























































# HANITA CUTTING TOOLS -- INCH

Type of Tool	Series	Shape	Range of Size Ø min-Ø max	Standard Coatings				Tool Material
				Uncoated	TICN	TIAlN	AlTiN	

## Carbide Roughers and Semi Finishers

	4SOR		1/4" - 1"		yes	yes		Premium Carbide
	4SOB		1/4" - 1"		yes	yes		Premium Carbide
	4QO3		3/16" - 1"	yes		yes		Premium Carbide
	4QN3		1/4" - 1"	yes		yes		Premium Carbide
	4AOR		1/4" - 1"	yes	yes			Premium Carbide
	4AOB		1/4" - 1"	yes	yes			Premium Carbide
	4MOR		1/4" - 1"				yes	Premium Carbide

## Cobalt, PM Roughers & Semi Finishers

	6K08		1/4" - 1 1/4"	yes	yes	yes		HSS - PM
	6K07		1 1/2" - 2"	yes	yes			HSS - PM
	6K06		3/8" - 1 1/4"	yes	yes	yes		HSS - PM
	6K05		1 1/2" - 2"	yes	yes			HSS - PM
	6K04		1/4" - 1 1/4"	yes	yes	yes		HSS - PM
	6208		5/32" - 2"	yes	yes	yes		HSS - M42
	6207		5/8" - 2"	yes	yes	yes		HSS - M42
	6206		3/16" - 2"	yes	yes	yes		HSS - M42
	6205		5/8" - 2"	yes	yes	yes		HSS - M42
	6308		3/8" - 2"	yes	yes	yes		HSS - M42
	6306		3/8" - 2"	yes	yes	yes		HSS - M42
	6200		3/8" - 2"	yes	yes			HSS - M42
	2325		2" - 4"	yes	yes			HSS - M42
	2327		2" - 4"	yes	yes			HSS - M42
	6ANR		1/2" - 2"		yes			HSS - PM
	6AOR		1/2" - 2"	yes				HSS - PM
	6209		1/4" - 2"	yes	yes			HSS - M42
	6TNR		1/2" - 2"			yes		HSS - PM
	6TOR		1/2" - 2"			yes		HSS - PM
	620V		3/4" - 2"	yes		yes		HSS - M42
	620W		3/4" - 2"	yes		yes		HSS - M42

# HANITA CUTTING TOOLS -- INCH

Application Features	Suitable to Machine										See Page	Recommended Cutting Parameters
	General Purpose	30 HRc or Less	40 HRc or Less Cast Iron	55 HRc or Less	55 HRc to 68 HRc	Stainless Steels	Titanium	High Temperature Alloys	Aluminum & Non Ferrous	Graphite		
Fine Profile Rougher for Steels	✓	✓	✓			✓✓					15	22
Ball Nose Rougher for Steels											16	
Semi Finisher for Stainless		✓	✓			✓		✓			17	22
Semi Finisher with Extended Neck for Stainless		✓	✓			✓		✓			18	
Rougher for Aluminum		✓✓							✓		19	22
Ball Nose Rougher for Aluminum		✓✓							✓		20	
Shallow Profile Rougher for Titanium			✓✓	✓	✓✓	✓✓	✓	✓			21	22
Coarse Profile CC Rougher		✓	✓✓			✓	✓✓	✓✓			25	47
Coarse Profile NCC Rougher		✓	✓✓			✓	✓✓	✓✓			26	
Fine Profile CC Rougher		✓	✓✓			✓	✓✓	✓✓			27	47
Fine Profile NCC Rougher		✓	✓✓			✓	✓✓	✓✓			28	
Extra Fine Profile Rougher		✓	✓			✓✓	✓✓	✓✓			29	47
Coarse Profile CC Rougher	✓	✓	✓✓								30	46
Coarse Profile NCC Rougher	✓	✓	✓✓								31	46
Fine Profile CC Rougher	✓	✓	✓								32	
Flat Profile NCC Rougher	✓	✓	✓								33	46
Coarse Profile Ball Nose Rougher	✓	✓	✓✓								34	
Fine profile Ball Nose Rougher	✓	✓	✓								35	
Flat Profile Semi Finisher	✓	✓	✓✓								36	
Fine Profile Shell Rougher	✓	✓	✓								37	
Coarse Profile Shell Rougher	✓	✓	✓✓								38	
Roughing Aluminum		✓✓								✓	39	
Rougher For Aluminum		✓✓								✓	40	46
Rougher For Aluminum		✓✓								✓	41	
General Purpose Rougher						✓✓	✓	✓			42	
General Purpose Rougher						✓✓	✓	✓			43	47
WavCut II Semi Rougher for Titanium			✓✓			✓✓	✓				44	
WavCut I Semi Rougher for Titanium			✓✓			✓✓	✓				45	

✓ GOOD    ✓✓ VERY GOOD    ✓✓✓ EXCELLENT

# HANITA CUTTING TOOLS -- INCH

Type of Tool	Series	Shape	Range of Size Ø min-Ø max	Standard Coatings				Tool Material
				Uncoated	TICN	TAIN	AITIN	
<b>VariMill</b>								
	4VN5		1/4" - 1"			yes		Premium Carbide
	4VP5		1/4" - 1"			yes		Premium Carbide
	4V05		1/8" - 1 1/4"			yes		Premium Carbide
	4VP0		1/4" - 1"			yes		Premium Carbide
	4V00		1/8" - 1 1/4"					Premium Carbide
	4VPT		1/2" - 1"				yes	Premium Carbide
	4V0T		1/2" - 1 1/4"				yes	Premium Carbide
<b>Vision Plus</b>								
	7S05		1/4" - 1"				yes	Premium Carbide
	7S50/7S51		1/4" - 1"				yes	Premium Carbide
	7S7R		5/32" - 1"				yes	Premium Carbide
	7S5F		1/8" - 3/4"				yes	Premium Carbide

# HANITA CUTTING TOOLS -- INCH

Application Features	Suitable to Machine										See Page	Recommended Cutting Parameters
	General Purpose	30 HRC or Less	40 HRC or Less Cast Iron	55 HRC or Less	55 HRC to 68 HRC	Stainless Steels	Titanium	High Temperature Alloys	Aluminum & Non Ferrous	Graphite		
VariMill Offset Flute with extended Neck	✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓✓	✓	✓✓			51	
VariMill Offset Flute Long Reach	✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓✓	✓	✓✓			52	
VariMill Offset Flute Conventional Lengths	✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓✓	✓	✓✓			53	58
VariMill Offset Flute Ball Nose Long Reach	✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓✓	✓	✓✓			54	58
VariMill Offset Flute Ball Nose	✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓✓	✓	✓✓			55	58
VariMill Offset Flute Long Reach for Titanium							✓✓✓	✓✓			56	
VariMill Offset Flute for Titanium							✓✓✓	✓✓			57	
Multi Purpose for Die & Mold			✓✓	✓✓✓	✓						63	67
Ball Nose for Die & Mold			✓✓	✓✓✓	✓						64	
Z-Axis Rougher for Hard Materials			✓✓	✓✓✓	✓	✓					65	67
Z-Axis Finisher for Hard Materials			✓✓	✓✓✓	✓	✓					66	67

GOOD  
 VERY GOOD  
 EXCELLENT

# HANITA CUTTING TOOLS -- INCH


























Type of Tool	Series	Shape	Range of Size Ø min-Ø max	Standard Coatings				Tool Material
				Uncoated	TICN	TiAIN	AlTiN	
<b>Carbide Finishers</b>								
	4C03		1/8" - 1"	yes	yes	yes		Premium Carbide
	4C05		1/8" - 1"	yes	yes	yes		Premium Carbide
	4202		1/32" - 1"	yes	yes	yes		Carbide
	4201		1/16" - 1"	yes	yes	yes		Carbide
	4203		1/16" - 1"	yes	yes			Carbide
	420A		1/8" - 1"	yes	yes			Carbide
	4205		3/64" - 1"	yes	yes	yes		Carbide
	4207		1/4" - 1"	yes	yes	yes		Carbide
	4200		1/16" - 1"	yes	yes	yes		Carbide
	4803		1/4" - 1"	yes	yes			Carbide
	4702		1/4" - 1/2"	yes				Carbide
	4705		1/4" - 1/2"	yes				Carbide
	4402		1/16" - 1/2"	yes				Carbide
	4401		1/16" - 1/2"	yes				Carbide
	4405		1/16" - 1/2"	yes				Carbide
	4400		1/16" - 1/2"	yes				Carbide
	4B02		3/16" - 1"	yes	yes			Premium Carbide
	4K03		1/4" - 1"	yes	yes			Carbide
	4K02		1/8" - 1"	yes	yes			Carbide
	4A03		1/4" - 1"	yes	yes			Carbide
	4A02		1/4" - 1"	yes	yes			Carbide
	4AN3		3/8" - 1"	yes	yes			Carbide
	4AP3		3/8" - 1"	yes	yes			Carbide
	4AN2		1/8" - 1 1/4"	yes	yes			Carbide
	4AP2		1/8" - 1 1/4"	yes	yes			Carbide
	4AN1		1/4" - 1"	yes	yes			Carbide
	4A01		1/8" - 1"	yes	yes			Premium Carbide
	4S07		3/16" - 1"	yes	yes	yes		Premium Carbide
	4S0F		1/4" - 1"	yes	yes	yes		Premium Carbide

# HANITA CUTTING TOOLS -- INCH






Application Features	Suitable to Machine										See Page	Recommended Cutting Parameters
	General Purpose	30 HRC or Less	40 HRC or Less Cast Iron	55 HRC or Less	55 HRC to 68 HRC	Stainless Steels	Titanium	High Temperature Alloys	Aluminum & Non Ferrous	Graphite		
3 Flute for Heavy Cuts in Stainless		✓	✓✓			✓	✓✓✓		✓✓✓		71	101
5 Flute Finisher for Stainless		✓	✓✓			✓	✓✓	✓✓✓			72	
2 Flute for General Applications	✓	✓	✓						✓✓	✓✓	73	100
2 Flute Ball Nose for General Applications	✓	✓	✓						✓✓	✓	74	100
3 Flute for General Applications	✓	✓	✓						✓✓	✓✓	75	100
3 Flute Ball Nose for General Applications	✓	✓	✓						✓✓	✓✓	76	
4 Flute for General Applications	✓	✓	✓							✓✓	77	101
6 Flute for General Applications	✓	✓	✓								78	
4 Flute Ball Nose for General Applications	✓	✓	✓								79	100
3 Flute 60 Degree for Shearing Capability											80	
2 Flute Straight Flute	✓	✓	✓								81	
4 Flute Straight Flute	✓	✓	✓								82	
2 Flute Double End	✓	✓	✓						✓✓	✓✓	83	
2 Flute Ball Nose Double End	✓	✓	✓						✓✓	✓	84	
4 Flute Double End	✓	✓	✓							✓✓	85	
2 Flute Ball Nose Double End	✓	✓	✓								86	
For Heavy Stock Removal in Aluminum									✓✓✓		87	101
3 Flute for High Performance Milling in Aluminum									✓✓✓		88	102
2 Flute for High Performance Milling in Aluminum									✓✓✓		89	
3 Flute for Milling Aluminum									✓✓✓		90	
2 Flute for Milling Aluminum									✓✓✓		91	
2 Flute Extended Neck Style for Aluminum									✓✓✓		92	101
3 Flute Long Reach for Aluminum									✓✓✓		93	
2 Flute Extended Neck Style for Aluminum									✓✓✓		94	101
2 Flute Long Reach for Aluminum									✓✓✓		95	
Ball Nose Extended Neck Style for Aluminum									✓✓✓		96	101
Ball Nose for High Performance Milling in Aluminum								✓✓	✓✓✓	✓✓	97	101
For Superior Finishes in Ferrous Materials	✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	98	102
For Superior Finishes in Harder Materials		✓✓✓	✓	✓✓	✓✓✓	✓✓✓	✓✓✓	✓		✓✓✓	99	102

✓ GOOD    ✓✓ VERY GOOD    ✓✓✓ EXCELLENT

# HANITA CUTTING TOOLS -- INCH

Type of Tool	Series	Shape	Range of Size Ø min-Ø max	Standard Coatings				Tool Material
				Uncoated	TiCN	TiAlN	AlTiN	
HSS, Cobalt & PM Finishers								
	1K05/1K07		3/8" - 1"	yes	yes			HSS - PM
	1202		1/8" - 2"	yes	yes			HSS - M42
	1201		1/4" - 2"	yes	yes			HSS - M42
	1203K		1/4" - 3/4"	yes	yes			HSS - M42
	1205/1207		1/8" - 2"	yes	yes			HSS - M42
	1204/1206/1208		3/4" - 2"	yes	yes			HSS - M42
	1200		1/4" - 2"	yes	yes			HSS - M42
	1902		1/16" - 3/16"	yes				HSS - M42
	1905		1/16" - 3/16"	yes				HSS - M42
	1402		1/8" - 1"	yes	yes			HSS - M42
	1405		1/8" - 1"	yes	yes			HSS - M42
	5270		3/8" Rad. 3/4" Rad.	yes				HSS - M42
	3K03		3/8" - 2"	yes	yes			HSS - M7
	3003		1/4" - 2"	yes	yes			HSS - M7
	3703		1/2" - 2"	yes				HSS - M7
	300A		1/2" - 2"	yes				HSS - M7
	3002		1/4" - 2"	yes				HSS - M7
	3702		1/2" - 2"	yes				HSS - M7
	3001		3/8" - 2"	yes				HSS - M7
	3K05/3K07		1/2" - 2"	yes		yes		HSS - PM
	3405/3407		3/8" - 2"	yes		yes		HSS - M42
	3805/3807		1/2" - 2"	yes				HSS - M42

## Carbide Drills

	M152		1/8" (3.0mm) 3/4" (20mm)			yes		Premium Carbide
	M252		1/8" (3.0mm) 3/4" (20mm)			yes		Premium Carbide
	M159		1/8" (3.0mm) 25/32" (20mm)		yes			Premium Carbide
	M259		1/8" (3.0mm) 25/32" (20mm)		yes			Premium Carbide
	M745		1/4" - 3/4"	yes				Premium Carbide

# HANITA CUTTING TOOLS -- INCH

Application Features	Suitable to Machine										See Page	Recommended Cutting Parameters
	General Purpose	30 HRc or Less	40 HRc or Less Cast Iron	55 HRc or Less	55 HRc to 68 HRc	Stainless Steels	Titanium	High Temperature Alloys	Aluminum & Non Ferrous	Graphite		
Multi Purpose for Profiling Operations		✓	✓✓			✓✓	✓✓	✓✓	✓✓✓		105	128
2 Flute for General Applications	✓	✓	✓✓			✓	✓	✓	✓		106	128
2 Flute Ball Nose for General Applications	✓	✓	✓✓			✓	✓	✓	✓		107	128
3 Flute with Keyway Tolerances	✓	✓	✓✓			✓	✓	✓	✓		108	
Multi Purpose, CC for Profiling Operations	✓	✓	✓✓			✓	✓	✓	✓		109-110	128
Multi Purpose, NCC for Profiling Operations	✓	✓	✓✓			✓	✓	✓	✓		111	
Multi Purpose, Ball Nose for Profiling Operations	✓	✓				✓	✓	✓	✓		112	
2 Flute Miniature Double End	✓	✓				✓	✓	✓	✓		113	
4 Flute Miniature Double End	✓	✓				✓	✓	✓	✓		114	
2 Flute Double End	✓	✓				✓	✓	✓	✓		115	
4 Flute Double End	✓	✓				✓	✓	✓	✓		116	
Corner Rounding Cutter	✓					✓	✓	✓	✓		117	
3 Flute for High Performance Milling in Aluminum						✓	✓	✓	✓✓✓		118	
3 Flute for High Performance Milling in Aluminum						✓	✓	✓	✓✓✓		119	
3 Flute Left Hand for High Performance Milling in Aluminum						✓	✓	✓	✓✓✓		120	
3 Flute Ball Nose for High Performance Milling in Aluminum						✓	✓	✓	✓✓✓		121	
2 Flute for Milling Aluminum						✓	✓	✓	✓✓		122	
2 Flute Left Hand Hand for Milling Aluminum						✓	✓	✓	✓✓		123	
2 Flute Ball Nose Hand for Milling Aluminum						✓	✓	✓	✓✓		124	
For Milling Titanium		✓✓				✓✓	✓	✓	✓		125	
For Milling Titanium		✓✓				✓✓	✓	✓	✓		126	
Left Hand for Milling Titanium		✓✓				✓✓	✓	✓	✓		127	
140° HQS Point for Hard Steels & Cast Iron		✓✓✓	✓	✓✓	✓✓✓	✓	✓✓✓	✓	✓		131-135	150
140° HQS Point with Coolant Hole for Hard Steels & Cast Iron		✓✓✓	✓	✓		✓	✓✓✓	✓	✓		136-139	150
120° HQA Point for Aluminum						✓	✓	✓	✓✓✓		141-143	150
120° HQA Point with Coolant Hole for Aluminum						✓	✓	✓	✓✓✓		144-148	150
145° Spotting Drill		✓✓	✓✓	✓✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	149	150

✓ GOOD    ✓✓ VERY GOOD    ✓✓✓ EXCELLENT

# HANITA CUTTING TOOLS -- METRIC

Type of tool	List no.	Shape	Range of size (mm) QMin-QMax	Coating	Tool Material	Length of cut (D: Diameter)			
						1xD	2xD	3xD	4xD
<b>Carbide Roughers &amp; Semi Finishers</b>									
	4909		6 ~ 25	••, WW	Carbide	←-----→			
	4979		6 ~ 25	••, CT	Carbide	←-----→			
	49N9		6 ~ 20	••	Carbide	←-----→			
	49G9		8 ~ 25	CT, CW	Carbide	←-----→			
	DQ13		3 ~ 20	LW	Carbide	←-----→			
	4966		5 ~ 25	CW, RW, LW	Carbide	←-----→			
	4906		4 ~ 25	TW, ZW, CW, RW, LW, RT	Carbide	←-----→			
	4976		4 ~ 25	MT	Carbide	←-----→			
	4940		6 ~ 25	LT	Carbide	←-----→			
	4970		6 ~ 25	CT, LT, LW	Carbide	←-----→			
	49H6		8 ~ 20	RW, LW	Carbide	←-----→			
<b>HSSE / HSS - PM Roughers &amp; Semi Finishers</b>									
	6609/19		6 ~ 32	WW	HSSE	←-----→			
	6676		10 ~ 32	WW, CW, LW	HSSE	←-----→			
	6667JJ		8 ~ 40	JJ, CJ, LJ	HSSE	←-----→			
	6604		6 ~ 25	WW, TW, ZW, CW, LW	HSSE	←-----→			
	6605/6/15/16		4 ~ 40	WW, FF, TW, ZW, CW, LW	HSSE	←-----→			
	6607/8/17/18		5 ~ 40	WW, FF, TW, CW, LW	HSSE	←-----→			
	6637JJ/38JJ		20 ~ 40	JJ	HSSE	←-----→			
	6645		4 ~ 30	WW, CW, LW	HSSE	←-----→			
	6673		10 ~ 32	WW, LW	HSSE	←-----→			
	6674		10 ~ 32	TW, CW, LW	HSSE	←-----→			
	6675		10 ~ 25	CW, LW	HSSE	←-----→			
	6N04		6 ~ 25	CW, LW	HSS-PM	←-----→			
	6N06		6 ~ 30	WW, CW, LW	HSS-PM	←-----→			
	6N70		6 ~ 32	LW, LT	HSS-PM	←-----→			
	6NL6		10 ~ 25	LW	HSS-PM	←-----→			

**Uncoated** \*\* WW, AA, FF, JJ

**TiN** TT, TW, TA, TE, TJ, TN

**Z-Coat** ZT, ZW

**TiCN** CT, CW, CA, CF, CJ

**TiAlN** LT, RT, LW, RW, LJ, RJ, RN





















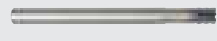





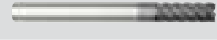

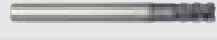

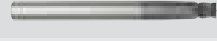

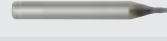

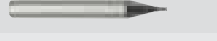

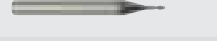



**AlTiN** MT

# HANITA CUTTING TOOLS -- METRIC

Application Features	Suitable to Machine										See Page	Recommended Working Details Page
	General Purpose	30 HRC or Less	40 HRC or Less Cast Iron	55 HRC or Less	55 HRC to 68 HRC	Stainless steels	Titanium	High temperature Alloys	Aluminium & Non Ferrous	Graphite		
Roughing Operation on Aluminium		✓✓							✓✓✓		15	21
Roughing and Semi-Finishing Aluminium Alloys		✓							✓✓✓		15	21
Deep Roughing and Semi-Finishing Aluminium		✓✓							✓✓✓		16	21
Roughing and Semi-Finishing Aluminium Alloys		✓							✓✓✓		16	21
Roughing and Semi-Finishing Stainless Steels	✓✓✓					✓✓✓					17	21
3D Roughing Operation	✓✓✓										17	21
General Purpose Roughing Operation	✓✓✓	✓✓✓	✓✓✓			✓					18	22
High Performance Roughing Operation		✓✓✓	✓✓✓	✓		✓✓	✓	✓✓			18	22
Roughing High Tensile Strength Steels And Titanium			✓✓✓	✓✓✓	✓	✓	✓✓✓	✓✓			19	22
Roughing High Tensile Strength Steels And Titanium			✓✓✓	✓✓✓	✓	✓✓	✓✓✓	✓✓			19	22
General Purpose Deep Roughing Operation		✓✓✓	✓✓✓			✓✓					20	22
Roughing Operation on Aluminium		✓✓							✓✓✓		25	34
Milling Aluminium Alloys		✓							✓✓✓		25	-
General Purpose 3D Roughing Operation	✓✓✓										26	-
General Purpose Roughing Operation		✓✓✓	✓✓			✓✓	✓				26	34
General Purpose Roughing Operation	✓✓✓										27	34
General Purpose Roughing Operation	✓✓✓										28	35
General Purpose Roughing Operation	✓✓✓										29	-
General Purpose, Pocketing and Roughing Operations	✓✓✓					✓✓✓					29	35
Milling Titanium Alloys		✓				✓✓					30	-
Milling Medium Tensile Strength Steels		✓✓✓				✓					30	-
Milling Medium Stainless Steel, Nickel and Cobalt Base Alloys		✓✓				✓✓✓					31	-
General Purpose Roughing Operation		✓✓✓	✓✓✓			✓✓	✓	✓			31	35
General Purpose Roughing Operation		✓✓✓	✓✓			✓✓✓	✓✓	✓			32	35
High Performance Semi-Roughing Operation		✓✓✓	✓✓✓			✓✓✓	✓✓✓	✓✓✓			32	36
General Purpose Deep Roughing Operation, Long Reach		✓✓✓	✓✓✓			✓✓✓	✓✓	✓			33	36

✓ GOOD    ✓✓ VERY GOOD    ✓✓✓ EXCELLENT

# HANITA CUTTING TOOLS -- METRIC

Type of tool	List no.	Shape	Range of size (mm) QMin-QMax	Coating	Tool Material	Length of cut (D: Diameter)			
						1xD	2xD	3xD	4xD
<b>VariMill</b>									
	47N0		5 ~ 20	LT	Premium Carbide	←-----→			
	4777		4 ~ 25	LT	Premium Carbide	←-----→			
	4778		4 ~ 25	MT	Premium Carbide	←-----→			
	1N77		6 ~ 30	CT, CW	HSS PM	←-----→			
<b>Vision Plus</b>									
	7151		1 ~ 20	RT	Premium Carbide	←→			
	7061		1 ~ 12	RT	Premium Carbide	←-----→			
	70N1		1 ~ 12	RT	Premium Carbide	←-----→			
	7150		2 ~ 20	RT	Premium Carbide	←→			
	7050/60		2 ~ 20	RT	Premium Carbide	←-----→			
	75N2		3 ~ 12	RT	Premium Carbide	←-----→			
	75N8		6 ~ 12	RT	Premium Carbide	←-----→			
	7585/95		3 ~ 25	LT	Premium Carbide	←-----→			
	7505/45		3 ~ 25	LT	Premium Carbide	←-----→			
	7515/25		6 ~ 25	LT	Premium Carbide	←-----→			→
	75N5		3 ~ 25	LT	Premium Carbide	←-----→			
	7670		4 ~ 25	LT	Premium Carbide	←-----→			
	7N01		0.3 ~ 6	RJ	Premium Carbide	←-----→			
	7N02		0.3 ~ 2.5	RJ	Premium Carbide	←-----→			
	7N12		0.5 ~ 2.5	RJ	Premium Carbide	←-----→			→
	7N22		0.4 ~ 3	RJ	Premium Carbide	←-----→			→

**Uncoated** \*\* WW, AA, FE, JJ

**TiN** TT, TW, TA, TE, TJ, TN

**Z-Coat** ZT, ZW

**TiCN** CT, CW, CA, CF, CJ

**TiAlN** LT, RT, LW, RW, LJ, RJ, RN

**AlTiN** MT

# HANITA CUTTING TOOLS -- METRIC

Application Features	Suitable to Machine										See Page	Recommended Working Details Page
	General Purpose	30 HRC or Less	40 HRC or Less Cast Iron	55 HRC or Less	55 HRC to 68 HRC	Stainless steels	Titanium	High temperature Alloys	Aluminium & Non Ferrous	Graphite		
Slotting and Finishing various Materials.		✓✓	✓✓			✓✓	✓✓	✓			39	41
Slotting and Finishing various Materials.		✓✓	✓✓			✓✓	✓✓	✓			39	41
Slotting and Finishing various Materials.		✓✓	✓✓			✓✓	✓✓	✓			40	41
Slotting and Finishing various Materials.		✓✓	✓✓			✓✓	✓✓	✓			40	42
Finishing in 3D Milling			✓✓	✓✓	✓✓						45	56
Deep 3D milling operation Additional strength due to the taper angle			✓✓	✓✓	✓✓						45	56
Deep 3D milling operation		✓	✓✓	✓✓	✓✓			✓			46	56
finishing in 3D milling			✓✓	✓✓	✓✓						46	56
Deep 3D milling operation			✓✓	✓✓	✓✓						47	56
Deep slotting and finishing operations		✓	✓✓	✓✓	✓	✓	✓		✓		48	56
Peripheral high finishing accuracy operation			✓✓	✓✓	✓✓						48	57
Deep Slotting and Peripheral Milling of Hard Steels			✓✓	✓✓	✓✓						49	57
Deep Slotting and Peripheral Milling of Hard Steels			✓✓	✓✓	✓✓						50	57
Shallow Slotting and Peripheral Milling of Hard Steels			✓✓	✓✓	✓✓						50	57
Deep Milling of Hard Steels			✓✓	✓✓	✓✓						51	57
Deep Slotting and Peripheral Milling of Hard Steels, Long Reach			✓✓	✓✓	✓✓						51	57
Roughing in 3D Milling			✓✓	✓✓	✓✓	✓	✓✓				52	58
Milling on precision machining centers		✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓	✓✓	52	58
Milling on precision machining centers		✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓	✓✓	53	58
Milling on precision machining centers		✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓	✓✓	53	58
Rib processing and very fine operations		✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓	✓✓	54-55	58

✓ GOOD    ✓✓ VERY GOOD    ✓✓✓ EXCELLENT

# HANITA CUTTING TOOLS -- METRIC

Type of tool	List no.	Shape	Range of size (mm) QMin-QMax	Coating	Tool Material	Length of cut (D: Diameter)			
						1xD	2xD	3xD	4xD
	4001/11/21		1 ~ 20	••, TT, CT, RT	Carbide	←-----→			
	4001JJ		1 ~ 20	JJ, RJ	Carbide	←-----→			
	4651		1 ~ 2	••, CT, RT	Carbide	←-----→			
	4000/10		3 ~ 20	••, TT, CT, RT	Carbide	←-----→			
	4002/12/22		1 ~ 25	••, TT, ZT, CT, RT	Carbide	←-----→			
	4102		1,5 ~ 20	••, CT, RT	Carbide	←-----→			
	4632		0,4 ~ 1,5	••, CT, RT	Carbide	←-----→			
	4003/13		1 ~ 25	••, TT, ZT, CT, RT	Carbide	←-----→			
	4103		3 ~ 20	••, CT	Carbide	←-----→			
	4503JJ		1 ~ 20	JJ, CJ, RJ	Carbide	←-----→			
	4603		3 ~ 20	••, RT	Carbide	←-----→			
	4633		0,4 ~ 1,8	••, CT, RT	Carbide	←-----→			
	4004/14/24		1 ~ 25	••, TT, ZT, CT, RT	Carbide	←-----→			
	D001/11		3 ~ 20	WW, CW, RW	Carbide	←-----→			
	D501		2 ~ 20	••, RT	Carbide	←-----→			
	D009		3 ~ 20	RW	Carbide	←-----→			
	DC19		3 ~ 20	LW	Carbide	←-----→			
	D000/10		3 ~ 20	WW, CW, RW	Carbide	←-----→			
	D002/12		2 ~ 20	WW, CW, RW	Carbide	←-----→			
	D502		3 ~ 20	••, RT	Carbide	←-----→			
	D003/13		2 ~ 20	WW, CW, RW	Carbide	←-----→			
	D503/13		2 ~ 20	WW, CW, RW	Carbide	←-----→			
	DC03		3 ~ 20	WW, LW	Carbide	←-----→			
	D004/14		2 ~ 20	WW, CW, RW	Carbide	←-----→			
	D507/17		6 ~ 20	WW, CW, RW	Carbide	←-----→			
	D518		4 ~ 25	RW, CW, RT	Carbide	←-----→			
	D618		3 ~ 20	RJ	Premium Carbide	←-----→			

Uncoated \*\* WW, AA, FF, JJ

TiN TT, TW, TA, TE, TJ, TN

Z-Coat ZT, ZW

TiCN CT, CW, CA, CF, CJ

TiAlN LT, RT, LW, RW, LJ, RJ, RN

AlTiN MT

# HANITA CUTTING TOOLS -- METRIC

Application Features	Suitable to Machine										See Page	Recommended Working Details Page
	General Purpose	30 HRc or Less	40 HRc or Less Cast Iron	55 HRc or Less	55 HRc to 68 HRc	Stainless steels	Titanium	High temperature Alloys	Aluminium & Non Ferrous	Graphite		
3D Milling and Deep Slotting	✓✓✓	✓✓✓	✓✓✓							✓✓✓	61	79
Deep 3D Milling	✓✓✓	✓✓✓	✓✓✓							✓✓✓	61	79
3D Milling	✓✓✓	✓✓✓	✓✓✓							✓	62	-
3D Milling	✓✓✓	✓✓✓	✓✓✓								62	79
Slotting	✓✓✓	✓✓✓	✓✓✓							✓✓	63	79
Slotting Aluminium										✓✓✓	64	80
Slotting and Side Milling	✓✓✓	✓✓✓	✓✓✓							✓✓	64	-
Slotting and Side Milling	✓✓✓	✓✓✓	✓✓✓								65	80
Slotting and side milling Aluminium										✓✓✓	66	80
Deep Slotting and Peripheral Finishing Operation		✓✓✓	✓✓✓	✓		✓✓✓	✓✓	✓	✓✓✓	✓✓	66	80
Peripheral Finishing Operation		✓	✓✓			✓✓	✓		✓		67	-
Slotting and Side Milling	✓✓✓	✓✓✓	✓✓✓							✓	67	-
Peripheral Finishing Operation	✓✓✓	✓✓✓	✓✓✓								68	81
3D Milling	✓✓✓	✓✓✓	✓✓✓							✓✓	69	81
3D Milling at High Speed Machining		✓✓✓	✓✓							✓✓✓	69	81
Deep 3D Milling	✓✓✓	✓✓✓				✓✓				✓	70	-
3D Milling		✓✓	✓			✓✓✓	✓✓✓	✓	✓✓✓	✓✓	70	81
3D Milling	✓✓✓	✓✓✓	✓✓✓								71	82
Deep Slotting	✓✓✓	✓✓✓	✓✓✓							✓✓✓	72	82
Slotting and Side Milling at High Speed Machining		✓✓✓								✓✓✓	73	82
Slotting and Side Milling	✓✓✓	✓✓✓	✓✓✓								74	82
Deep Slotting and Peripheral Finishing Operations		✓✓✓	✓✓✓	✓		✓✓	✓✓	✓	✓✓	✓✓	75	83
Slotting and Finishing Stainless Steel and Aluminium		✓✓✓	✓✓✓			✓✓✓	✓✓		✓		75	83
Peripheral Finishing Operation	✓✓✓	✓✓✓	✓✓✓							✓✓	76	83
Peripheral Finishing Operation		✓✓✓	✓✓✓	✓✓		✓✓✓	✓✓✓	✓✓✓		✓	77	83
Peripheral High Accuracy Finishing Operation		✓	✓✓✓	✓✓	✓		✓	✓✓✓		✓✓	77	84
Peripheral High Accuracy Long Milling of Ultra-Hard Steels				✓✓✓	✓✓✓						78	84

✓ GOOD   ✓✓ VERY GOOD   ✓✓✓ EXCELLENT

# HANITA CUTTING TOOLS -- METRIC

Type of tool	List no.	Shape	Range of size (mm) QMin-QMax	Coating	Tool Material	Length of cut (D: Diameter)			
						1xD	2xD	3xD	4xD
HSSE/HSS-PM Finishers									
	1601		3 ~ 25	WW, FF, TW, CW, LW	HSSE	←-----→			
	1601JJ		3 ~ 25	JJ, TJ, CJ	HSSE	←-----→			
	1602/12		2 ~ 32	WW, FF, TW, ZW, CW, CF, LW	HSSE	←-----→			
	1N02		3 ~ 20	WW, CW, LW	HSSE-PM	←-----→			
	3502		9 ~ 25	WW, CW	HSSE	←-----→			
	1652JJ/62JJ		2 ~ 50	JJ, TJ, CJ	HSSE	←-----→			
	1603		3 ~ 25	WW, FF, TW, ZW, CW, LW	HSSE	←-----→			
	3603AA/13AA		1/5 ~ 10	AA, TA, CA	HSSE	←-----→			
	1605/15		2 ~ 20	WW, FF, TW, ZW, CW, LW	HSSE	←-----→			
	1634JJ		3 ~ 32	JJ, CJ, LJ	HSSE	←-----→			
	1625		6 ~ 25	WW	HSSE	←-----→			
	1N0M		3 ~ 25	LW	HSSE-PM	←-----→			
	1N0M/JJ		3 ~ 25	LJ	HSSE-PM	←-----→			
	1606/16		21 ~ 34	WW, FF, TW, CW, LW	HSSE	←-----→			
	1600		3 ~ 25	WW, TW, ZW, CW, LW	HSSE	←-----→			
	1N05/7		6 ~ 25	WW, CW, LW	HSSE-PM	←-----→			
	3605/15		3 ~ 30	••, WW, CW, CT, LW	HSSE	←-----→			
	3N05		6 ~ 25	WW, CW, LW	HSSE-PM	←-----→			
	5870		8 ~ 48	••, WW	HSSE				

## Carbide Drills

	M112		1 ~ 20	••, TT, RT	Carbide	←-----→			
	M132		0.5 ~ 20	••, TT, RT	Carbide	←-----→			
	M133		3 ~ 20	••, RT	Carbide	←-----→			
	M152		3 ~ 20	TN, RN, RT	Carbide	←-----→			
	M155		3 ~ 20	RT	Premium Carbide	←-----→			
	M162		3 ~ 20	TN, RN, RT	Carbide	←-----→			
	M252		3 ~ 20	RN, RT	Carbide	←-----→			
	M262		3 ~ 20	RN, RT	Carbide	←-----→			

Uncoated \*\* WW, AA, FF, JJ

TiN TT, TW, TA, TF, TJ, TN

Z-Coat ZT, ZW

TiCN CT, CW, CA, CF, CJ

TiAlN LT, RT, LW, RW, LJ, RJ, RN

AlTiN MT

# HANITA CUTTING TOOLS -- METRIC

	Application Features	Suitable to Machine										See Page	Recommended Working Details Page
		General Purpose	30 HRc or Less	40 HRc or Less Cast Iron	55 HRc or Less	55 HRc to 68 HRc	Stainless steels	Titanium	High temperature Alloys	Aluminium & Non Ferrous	Graphite		
3D Milling	✓✓✓											87	-
Deep 3D Milling	✓✓✓											87	-
General Purpose Slotting	✓✓✓											88	98
Slotting		✓✓✓	✓✓							✓✓		89	98
Roughing and Finishing Aluminium		✓✓										89	-
Deep Slotting	✓✓✓	✓✓✓								✓✓		90	-
Slotting and Side Milling	✓✓✓											91	-
Slotting and Side Milling - General Purpose	✓✓✓											91	-
Peripheral Finishing Operation	✓✓✓											92	98
Deep Peripheral Finishing Operation	✓✓✓											93	99
Deep Peripheral Finishing Operation	✓✓✓											93	99
High Performance Roughing and Finishing Operations		✓✓✓	✓✓				✓✓	✓✓	✓✓	✓✓		94	99
High Performance Roughing and Finishing Operations		✓✓✓	✓✓				✓✓	✓✓	✓✓	✓✓		94	-
Peripheral Finishing Operation	✓✓✓											95	-
3D Milling	✓✓✓											95	-
Peripheral Finishing Operation		✓✓✓	✓✓					✓✓	✓✓	✓✓		96	99
Slotting and Peripheral Finishing Operations		✓✓✓					✓	✓✓	✓✓			96	100
Slotting and Peripheral Finishing Operations		✓✓✓	✓✓				✓	✓✓	✓✓			97	100
Corner Radius Milling	✓✓✓											97	-

General Purpose Drilling	✓✓✓											103-104	119
General Purpose Drilling	✓✓✓											105-106	119
Shallow Depth Holes with Self Centering	✓✓✓											107-108	119
Drilling Depth of 3XD		✓	✓✓✓	✓✓	✓	✓	✓	✓	✓			109-110	119
Drilling Depth of 3XD for Ultra Hard Steels				✓✓✓	✓✓✓							111-112	119
Drilling Depth of 5XD		✓	✓✓✓	✓✓✓	✓✓	✓	✓	✓	✓			113-114	119
Drilling Depth of 3XD		✓	✓✓✓	✓✓✓	✓✓	✓	✓✓	✓✓	✓✓			115-116	119
Drilling Depth of 5XD		✓	✓✓✓	✓✓✓	✓✓	✓	✓✓	✓✓	✓✓			117-118	119

✓ GOOD    ✓✓ VERY GOOD    ✓✓✓ EXCELLENT