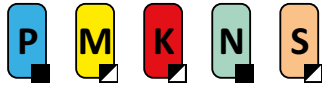




# STN10



PRAMET

S

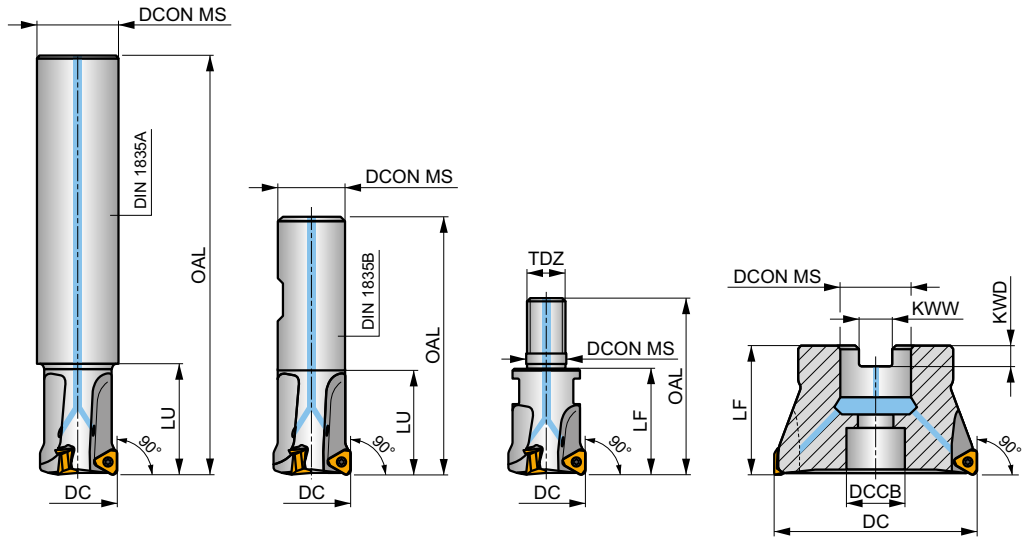
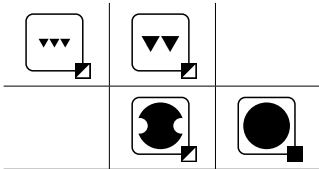
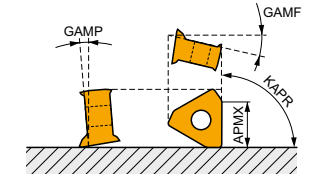


## ECON TN10 Square Shoulder Mill with Internal Coolant

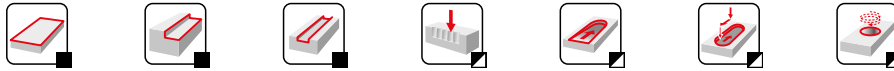
90° end and shell mills utilising double sided TNGX 10 insert with 6 cutting edges and APMX of 5 mm. Suitable for a wide range of applications. Available in cylindrical, weldon, modular and arbor style, in Ø18 up to Ø80 mm, with or without differential tooth pitch. Body treated for longer tool life.

## ECON TN

KAPR	90°
APMX	5.0 mm



	0.03 - 0.08
	0.03 - 0.06



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

GI292	TNGX 1004..

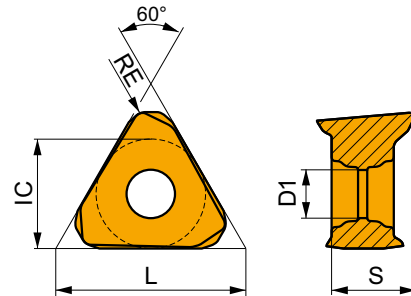
SQ300	US 52506-T07P	0.8	M 2.5	6	-	-	Flag T07P	-	-
SQ301	US 52506-T07P	0.8	M 2.5	6	D-T07P/T09P	FG-15	-	-	-
SQ302	US 52506-T07P	0.8	M 2.5	6	D-T07P/T09P	FG-15	-	-	HS 0830C
SQ303	US 52506-T07P	0.8	M 2.5	6	D-T07P/T09P	FG-15	-	-	HS 1030C

AC001	KS 1230	K.FMH27

## TNGX 10

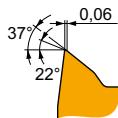


	IC	D1	L	S
	[mm]	[mm]	[mm]	[mm]
1004	6.000	2.80	10.39	4.69



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

Product	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]


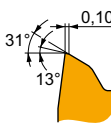



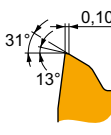



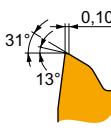



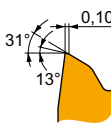





F geometry with highly positive design for light machining.

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	-	-	-	-	-	-	-	-
TNGX 100408SR-F	M9340	0.4	270	0.09	2.0	160	0.08	2.0	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-



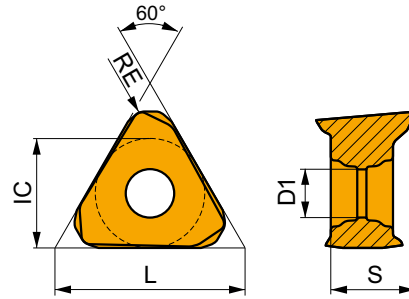
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

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]							
	0.4	0.10					M geometry with positive design for light to medium machining.																			
							<b>8215</b>	205	0.13	2.0	120	0.12	2.0	190	0.13	2.0	–	–	–	50	0.09	1.6	–	–	–	
							<b>M6330</b>	175	0.13	2.0	125	0.12	2.0	–	–	–	–	–	–	50	0.09	1.6	–	–	–	
							<b>M8330</b>	205	0.13	2.0	120	0.12	2.0	190	0.13	2.0	–	–	–	50	0.09	1.6	–	–	–	
							<b>M8340</b>	185	0.13	2.0	110	0.12	2.0	175	0.13	2.0	–	–	–	45	0.09	1.6	–	–	–	
							<b>M8345</b>	150	0.13	2.0	90	0.12	2.0	–	–	–	–	–	–	35	0.09	1.6	–	–	–	
<b>TNGX 100408SR-M</b>	0.4	0.8	0.10					M geometry with positive design for light to medium machining.																		
								<b>8215</b>	245	0.13	2.0	145	0.12	2.0	230	0.13	2.0	–	–	–	60	0.09	1.6	–	–	–
								<b>M6330</b>	210	0.13	2.0	150	0.12	2.0	–	–	–	–	–	–	60	0.09	1.6	–	–	–
								<b>M8310</b>	270	0.13	2.0	135	0.12	2.0	255	0.13	2.0	–	–	–	–	–	–	–	–	–
								<b>M8330</b>	245	0.13	2.0	145	0.12	2.0	230	0.13	2.0	–	–	–	60	0.09	1.6	–	–	–
								<b>M8340</b>	220	0.13	2.0	130	0.12	2.0	205	0.13	2.0	–	–	–	55	0.09	1.6	–	–	–
<b>TNGX 100412SR-M</b>	1.2	0.8	0.10					M geometry with positive design for light to medium machining.																		
								<b>M8330</b>	255	0.13	2.0	150	0.12	2.0	240	0.13	2.0	–	–	–	60	0.09	1.6	–	–	–
<b>TNGX 100416SR-M</b>	1.6	0.8	0.10					M geometry with positive design for light to medium machining.																		
								<b>M8310</b>	300	0.13	2.0	150	0.12	2.0	285	0.13	2.0	–	–	–	–	–	–	–	–	

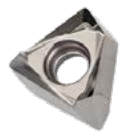
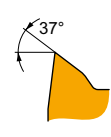

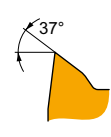


## TNGX 10-FA

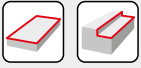


	IC [mm]	D1 [mm]	L [mm]	S [mm]
1004	6.000	2.80	10.39	4.69



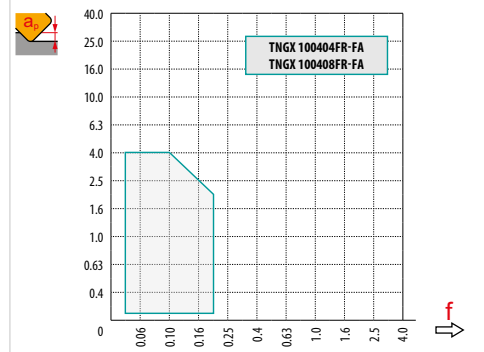
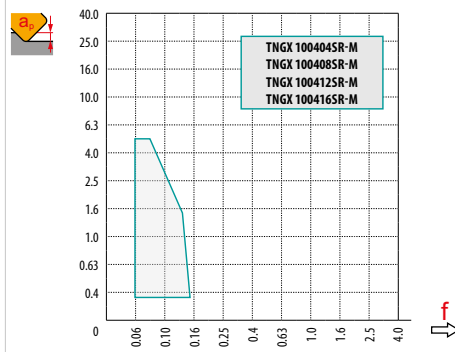
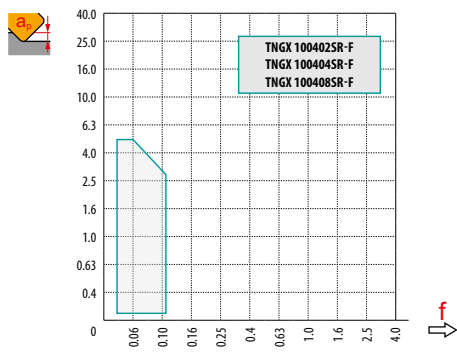
Suitability and starting values for cutting speed (vc), feed (f) and depth of cut (ap). Refer to our Machining Calculator app for further calculations.

Product	RE	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]					
	0.4	0.10			FA geometry with highly positive design for fine-finish to medium machining.																			
					<b>HF7</b>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		
<b>TNGX 100408FR-FA</b>	0.8	0.8	0.10				FA geometry with highly positive design for fine-finish to medium machining.																	
							<b>HF7</b>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–



$a_s$ DC	5%	10%	15%	20%	25%	30%	40%	50%	60%	70%	75%	80%	90%	100%
	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
	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
	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
	0.2	0.4	0.8
	1.53	1.34	0.92



1.5

	1.0	3.0	5.0
	0.10	0.08	0.04

0.2

	RPMX	APMX/I
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

	DMIN	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