

TN	CARBIDE Negative				ISO513	HC-CVD						HC-PVD		HW	HT						
	Size	IC	S	D1		JC7010	JC7020	JC8005	JC8015	JC8025	JC8035	JC9010	JC9025	JP9015	JP9030					JU6020	JU4015
<p>6 edges</p>					P			200 380	180 360	140 300	100 240										
	1604□	9,525	4,76	3,81	M						150 280	120 240	100 220	80 200		160 280					
	2204□	12,70	4,76	5,16	K	180 380	150 300									200 400					
					N											500					
					S											1500					
				H																	
GRADE APPLICATION AREA	Stable machining, continuous cut																				
	General machining, light interruption																				
	Unstable machining, interrupted cut																				
FINISHING	NSP P		TNMG 160404-NSP	RE 0.4	a _p 0.40 f _n 0.08	1.20 0.15	2.00 0.22			●	●	●									
			160408-NSP	RE 0.8	a _p 0.40 f _n 0.10	1.20 0.22	2.00 0.34			●	●	●									
	NFP P		TNMG 160408-NFP	RE 0.8	a _p 0.50 f _n 0.08	1.50 0.17	2.50 0.26					▽									
	NFM M		TNMG 160404-NFM	RE 0.4	a _p 0.40 f _n 0.08	1.20 0.14	2.00 0.20							●							
			160408-NFM	RE 0.8	a _p 0.40 f _n 0.10	1.20 0.20	2.00 0.30							●							
	NMP P		TNMG 160404-NMP	RE 0.4	a _p 1.50 f _n 0.12	2.50 0.20	3.50 0.28			●	●										
			160408-NMP	RE 0.8	a _p 1.50 f _n 0.16	2.50 0.25	3.50 0.34			●	●										
			160412-NMP	RE 1.2	a _p 1.50 f _n 0.20	2.50 0.30	3.50 0.40			●	●										
			TNMG 220408-NMP	RE 0.8	a _p 3.00 f _n 0.20	4.50 0.30	6.00 0.40			○	●										
	NUP P M		TNMG 160404-NUP	RE 0.4	a _p 1.00 f _n 0.10	2.50 0.20	4.00 0.30			●	●	●		●							
			160408-NUP	RE 0.8	a _p 1.00 f _n 0.15	2.50 0.25	4.00 0.35			●	●	●		●							
160412-NUP			RE 1.2	a _p 1.00 f _n 0.18	2.50 0.30	4.00 0.42			●	●	●		●								
TNMG 220408-NUP			RE 0.8	a _p 2.00 f _n 0.18	4.50 0.30	7.00 0.42			○	○											
NMU P M		TNMG 160404%-NMU	RE 0.4	a _p 1.00 f _n 0.15	2.50 0.25	4.00 0.35			○	●			●								
		160408%-NMU	RE 0.8	a _p 1.00 f _n 0.20	2.50 0.30	4.00 0.40			○	●			●								

● stock standard, ○ non-standard stock, ▽ stock exhaustion



- TURNING
- THREADING
- GROOVING
- MILLING
- DRILLING
- ACCESSORIES

TURNING	<h1>TN</h1> <p>6 edges</p>		CARBIDE Negative				ISO513	HC-CVD								HC-PVD		HW		HT			
			Size	IC	S	D1		P	JC7010	JC7020	JC8005	JC8015	JC8025	JC8035	JC9010	JC9025	JPS015	JPS030	JU6020	JU4015			
			1604□	9,525	4,76	3,81		M			200 380	180 360	140 300	100 240			150 280	120 240	100 220	80 200		200 380	
						K	180 380	150 300											160 280	200 400			
						N												500 1500					
						S																	
						H																	
THREADING	GRADE APPLICATION AREA		Stable machining, continuous cut																				
	main application		General machining, light interruption																				
	applicable		Unstable machining, interrupted cut																				
GROOVING	NMM M 	TNMG	160404-NMM	RE 0.4	a _p 1.00 f _n 0.15	2.50 0.25	4.00 0.35														▽		
			160408-NMM	RE 0.8	a _p 1.00 f _n 0.20	2.50 0.30	4.00 0.40															▽	
			160412-NMM	RE 1.2	a _p 1.00 f _n 0.25	2.50 0.35	4.00 0.45																
		TNMG	220408-NMM	RE 0.8	a _p 2.00 f _n 0.25	4.50 0.35	7.00 0.45									○		○					
			220412-NMM	RE 1.2	a _p 2.00 f _n 0.30	4.50 0.40	7.00 0.50									○		○					
			220416-NMM	RE 1.6	a _p 2.00 f _n 0.35	4.50 0.45	7.00 0.55									○		○					
	NMK K 	TNMG	160404-NMK	RE 0.4	a _p 0.50 f _n 0.10	2.00 0.20	3.50 0.30	●	○														
			160408-NMK	RE 0.8	a _p 0.50 f _n 0.15	2.00 0.25	3.50 0.35	●	○														
			160412-NMK	RE 1.2	a _p 0.50 f _n 0.20	2.00 0.30	3.50 0.40	●	○														
		TNMG	160416-NMK	RE 1.6	a _p 0.50 f _n 0.25	2.00 0.35	3.50 0.45	○	○														
			220408-NMK	RE 0.8	a _p 2.00 f _n 0.25	4.00 0.35	6.00 0.45	○	○														
			220412-NMK	RE 1.2	a _p 2.00 f _n 0.30	4.00 0.40	6.00 0.50	●	○														
220416-NMK	RE 1.6	a _p 2.00 f _n 0.35	4.00 0.45	6.00 0.55	●	○																	
NMN N <p>polished surface</p>	TNGG	160404-NMN	RE 0.4	a _p 0.50 f _n 0.10	2.00 0.20	3.50 0.30															●		
		160408-NMN	RE 0.8	a _p 0.50 f _n 0.15	2.00 0.25	3.50 0.35																●	
		160412-NMN	RE 1.2	a _p 0.50 f _n 0.20	2.00 0.30	3.50 0.40																	●
NRP P 	TNMG	160408-NRP	RE 0.8	a _p 2.00 f _n 0.25	4.00 0.35	6.00 0.45																● ●	
		160412-NRP	RE 1.2	a _p 2.00 f _n 0.30	4.00 0.40	6.00 0.50																	● ●
	TNMG	220412-NRP	RE 1.2	a _p 4.00 f _n 0.35	6.00 0.50	8.00 0.65																	● ●
		220416-NRP	RE 1.6	a _p 4.00 f _n 0.40	6.00 0.55	8.00 0.70																	● ●
NRK K 	TNMG	160408-NRK	RE 0.8	a _p 1.50 f _n 0.20	4.00 0.30	6.50 0.40	●	○															
		160412-NRK	RE 1.2	a _p 1.50 f _n 0.25	4.00 0.35	6.50 0.45	●	○															
	TNMG	220408-NRK	RE 0.8	a _p 3.00 f _n 0.35	6.00 0.50	9.00 0.65	○	○															
		220412-NRK	RE 1.2	a _p 3.00 f _n 0.40	6.00 0.55	9.00 0.70	○	○															
220416-NRK	RE 1.6	a _p 3.00 f _n 0.45	6.00 0.60	9.00 0.75	○	○																	

● stock standard, ○ non-standard stock, ▽ stock exhaustion



TN	CARBIDE Negative				ISO513	HC-CVD								HC-PVD	HW	HT				
	Size	IC	S	D1		JC7010	JC7020	JC8005	JC8015	JC8025	JC8035	JC9010	JC9025	JP9015	JP9030	JU6020	JU4015			
<p>6 edges</p>					P			200 380	180 360	140 300	100 240						200 380			
	1604□	9.525	4.76	3.81	M						150 280	120 240	100 220	80 200			160 280			
	2204□	12.70	4.76	5.16	K	180 380	150 300										200 400			
					N											500 1500				
					S															
				H																
GRADE APPLICATION AREA	Stable machining, continuous cut				+ Hardness - Toughness 															
main application	General machining, light interruption																			
applicable	Unstable machining, interrupted cut																			
ROUGHING 	Flat K	TNMA 160404	RE 0.4	a _p ▶ 2.00 f _n ▶ 0.15	4.00 0.25	6.00 0.35	○	○												
			RE 0.8	a _p ▶ 2.00 f _n ▶ 0.25	4.00 0.35	6.00 0.45	●	●												
		160412	RE 1.2	a _p ▶ 2.00 f _n ▶ 0.35	4.00 0.45	6.00 0.55	●	○												
			RE 1.6	a _p ▶ 2.00 f _n ▶ 0.45	4.00 0.55	6.00 0.65	●	○												
		TNMA 220408	RE 0.8	a _p ▶ 4.00 f _n ▶ 0.35	7.00 0.50	10.0 0.65	●	○												
			RE 1.2	a _p ▶ 4.00 f _n ▶ 0.45	7.00 0.60	10.0 0.75	●	○												
		220416	RE 1.2	a _p ▶ 4.00 f _n ▶ 0.45	7.00 0.60	10.0 0.75	●	○												
			RE 1.6	a _p ▶ 4.00 f _n ▶ 0.50	7.00 0.65	10.0 0.80	○	○												

● stock standard, ○ non-standard stock

- TURNING
- THREADING
- GROOVING
- MILLING
- DRILLING
- ACCESSORIES

