

# Technical Information - Turning

## Recommended Cutting Data for Positive Carbide Inserts

A = Light Duty B = Medium Duty C = Heavy Duty D = Very Heavy Duty

ANSI ISO 513	VDI 3323	A (doc x feed = .0394 x .0039)						B (doc x feed = .0787 x .0079)											
		Cutting Speed / vc sfm																	
P	Geometry d.o.c. (inch) f (inch)	- / -2 / -41 .0079 - .0787 .0020 - .0079			- / -2 / -MU .0079 - .0787 .0020 - .0079			-2 / -MU / _CMT .0118 - .1775 .0315 - .1378											
		min	Start	max	min	Start	max	min	Start	max	min	Start	max						
		TTI15			TN7110			TN7110 / TN6010			TN7115 / TN6025								
1		1275	1800	2165	1115	1605	1935	915	1310	1570	820	1180	1410						
2		1245	1770	2130	1115	1570	1900	850	1210	1440	785	1115	1345						
3		1045	1505	1800	950	1375	1640	590	850	1015	555	785	950						
4		950	1345	1605	850	1210	1440	620	885	1045	590	820	980						
5		720	1045	1245	655	915	1115	455	655	785	425	620	750						
6		980	1410	1705	885	1275	1540	655	950	1145	620	885	1045						
7		950	1345	1605	850	1210	1440	620	885	1045	590	820	980						
8		820	1145	1375	720	1045	1245	520	750	915	490	685	820						
9		720	1045	1245	655	915	1115	455	655	785	425	620	750						
10		980	1410	1705	885	1275	1540	655	950	1145	620	885	1045						
11		720	1045	1245	655	915	1115	425	620	750	390	555	655						
12		590	850	1015	490	720	850	455	655	785	425	590	720						
13.1		490	720	850	425	620	750	390	555	655	360	490	590						
13.2		260	360	425	210	310	375	195	275	325	180	245	295						
M	Geometry d.o.c. (inch) f (inch)	- / -MU / - .0079 - .0787 .0020 - .0079						-2 / -MU / _CMT .0118 - .1772 .0032 - .1378											
		TTI15			TN8025 / TN6010			TN8025 / TN6010			TN6025								
14.1		915	1310	1570	590	820	980	490	720	850	455	620	750						
14.2		820	1210	1440	455	655	785	425	590	720	360	520	620						
14.3		620	885	1045	360	490	590	325	455	555	275	390	455						
14.4		455	655	785	295	425	520	245	360	425	225	310	360						
K	Geometry d.o.c. (inch) f (inch)	- / -MU / - .0079 - .0787 .0020 - .0079			- / -MU / - .0079 - .0787 .0020 - .0079			- / -MU / - .0118 - .1772 0,08 - 0,35											
		TTI15			TN5105			TN5105											
15					950	1345	1605	750	1080	1310									
16					750	1080	1310	590	820	980									
17		915	1310	1570	820	1180	1410	685	980	1180									
18		915	1145	1375	785	1115	1345	620	885	1045									
19					1115	1605	1935	950	1345	1605									
20					950	1345	1605	750	1080	1310									
N	d.o.c. (inch) f (inch)				.0394 - .1575 .0039 - .0079			-AL1 / -AL2, / -AL3 .0394 - .1575 .0039 - .0079			.0394 - .1575 .0039 - .0079			-AL1 / -AL2, / -AL3 .0394 - .1575 .0039 - .0079					
					THM / HWK10 / HWK15 / TN6025			HCK15			THM / HWK10 / HWK15			HCK15					
21					2620	3280	9840	2620	6560	9840	1640	3280	8200	1640	5245	8200			
22					1310	3280	6560	1310	4920	6560	980	3280	5905	980	4590	5905			
23					1965	3280	4920	1965	3935	4920	1640	2620	4265	1640	3280	4265			
24					1965	3280	4920	1965	3935	4920	1640	2620	4265	1640	3280	4265			
25					1310	2295	3280	1310	2620	3280	980	1965	2620	980	1965	2620			
26					1310	1640	1965	1310	1640	1965	980	1310	1640	980	1310	1640			
27					1310	1640	1965	1310	1640	1965	980	1310	1640	980	1310	1640			
28					655	980	1310	655	980	1310	490	820	1145	490	820	1145			
29					325	490	655	325	490	655	325	455	590	325	455	590			
30					490	655	820	490	655	820	390	590	720	390	590	720			
S	Geometry d.o.c. (inch) f (inch)	_CMT .0276 - .1181 .0047 - .0079			-MU .0118 - .0787 .0032 - .0079			_CMT .0276 - .1969 .0047 - .0157			-MU .0118 - .1772 .0032 - .0138								
		THM			TN6025			TN8025 / TN6010			THM			TN6025			TN8025 / TN6010		
31		110	160	195	160	225	275	180	260	310	100	145	180	150	210	260	160	225	275
32		90	130	155	125	180	210	150	210	260	80	115	140	110	160	195	135	195	225
33		70	100	120	100	140	180	110	155	195	65	95	110	90	130	155	95	140	160
34		45	65	75	55	85	100	65	95	115	40	55	70	50	75	90	60	85	100
35		45	65	75	65	90	110	70	100	120	40	55	70	55	80	95	65	95	110
36		180	260	310							160	225	275						0
37		90	130	155	125	180	210	135	195	225	80	115	140	110	160	195	125	180	210

# Technical Information - Turning

## Recommended Cutting Data for Positive Carbide Inserts

A = Light Duty B = Medium Duty C = Heavy Duty D = Very Heavy Duty

C (doc x feed = .1575 x .0098)						D (doc x feed = .2362 x .0236)						VDI 3323	ANSI ISO 513
Cutting Speed / vc sfm												Geometry d.o.c. (inch) f (inch)	
-MU / _CMT / - .0276 - .1969 .0047 - .0157													
min	Start	max	min	Start	max								
TN7115			TN7125										
655	950	1145	590	850	1015							1	P
620	885	1045	425	620	750							2	
520	750	915	425	590	720							3	
425	620	750	360	490	590							4	
295	425	520	245	360	425							5	
455	655	785	360	520	620							6	
425	620	750	360	490	590							7	
360	490	590	275	390	455							8	
295	425	520	245	360	425							9	
455	655	785	360	520	620							10	
295	425	520	245	360	425							11	
390	555	655	360	520	620							12	
325	455	555	295	425	520							13.1	
160	225	275	145	210	260							13.2	
-2 / -MU / _CMT .0118 - .1772 .0032 - .0138												Geometry d.o.c. (inch) f (inch)	M
TN8025													
455	655	785										14.1	
360	520	620										14.2	
275	390	455										14.3	
225	325	390										14.4	
- / _CMW / - .0394 - .3150 .0039 - .0197												Geometry d.o.c. (inch) f (inch)	K
TN5120													
590	850	1015										15	
455	655	785										16	
590	820	980										17	
490	685	820										18	
785	1115	1345										19	
590	850	1015										20	
			.0394 - .1575 .0039 - .0157			-AL1 / -AL2 / -AL3 .0394 - .1575 .0039 - .0157						d.o.c. (inch) f (inch)	N
			THM / HWK10 / HWK15			HCK15							
			980	3280	6560	980	4920	6560				21	
			980	3280	4920	980	3935	4920				22	
			655	2295	3935	655	2950	3935				23	
			655	2295	3935	655	2950	3935				24	
			655	1640	2295	655	1640	2295				25	
			820	1145	1310	820	1145	1310				26	
			655	980	1310	655	980	1310				27	
			325	655	980	325	655	980				28	
			260	390	490	260	390	490				29	
			325	490	655	325	490	655				30	
_CMT .0276 - .1696 .0047 - .0157			-MU .0118 - .1772 .0032 - .0138									Geometry d.o.c. (inch) f (inch)	S
THM			TN8025										
85	120	145	135	195	225							31	
65	95	115	110	160	195							32	
55	75	95	80	115	140							33	
35	45	55	50	75	85							34	
35	45	55	55	75	95							35	
135	195	225										36	
65	95	115	100	145	180							37	