNET 13

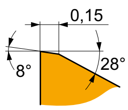
	IC [mm]	D1 [mm]	L [mm]	S [mm]
1305	13.200	5.90	13.20	6.33

PRAMET



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	Grade	RE [mm]	P	vc [m/min]	f [mm/tooth]	ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K	vc [m/min]	f [mm/tooth]	ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SNET 130512SR-M	**M8330**	1.2	■	105	0.15	12.0	–	–	–	◪	95	0.15	12.0	–	–	–	–	–	–	–	–	–
	M8340	1.2	■	105	0.15	12.0	–	–	–	◪	95	0.15	12.0	–	–	–	–	–	–	–	–	–



M geometry with positive design for light to medium machining.

a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00

$a_{e\,max}$	1		2.5		5		7.5		10		15		20	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
63	0.64	1.75	0.40	1.11	0.29	0.79	0.24	0.65	0.21	0.57	0.17	0.47	0.15	0.41
80	0.72	1.97	0.45	1.25	0.32	0.89	0.27	0.73	0.23	0.64	0.19	0.53	0.17	0.46

$a_{e\,max}$	25		32		40		50		63		80	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
63	0.14	0.38	0.12	0.34	0.12	0.32	0.11	0.30	0.13	0.35	–	–
80	0.15	0.42	0.14	0.38	0.13	0.35	0.12	0.32	0.11	0.30	0.13	0.35

	LNET 16-M	LNET 16-R	SNGX 13-M	SNGX 13-R	SNET 13-M
RE	1.6	1.6	1.2	1.2	1.2
BS	–	–	–	–	–

ISO	DC		APMX	a_p
63J2R155H50-SLSN104-C	63	2+2	104	101.2
80J2R190H50-SLSN134-C	80	2+2	134	131.2
63J2R155G50-SLSN104-C	63	2+2	104	101.2
80J2R190G50-SLSN134-C	80	2+2	134	131.2
63J2R175X50-SLSN104-C	63	2+2	104	101.2
80J2R210X50-SLSN134-C	80	2+2	134	131.2

J(T)-SSAP

P M K S

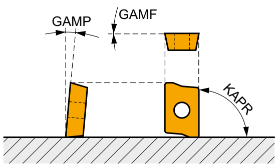
PRAMET

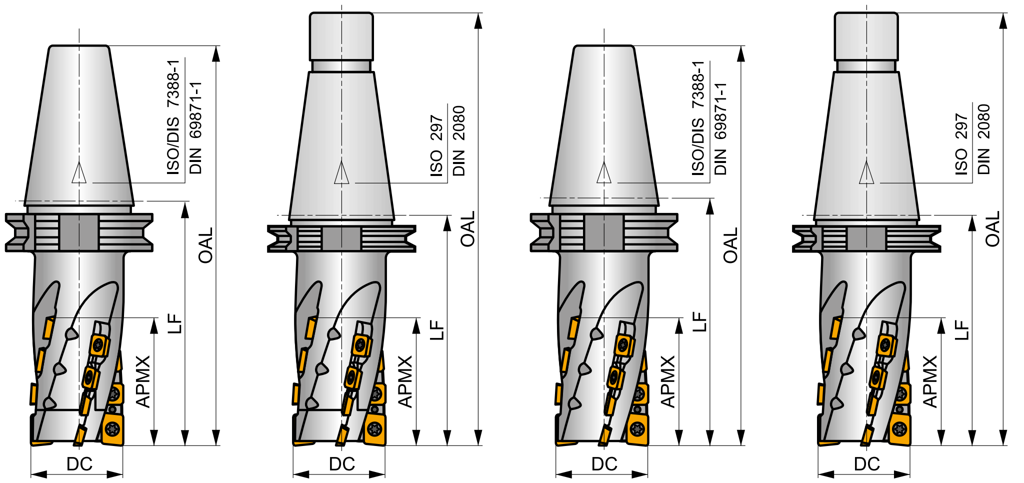
S

Long Edge End Mill for Medium Milling for AP.. 15 and SP.. 12 Inserts

90° long edge end mill utilising AP.. 15 and SP.. 12 inserts with APMX of 58 up to 95 mm. Body has exchangeable end piece. Suitable for shoulder, slot, face and plunge milling. Available in DIN 69871 and DIN 2080 50 taper style, in Ø50 up to Ø80 mm. Body treated for longer tool life.

KAPR	90°
APMX	58.0 - 95.0 mm





h_m 0.07 - 0.1

	Product	DC [mm]	OAL [mm]	APMX [mm]	LF [mm]	GAMF [°]	GAMP [°]	CZC MS	NOF	AP	SP		max.		kg		
ISO/DIS 7388-1	50J4R110H50-SSAP37+21	50	212	58.00	110	0	7	50	4	2	12	–	9500	–	3.65	GI128	SQ942
	50J4R128H50-SSAP55+21	50	230	76.00	128	0	7	50	4	2	16	–	9500	–	3.80	GI128	SQ942
	63J4R150H50-SSAP74+21	63	252	95.00	150	0	7	50	4	2	20	–	8500	–	4.50	GI128	SQ943
ISO 297	50J4R106X50-SSAP37+21	50	233	58.00	106	0	7	50	4	2	12	–	9500	–	3.50	GI128	SQ942
	50J4R124X50-SSAP55+21	50	251	76.00	124	0	7	50	4	2	16	–	9500	–	4.43	GI128	SQ942
	63J4R146X50-SSAP74+21	63	273	95.00	146	0	7	50	4	2	20	–	8500	–	4.75	GI128	SQ943
ISO/DIS 7388-1	50J4R110H50-SSAP58-A	50	212	58.00	110	0	7	50	4	2	12	–	9500	–	3.50	GI128	SQ941
	50J4R128H50-SSAP76-A	50	230	76.00	128	0	7	50	4	2	16	–	9500	–	3.80	GI128	SQ941
	63J4R150H50-SSAP95-A	63	252	95.00	150	0	7	50	4	2	20	–	8500	–	4.50	GI128	SQ941
	80J6R155H50-SSAP95-A	80	257	95.00	155	0	7	50	6	3	30	–	7500	–	6.30	GI128	SQ941
ISO 297	50J4R106X50-SSAP58-A	50	233	58.00	106	0	7	50	4	2	12	–	9500	–	3.70	GI128	SQ941
	50J4R124X50-SSAP76-A	50	251	76.00	124	0	7	50	4	2	16	–	9500	–	3.80	GI128	SQ941
	63J4R146X50-SSAP95-A	63	273	95.00	146	0	7	50	4	2	20	–	8500	–	4.50	GI128	SQ941
	80J6R151X50-SSAP95-A	80	275	95.00	151	0	7	50	6	3	30	–	7500	–	6.20	GI128	SQ941

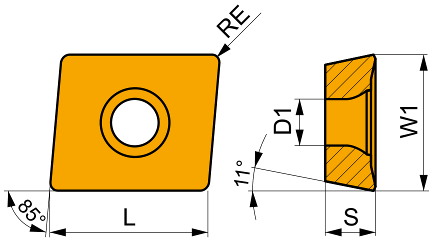
GI128	APE. 1504..	SPE. 1204..

					Nm			
SQ941	–	–	–	US 4511-T20	5.0	M 4.5	11	SDR T20-T
SQ942	P50X21	SR 25	HXK 6	US 4511-T20	5.0	M 4.5	11	SDR T20-T
SQ943	P63X21	SR 26	HXK 8	US 4511-T20	5.0	M 4.5	11	SDR T20-T

APET 15

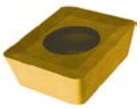
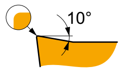
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	S [mm]
1504	12.700	5.50	15.90	4.76



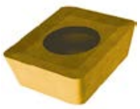
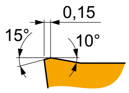
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
APET 150412EN	M8330	1.2	■ 225	0.20	12.0	◪ 135	0.18	12.0	■ 210	0.20	12.0	–	–	–	◪ 55	0.14	9.6	–	–	–
APET 150412SN	M8330	1.2	■ 215	0.25	12.0	◪ 125	0.23	12.0	■ 200	0.25	12.0	–	–	–	◪ 50	0.25	9.6	–	–	–
	M8340	1.2	■ 190	0.25	12.0	◪ 110	0.23	12.0	◪ 180	0.25	12.0	–	–	–	◪ 45	0.25	9.6	–	–	–

E

EN edge preperation, positive geometry for light to medium machining.

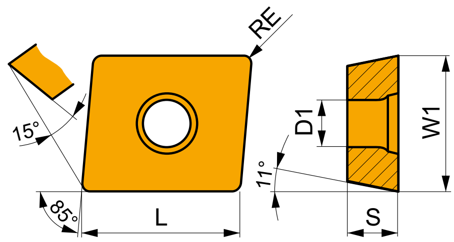
S

SN edge preperation, positive geometry for medium to heavy machining.

APEW 15

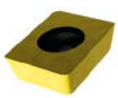
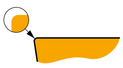
PRAMET

	W1 [mm]	D1 [mm]	L [mm]	M [mm]	S [mm]
1504	12.700	5.50	15.90	4	4.76



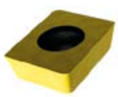
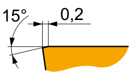
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
APEW 150412ER	M8330	1.2	◪ 200	0.20	12.0	–	–	–	■ 190	0.20	12.0	–	–	–	–	–	–	◪ 40	0.15	1.0
APEW 150412SR	M8330	1.2	◪ 200	0.20	12.0	–	–	–	■ 190	0.20	12.0	–	–	–	–	–	–	◪ 40	0.15	1.0
	M8340	1.2	◪ 180	0.20	12.0	–	–	–	◪ 170	0.20	12.0	–	–	–	–	–	–	–	–	–

E

ER edge preperation, zero rake angle geometry for light to medium machining.

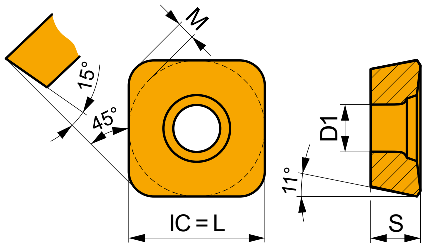
S

SR edge preperation, zero rake angle geometry for medium to heavy machining.

SPET 12

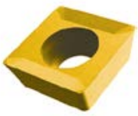
PRAMET

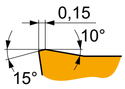
	IC [mm]	D1 [mm]	L [mm]	M [mm]	S [mm]
1204	12.700	5.50	12.70	2	4.76



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SPET 120408S	M8330	0.8	■ 215	0.20	12.0	◪ 125	0.18	12.0	■ 200	0.20	12.0	–	–	–	◪ 50	0.18	9.6	–	–	–
	M8340	0.8	■ 190	0.20	12.0	◪ 110	0.18	12.0	◪ 180	0.20	12.0	–	–	–	◪ 45	0.18	9.6	–	–	–





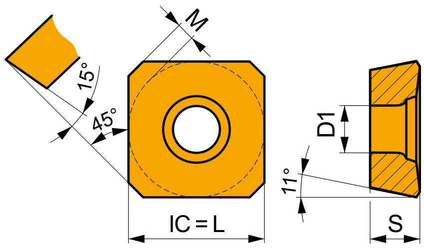
S

S edge prepartion, positive general purpose geometry.

SPET 12 AD

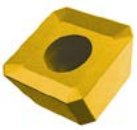
PRAMET

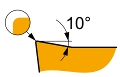
	IC [mm]	D1 [mm]	L [mm]	M [mm]	S [mm]
1204	12.700	5.50	12.70	2	4.76



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

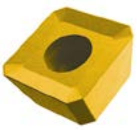
Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SPET 1204ADEN	M8330	–	■ 245	0.20	12.0	◪ 145	0.18	12.0	■ 230	0.20	12.0	–	–	–	◪ 60	0.14	9.6	–	–	–
	M8340	–	■ 220	0.20	12.0	◪ 130	0.18	12.0	◪ 205	0.20	12.0	–	–	–	◪ 55	0.14	9.6	–	–	–
SPET 1204ADSN	M8330	–	■ 245	0.20	12.0	◪ 145	0.18	12.0	■ 230	0.20	12.0	–	–	–	◪ 60	0.14	9.6	–	–	–
	M8340	–	■ 220	0.20	12.0	◪ 130	0.18	12.0	◪ 205	0.20	12.0	–	–	–	◪ 55	0.14	9.6	–	–	–

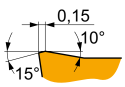




E

ADEN edge prepartion, positive geometry for light to medium machining.



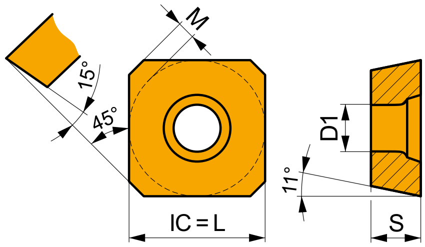


S

ADSN edge prepartion, positive geometry for medium machining.

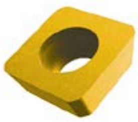
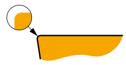
SPEW 12 AD

	IC [mm]	D1 [mm]	L [mm]	M [mm]	S [mm]
1204	12.700	5.50	12.70	2	4.76

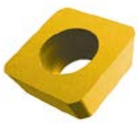
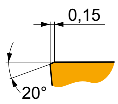


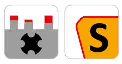
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SPEW 1204ADEN	M8330	–	220	0.20	12.0	–	–	–	205	0.20	12.0	–	–	–	–	–	–	40	0.15	1.0
	M8340	–	200	0.20	12.0	–	–	–	190	0.20	12.0	–	–	–	–	–	–	–	–	–
SPEW 1204ADSN	M8330	–	220	0.20	12.0	–	–	–	205	0.20	12.0	–	–	–	–	–	–	40	0.15	1.0
	M8340	–	200	0.20	12.0	–	–	–	190	0.20	12.0	–	–	–	–	–	–	–	–	–


ADEN edge preperation, zero rake angle geometry for light to medium machining.



ADSN edge preperation, zero rake angle geometry for medium machining.

a_e / DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	0.89	0.81	0.76	0.73	0.71	0.70	0.67	0.65	0.63	0.62	0.60	0.60	0.60	0.45

$a_{e\,max}$	1		2.5		5		7.5		10		15		20	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
50	0.50	0.71	0.32	0.45	0.23	0.32	0.19	0.27	0.16	0.23	0.14	0.19	0.12	0.17
63	0.56	0.80	0.35	0.51	0.25	0.36	0.21	0.30	0.18	0.26	0.15	0.21	0.13	0.19
80	0.63	0.90	0.40	0.57	0.28	0.40	0.23	0.33	0.20	0.29	0.17	0.24	0.15	0.21

$a_{e\,max}$	25		32		40		50		63		80	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
50	0.11	0.16	0.10	0.14	0.10	0.14	0.11	0.16	–	–	–	–
63	0.12	0.17	0.11	0.16	0.10	0.15	0.10	0.14	0.11	0.16	–	–
80	0.13	0.19	0.12	0.17	0.11	0.16	0.10	0.15	0.10	0.14	0.11	0.16

	APET 15	APEW 15	SPET 12	SPET 12AD	SPEW 12AD
RE	1.2	1.2	0.8	–	–
BS	–	–	–	–	–

ISO	DC	Z	APMX	a_p
50J4R110H50-SSAP37+21	50	2+2	58	55.6
50J4R128H50-SSAP55+21	50	2+2	76	73.6
63J4R150H50-SSAP74+21	63	2+2	95	92.6
50J4R106X50-SSAP37+21	50	2+2	58	55.6
50J4R124X50-SSAP55+21	50	2+2	76	73.6
63J4R146X50-SSAP74+21	63	2+2	95	92.6
50J4R110H50-SSAP58-A	50	2+2	58	55.6
50J4R128H50-SSAP76-A	50	2+2	76	73.6
63J4R150H50-SSAP95-A	63	2+2	95	92.6
80J6R155H50-SSAP95-A	80	3+3	95	92.6
50J4R106X50-SSAP58-A	50	2+2	58	55.6
50J4R124X50-SSAP76-A	50	2+2	76	73.6
63J4R146X50-SSAP95-A	63	2+2	95	92.6
80J6R151X50-SSAP95-A	80	3+3	95	92.6

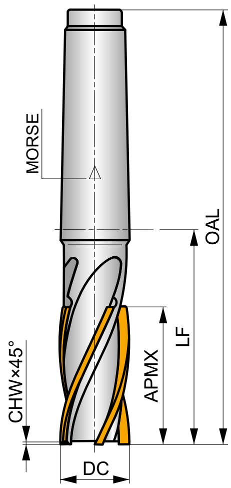
J(T)-2416

P M K N

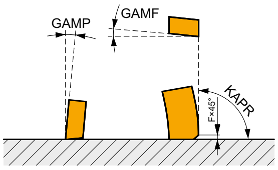
PRAMET

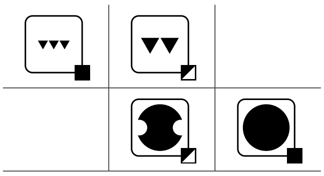
Long Edge Mill with Brazed Solid Carbide Helical Tips

90° long edge mill with helically brazed carbide tips and APMX of 40 up to 63 mm. Suitable for shoulder, slot and face milling. Available in morse taper 4 and 6, in Ø20 up to Ø40 mm. Body treated for longer tool life.

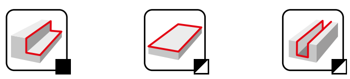


KAPR	90°
APMX	40.0 - 63.0 mm





h_m 0.02 - 0.04



	Product	DC [mm]	OAL [mm]	APMX [mm]	LF [mm]	CHW [mm]	CZC MS	NOF		max.		kg		
DIN 228A	2416-20R-E3-P	20	146	40.00	65	0.5	3	4	–	–	–	0.37	–	–
	2416-25R-E3-P	25	160	50.00	79	0.5	3	4	–	–	–	0.40	–	–
	2416-32R-E4-P	32	180	50.00	78	0.5	4	4	–	–	–	0.80	–	–
	2416-40R-E4-P	40	200	63.00	98	0.8	4	6	–	–	–	1.19	–	–

ISO		f_{min}	f_{max}	P30
P	●	0.03	0.08	149
		0.03	0.07	133
		0.03	0.06	115
M	●	0.03	0.08	88
		0.03	0.07	79
		0.03	0.06	70
K	●	0.03	0.08	142
		0.03	0.07	126
		0.03	0.06	110
N	●	0.03	0.08	374
		0.03	0.07	333
		0.03	0.06	290

a_e/DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
$x.V$	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.08	1.05	1.03	1.00	1.00	1.00	1.00
$x.f$	2.20	1.60	1.35	1.20	1.10	0.95	0.85	0.75	0.85	0.95	1.00	1.00	1.00	1.00
$x.f$	0.64	0.64	0.64	0.64	0.64	0.65	0.65	0.67	0.68	0.71	0.72	0.74	0.79	1.00

ISO	DC		APMX	a_p
2416-20R-E3-P	20	4	40	40
2416-25R-E3-P	25	4	50	50
2416-32R-E4-P	32	4	50	50
2416-40R-E4-P	40	6	63	63

$a_{e\,max}$	0.5		1		2		3		4		5		8	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
20	0.14	0.25	0.10	0.18	0.07	0.13	0.06	0.11	0.05	0.09	0.05	0.08	0.04	0.07
25	0.16	0.28	0.11	0.20	0.08	0.14	0.07	0.12	0.06	0.10	0.05	0.09	0.04	0.08
32	0.18	0.32	0.13	0.23	0.09	0.16	0.07	0.13	0.07	0.12	0.06	0.10	0.05	0.08
40	0.20	0.36	0.14	0.25	0.10	0.18	0.08	0.15	0.07	0.13	0.07	0.12	0.05	0.09

$a_{e\,max}$	10		12		16		20		25		32		40	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
20	0.04	0.06	0.03	0.06	0.03	0.06	0.04	0.06	–	–	–	–	–	–
25	0.04	0.07	0.04	0.06	0.03	0.06	0.03	0.06	0.04	0.06	–	–	–	–
32	0.04	0.08	0.04	0.07	0.04	0.06	0.03	0.06	0.03	0.06	0.04	0.06	–	–
40	0.05	0.08	0.04	0.08	0.04	0.07	0.04	0.06	0.03	0.06	0.03	0.06	0.04	0.06

J(T)-CSD12X

P M S

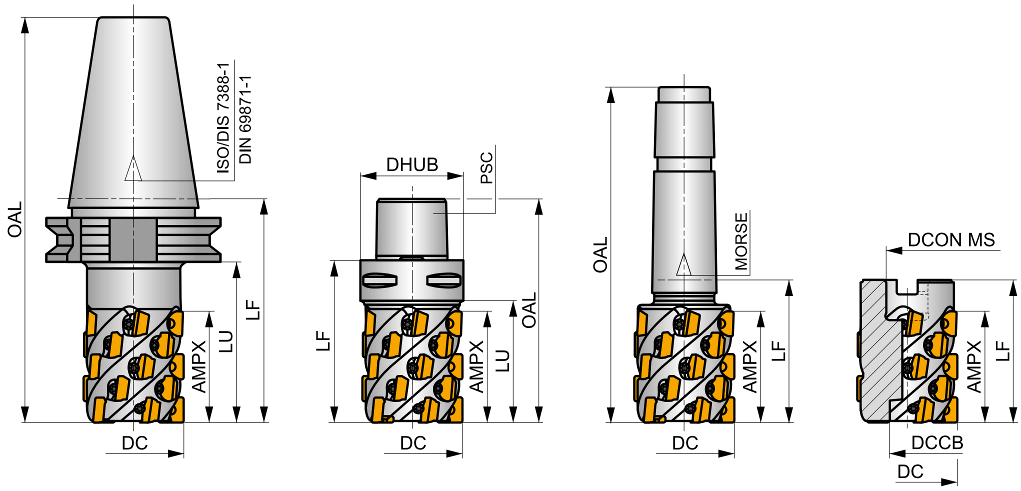
PRAMET

C

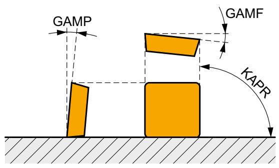
MULTISIDE SD Long Edge Mill

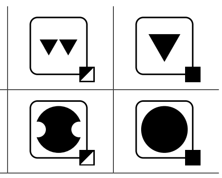
90° long edge end mill utilising positive SD.. 12 inserts with APMX of 44.1 up to 87.3 mm. Suitable for shoulder, slot or face milling. Available in arbor, PSC, Morse or DIN 69871 taper style, in Ø40 up to Ø80 mm. Body treated for longer tool life.

MULTISIDE SD



KAPR	90°
APMX	44.1 - 87.3 mm





h_m	0.025 - 0.05
h_m	0.025 - 0.05

	Product	DC [mm]	OAL [mm]	DCON MS [mm]	DCCB [mm]	LU [mm]	LF [mm]	APMX [mm]	GAMF [°]	GAMP [°]	CZC MS	NOF			max.		kg		
ISO/DIS 7388-1	40J4R090H40-CSD12X44	40	158.4	–	–	70	90	44.10	-5	8	40	4	16	–	4000	–	1.16	GI271	SQ091
	50J5R100H50-CSD12X55	50	201.7	–	–	80	100	54.90	-5	8	50	5	25	–	3200	–	4.20	GI271	SQ091
	63J6R110H50-CSD12X66	63	211.7	–	–	90	110	65.70	-5	8	50	6	36	–	2500	–	4.90	GI271	SQ091
PSC	40J4R080XC5-CSD12X44	40	110	–	–	59	80	44.10	-5	8	C5	4	16	–	4000	–	1.06	GI271	SQ091
	50J5R080XC5-CSD12X55	50	110	–	–	59	80	54.90	-5	8	C5	5	25	–	3200	–	1.24	GI271	SQ091
DIN 228A	50J5R065E04-CSD12X55	50	167.5	–	–	–	65	54.90	-5	8	4	5	25	–	3200	–	1.34	GI271	SQ091
ISO 6462 DIN 8030	50T05R-C90SD12X55	50	–	22	18	–	78	54.90	-5	8	–	5	25	–	3200	–	0.95	GI271	SQ923
	63T06R-C90SD12X66	63	–	27	22	–	90	65.70	-5	8	–	6	36	–	2500	–	1.72	GI271	SQ924
	80T08R-C90SD12X88	80	–	40	36	–	115	87.30	-5	8	–	8	64	–	2000	–	3.20	GI271	SQ925

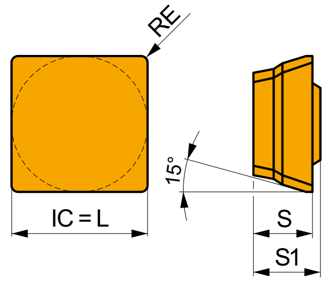
GI271	SDGX 1205..	SDMX 1205..

		Nm					
SQ091	US 63511D-T15P	3.0	M 3.5	11	D-T08P/T15P	FG-15	–
SQ923	US 63511D-T15P	3.0	M 3.5	11	D-T08P/T15P	FG-15	HSD 1070
SQ924	US 63511D-T15P	3.0	M 3.5	11	D-T08P/T15P	FG-15	HS 1280
SQ925	US 63511D-T15P	3.0	M 3.5	11	D-T08P/T15P	FG-15	HS 20100

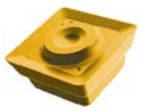
SDGX 12

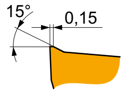
PRAMET

	IC [mm]	L [mm]	S [mm]	S1 [mm]
1205	12.700	12.70	5.56	6.35



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.





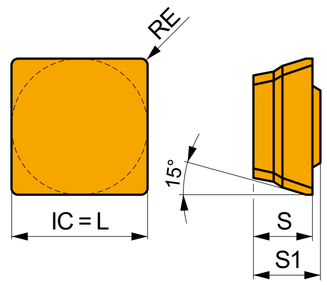
FM geometry with positive design for light to medium heavy machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SDGX 120508EN-FM	**M8330**	0.8	■ 220	0.15	12.0	■ 130	0.14	12.0	–	–	–	–	–	–	◩ 55	0.11	9.6	–	–	–
	M8345	0.8	■ 155	0.15	12.0	■ 90	0.14	12.0	–	–	–	–	–	–	■ 35	0.11	9.6	–	–	–

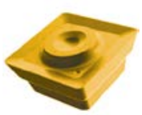
SDMX 12

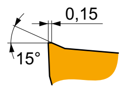
PRAMET

	IC [mm]	L [mm]	S [mm]	S1 [mm]
1205	12.700	12.70	5.56	6.35



Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.





M geometry with positive design for light to heavy machining.

Product		RE [mm]	P vc [m/min]	P f [mm/tooth]	P ap [mm]	M vc [m/min]	M f [mm/tooth]	M ap [mm]	K vc [m/min]	K f [mm/tooth]	K ap [mm]	N vc [m/min]	N f [mm/tooth]	N ap [mm]	S vc [m/min]	S f [mm/tooth]	S ap [mm]	H vc [m/min]	H f [mm/tooth]	H ap [mm]
SDMX 120508EN-M	**M8330**	0.8	◩ 220	0.15	12.0	■ 130	0.14	12.0	–	–	–	–	–	–	◩ 55	0.11	9.6	–	–	–
	M8345	0.8	◩ 155	0.15	12.0	■ 90	0.14	12.0	–	–	–	–	–	–	■ 35	0.11	9.6	–	–	–

a_e / DC	5 %	10 %	15 %	20 %	25 %	30 %	40 %	50 %	60 %	70 %	75 %	80 %	90 %	100 %
X.V	0.89	0.81	0.76	0.73	0.71	0.70	0.66	0.65	0.63	0.62	0.60	0.60	0.60	0.45

$a_{e\,max}$	1		2.5		5		7.5		10		15		20	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
40	0.16	0.32	0.10	0.20	0.07	0.14	0.06	0.12	0.05	0.10	0.04	0.09	0.04	0.08
50	0.18	0.35	0.11	0.23	0.08	0.16	0.07	0.13	0.06	0.12	0.05	0.10	0.04	0.09
63	0.20	0.40	0.13	0.25	0.09	0.18	0.07	0.15	0.06	0.13	0.05	0.11	0.05	0.09
80	0.22	0.45	0.14	0.28	0.10	0.20	0.08	0.17	0.07	0.14	0.06	0.12	0.05	0.10

$a_{e\,max}$	25		32		40		50		63		80	
DC	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}	f_{min}	f_{max}
40	0.04	0.07	0.03	0.07	0.04	0.08	–	–	–	–	–	–
50	0.04	0.08	0.04	0.07	0.03	0.07	0.04	0.08	–	–	–	–
63	0.04	0.09	0.04	0.08	0.04	0.07	0.03	0.07	0.04	0.08	–	–
80	0.05	0.09	0.04	0.09	0.04	0.08	0.04	0.07	0.03	0.07	0.04	0.08

	SDGX 12-FM	SDMX 12-M
RE	0.8	0.8
BS	2.99	2.99

ISO	DC		APMX	a_p
40J4R090H40-CSD12X44	40	4	44.1	42.5
50J5R100H50-CSD12X55	50	5	54.9	53.3
63J6R110H50-CSD12X66	63	6	65.7	64.1
80J8R130H50-CSD12X88	80	8	87.3	85.7
40J4R080XC5-CSD12X44	40	4	44.1	42.5
50J5R080XC5-CSD12X55	50	5	54.9	53.3
63J6R095XC6-CSD12X66	63	6	65.7	64.1
50J5R065E04-CSD12X55	50	5	54.9	53.3
50T05R-C90SD12X55	50	5	54.9	53.3
63T06R-C90SD12X66	63	6	65.7	64.1
80T08R-C90SD12X88	80	8	87.3	85.7

i