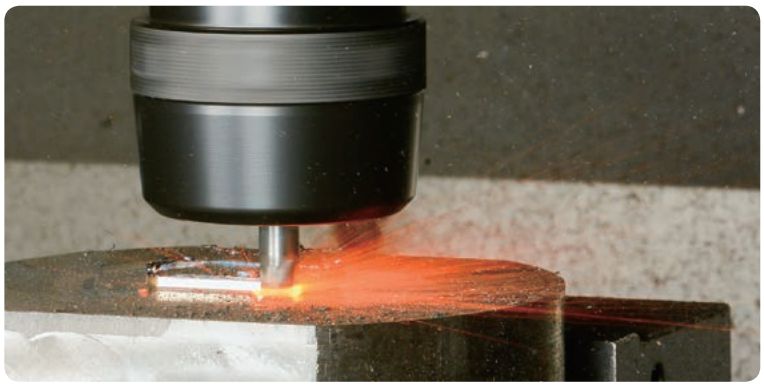
NTK CUTTING TOOLS

MILLING PRODUCT RANGE

For When Speed Is Everything

Ceramic Endmill (RCE) for HRSA Materials



Features

- *Extremely high speed machining for HRSA materials with our durable SiAlON grade "SX9"*
- *More than 15 times higher productivity than a Carbide endmill*
- *4 flutes and 6 flutes are available*
- *Unique patent pending design provides toughness to the edge*

➡18

NEW Ceramic Endmill (RCS) for Cast Iron/HRSA Materials

Features

- *Strong edge design ensures 5 times higher productivity than carbide tooling*
- *4, 6 and 8 flute designs*
- *Unique edge preparation has potential applications for Heat Resistant Super Alloy machining*

➡18

HRSA materials and Hardened Materials

Features

- *High performance milling cutter line that uses round-shaped inserts for machining both aerospace and hardened steels*
- *SX7, the new SiAlON grade, has the best performance for high speed machining of high temperature alloys*

AHM *ccel igh speed ill* series ➡I12・I14

Gray / Ductile Cast Iron

XFM *treme eed ill* series

➡I16

88°
Lead angle

A.R.–4° R.R.0°

Features

- *Large DOC is possible because of the fine pitch of inserts which results in higher productivity*
- *LNX Insert comes with special chipbreaker to reduce tool pressure*
- *Newly added Left-hand cutters*

HVM *igh elocity ill* series

➡I18・I20・I22

45° 75° 88°
Lead angle Lead angle Lead angle

A.R.–6° R.R.–10°

Features

- *Extremely economical 8-corner inserts*
- *Covers various applications with 45, 75, and 88 degree angle milling cutters*
- *Ceramic inserts with chipbreaker and wiper are also available*

JQ series

➡I17

90°
Lead angle

Features

- *Capable of 90-degree shoulder milling*
- *A variety of cutter diameters as small as .787 (ϕ20mm)*

TRI series

➡I24

88°
Lead angle

A.R.5° R.R.4°,7°,10°

Features

- *Stable gray cast iron milling with lower cutting forces*
- *Maximizes ceramic insert potential and can mill faster than 3,200 SFM*

HSM *igh speed hear ill* series

➡I25・I26・I27

45° 75°
Lead angle Lead angle

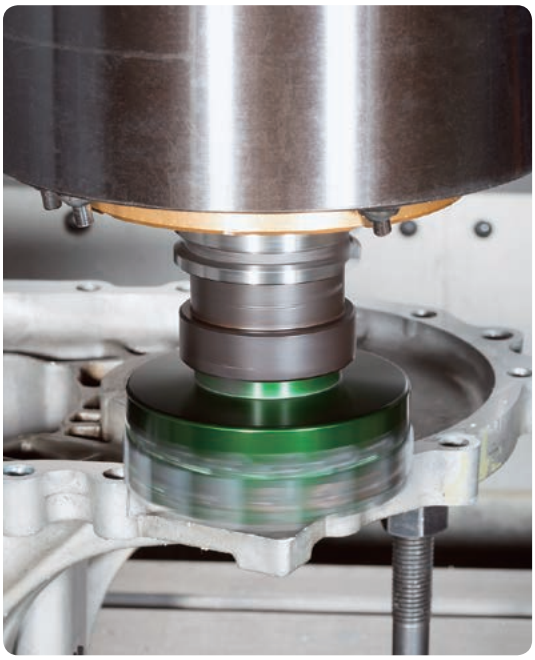
A.R.+12° R.R.0°

Features

- *Positive inserts reduce tool pressure and produce excellent surface finish in addition to long tool life*
- *Best for milling thin parts thanks to reduced tool pressure*

Aluminum

HFC High Feed Cutter series Adjustable type ➡I28



Features

- ***More teeth = More productivity***
- ***Light weight aluminum body***
- ***Adjustable edge height***
- ***Produces outstanding surface finishes***
- ***Internal coolant supply***
- ***Inserts can be reground up to 4 times***
- ***Guaranteed setup service is available***

HPC High Performance Cutter series ➡I32

Features

- *A wide range of cutter diameters from ϕ.787" (20mm) to ϕ3.937" (100mm)*
- *Strong rigid steel bodies*
- *With the fixed-type cutters, no time-consuming presetting is required*

Small Carbide Endmill for Swiss Machines

Features

- *The tool's sharpness creates a remarkable finish on machined surfaces.*
- *2, 3, and 4 flute designs with a selection of diameters to cover a variety of applications. (2 flute available in 2mmϕ)*
- *40, 45, and 50mm lengths ideal for Swiss type lathes.*

Milling with NTK Grades by Application

General Guidelines for Successful Milling

- *Select the best grade for the application*
- *Select cutter diameter 1.5 times greater than the workpiece width*
- *Eliminate any overhang to increase stability*
- *Choose the strongest nose radius*
- *No Coolant. Use compressed air*
- *Check clamp and part rigidity*

Guidelines for Successful Milling by Material

Heat resistant alloy / PH stainless steel

- *Down or climb milling where the chip thins upon exit is the preferred method for HNBA materials*
- *Reduce feed rate 50% upon entrance and exit*
- *Do not recut side walls as this can cause work hardening*
- *Use balanced shell mill adapter or shrink fit for end-mills*
- *As DOC gets thinner the feed must be increased to compensate for heat loss*
- *Use RPG geometries if tool pressure is a problem*
- *E01, E02 edge preparation recommended*

Hardened Steel / Die mold / Chilled iron / Overlay

- *Larger edge preparations need to be used*
- *Speed is reduced as hardness goes up*

Cast Iron / Ductile Cast Iron

- *Parts that are cast are more difficult to machine than forged • decrease feed rates by 25%*
- *Maximize feed rates for gray cast irons*

Trouble shooting

Material	Insert Grade	NTK Grade	Problem	Solution					
				Speed	Feed	DOC	Edge Prep.	Insert Grade	Others
Hardened Steel	Ceramic	HC7 WA1	Chipping	—	↘	—	Wider	—	—
			Break	↘	↘	—	—	—	—
Cast Iron	Silicon Nitride	SX6 SP9	Chipping	↘	↘	—	Wider	—	—
			Break	↘	↘	↘	—	Tougher	Larger radius
			Themal Crack	↘	↘	—	—	—	—
			Crater Wear	—	—	—	Sharper	—	—
Heat Resistant Alloy	SiAlON	SX9 SX7	Notching	↗	↗	Vary / ↘	Wider	—	Pre-chamfer parts
			Flank Wear	↘	↗	—	—	Harder	—
			Chipping	—	—		Wider	Tougher	—
			Break	↘	—	↘	—	Tougher	—
			Tool Pressure	—	—	—	—	—	Use RPG insert

Hard Milling with WA1

Mill hardened materials (HRC 45-62) Reduce costs and eliminate grinding

- *Rapid metal removal rates*
- *Achieve outstanding surface finishes*
- *Increased tool life vs carbides*
- *Versatile round insert geometries provide clearance in every direction*

Target Industries

- *Mold Shops*
- *Food processing*
- *Tool & Die*
- *Forging*
- *Mining*

Application Materials

- *Tool Steels*
- *Chilled Irons*
- *Stellite*
- *Mold Steels*
- *Powered Metal*
- *Weld Overlays*

Cutters

➡I12

➡I12

➡I14

Insert

- *Grade* ***WA1***
- *Shape*
  RPG: Low tool pressure
  RNG: More rigidity

Recommend Cutting Conditions

INSERT	DOC	HRC 45-55		HRC 55-60		HRC 60-62	
		Cutting Speed (SFM)	Feed (IPT)	Cutting Speed (SFM)	Feed (IPT)	Cutting Speed (SFM)	Feed (IPT)
RPG-21.51	.030"	850 - 1000	.004"	700 - 900	.003"	550 - 800	.0025"
RPG-32	.045"	850 - 1200	.0045"	700 - 1100	.003"	550 - 1000	.0025"
RPG-43	.050"	850 - 1300	.005"	700 - 1200	.0035"	550 - 1100	.003"
RNG-32	.045"	850 - 1200	.0045"	700 - 1100	.0045"	550 - 1000	.0025"
RNG-43	.045"	850 - 1400	.0045"	700 - 1300	.045"	550 - 1200	.003"
RNG45	.075"	850 - 1400	.005"	700 - 1300	.004"	550 - 1200	.003

Note: Speeds and Feeds are approximately starting points

Guidelines for Success

- *Minimize overhang and have ridged set-ups*
- *Keep cutter engagement to 1/2 to 5/8 of the cutter diameter*
- *Reduce feed upon entrance and exit of the cut by 25%*
- *Use air blast without coolant*
- *Use helical interpolation to ramp down into a cavity*
- *Increase feed rates in corners to compensate for heat loss*
- *Use climb milling*
- *Use shrink fit holders whenever possible*
- *Safety first-do not exceed SFM*
- *As DOC gets smaller speed should accelerate to compensate for heat loss*
- *Adjust speed to maximize plastic deformation*

Machine power requirements ～Quick Check Table～

Calculation

※Assuming that normal cast iron is machined at a cutting speed of 2600 SFM

Required mechanical power(hp) = ○○% × ○○hp

Width of cutting a_e = __ __ % of the cutter diameter

The value __ hp determined from the applicable table below

〈Example of calculation〉
Cutter used : HVMϕ4"−10 teeth　Width of cutting a_e=1.2"→This is 30% of the cutter diameter
Cutting conditions : 2600 SFM　.008 IPT .118 DOC → The value 54hp in the table is located.

→ The required power (hp)=30%×54hp=16hp

HVM Series

HVM　Φ2.5" - 6 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	5	8	9	12
.079	9	15	19	23
.118	15	22	30	35
.157	19	30	39	47

HVM　Φ3" - 8 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	8	12	16	19
.079	16	24	32	39
.118	24	36	47	58
.157	31	48	63	76

HVM　Φ4" - 10 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	12	17	24	28
.079	23	36	47	56
.118	35	54	71	86
.157	47	72	94	114

HVM　Φ5" - 12 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	16	26	34	40
.079	32	50	66	79
.118	48	75	98	119
.157	64	99	131	158

HVM　Φ6" - 16 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	28	43	56	67
.079	55	85	111	134
.118	83	127	168	203
.157	110	170	223	270

HSM Series

HSM　Φ2.5" - 4 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	4	5	8	9
.079	8	12	16	19
.118	12	17	24	30
.157	16	24	32	39

HSM　Φ3" - 6 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	7	11	15	17
.079	15	22	30	35
.118	22	32	44	52
.157	28	43	58	70

HSM　Φ4" - 7 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	9	13	19	23
.079	19	27	36	44
.118	27	42	55	67
.157	36	55	74	89

HSM　Φ5" - 8 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	11	17	23	27
.079	23	34	46	55
.118	34	51	68	82
.157	44	67	91	110

HSM　Φ6" - 10 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.039	16	24	32	39
.079	32	48	66	79
.118	48	72	98	118
.157	64	97	130	157

XFM Series

XFM　Φ3" - 10 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.197	48	74	102	125
.236	58	89	122	149
.276	67	102	142	174
.315	76	117	162	199

XFM　Φ4" - 13 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.197	82	125	174	213
.236	98	150	209	255
.276	114	176	244	298
.315	130	200	279	341

XFM　Φ5" - 16 teeth

Depth of cut (inch)	Feed rate per tooth (IPT) .004	.008	.012	.016
.197	125	192	266	325
.236	149	229	319	390
.276	174	268	372	455
.315	199	306	425	519

Unit : kW

Tips for utilizing the above tables

① The assumption is that gray cast iron is machined at a cutting speed of 2600 SFM, with the cutter diameter shown as the width of cut (a_e = 100% of the cutter diameter).
② The required power becomes approximately half (50%) if the cutting width a_e or depth of cut a_p is halved. (The power is proportional to a_e or a_p.)
③ The required power is reduced to approximately 60% if the number of blades is halved.
④ Machines that have an output of 30 hp or greater are recommended.

＊Please make use of the above tables, understanding that they are approximations as only a guide.

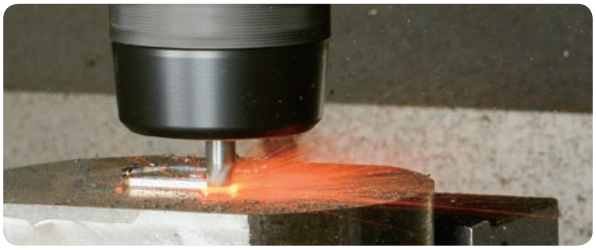
NEW Solid Ceramic End Mill

Features

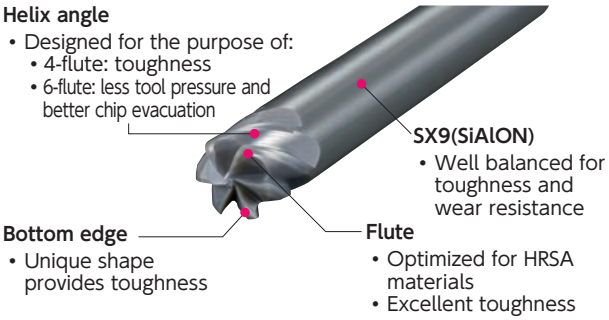
- *Extremely high speed machining for HRSA materials with our durable SiAlON grade "SX9"*
- *More than 15 times higher productivity than a Carbide end mill*
- *4, 6 and 8 flutes are available*
- *Unique patent pending design provides toughness to the edge*

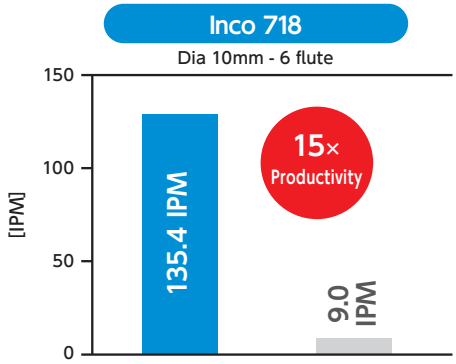
RCE for HRSA materials

➜I10



Ceramic specialist's design

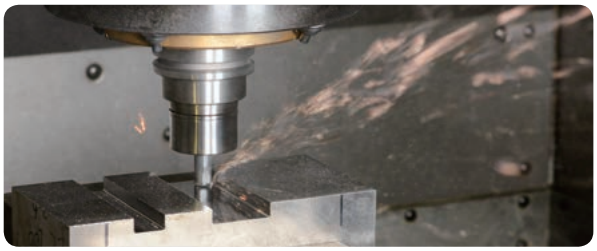


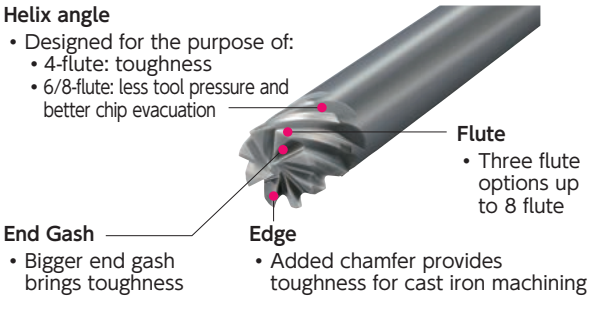


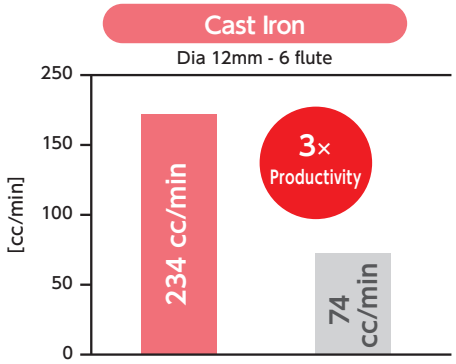
	SX9	Carbide
SFM	1970	130
IPT	.0012	←
DOC	.118	←

RCS for Cast iron / HRSA materials

➜I11



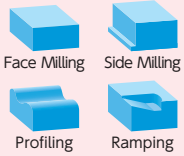




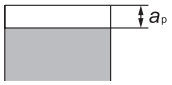
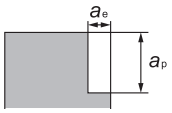
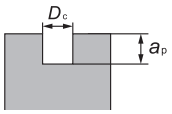
	SX9	Carbide
SFM	2300	360
IPT	.002	←
DOC	.138	.275

4-flute

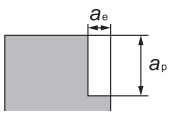
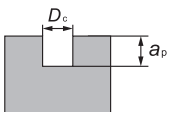
6-flute **8-flute**



Recommend Cutting Conditions for HRSA material

Application	Grade	φ D_c	Flute	Cutting Speed (SFM) 500 2000 3500	Feed (IPT)	Depth of cut (a_p —inch)	Width of cut (a_e —inch)	Coolant
Face Milling 	SX9	3/8"	4/6/8		.0012	.056	—	DRY
		1/2"				.075		
		5/8"				.094		
		3/4"				.113		
		8mm				.047		
		10mm				.059		
		12mm				.071		
		16mm				.094		
		20mm				.118		
Side Milling 	SX9	3/8"	4/6/8		.0012	.187	.037	DRY
		1/2"				.250	.050	
		5/8"				.313	.063	
		3/4"				.375	.075	
		8mm				.157	.031	
		10mm				.197	.039	
		12mm				.236	.047	
		16mm				.315	.063	
		20mm				.394	.079	
Slotting 	SX9	3/8"	4		.0012	.094	—	DRY
		1/2"				.125		
		5/8"				.156		
		8mm				.079		
		10mm				.098		
		12mm				.118		
		16mm				.157		
		3/8"	6			.056		
		1/2"				.075		
		5/8"				.094		
		8mm				.047		
		10mm				.059		
		12mm				.071		
		16mm				.094		
		3/4"	8			.113	—	
		16mm				.118		

Recommended cutting conditions for Cast Iron

Application	Grade	φ D_c	Flute	Cutting Speed (SFM) 500 2000 3500	Feed (IPT)	Depth of cut (a_p —inch)	Width of cut (a_e —inch)	Coolant
Face Milling	SX9	1/2"	4/6/8		.004	.094	—	DRY
		5/8"				.156		
		3/4"				.187		
		12mm				.118		
		16mm				.158		
		20mm				.197		
Side Milling 	SX9	1/2"	4/6/8		.004	.375	.083	DRY
		5/8"				.469	.104	
		3/4"				.563	.125	
		12mm				.354	.079	
		16mm				.472	.098	
		20mm				.591	.130	
Slotting 	SX9	1/2"	4/6/8		.004	.094	—	DRY
		5/8"				.156		
		3/4"				.187		
		12mm				.118		
		16mm				.157		
		20mm				.197		

For Maximum Productivity

- *A continuous cut is recommended. An interrupted cut may cause chipping or breakage.*
- *When using a Hydraulic or Shrink chuck, blow air to the arbor body, DON'T blow air to the endmill itself.*
- *A Minimum speed of 980 SFM is required. (Don't run at lower speed.)*
- *A 1.5 degree ramping angle is recommended. Run at 50% lower feed rate when ramping cut.*

When cutting HRSA materials

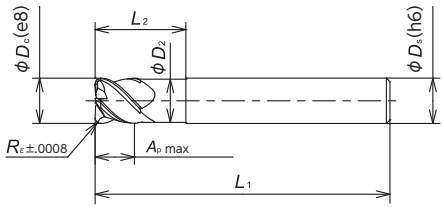
- Continue to machine even if you see BUE, removing BUE may cause chipping or breakage to the edge.
- High speed machining work hardens the material. For this reason, leave at least 0.3mm of material for a finishing process.

RCE for HRSA Materials

RCE-H4 (4-flute with Neck)

○No center cutting edge

Slotting　Pocketing　Ramping　Z=4



Tolerances

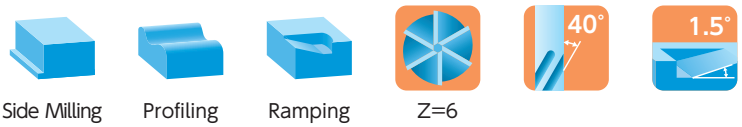
ϕDc / ϕDs	e8	h6
3/8", 8mm, 10mm	-.00098/-.00185"	+0/-.00035"
1/2", 12mm	-.00126/-.00232"	+0/-.00043"

Heat Resistant Alloy | S ●　● : 1st Choice　● : 2nd choice

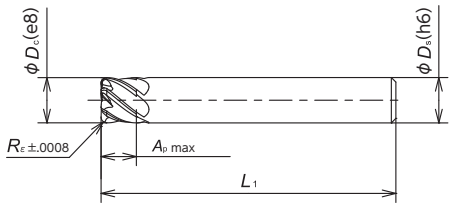
Item Number	Grade SX9	Flute	ϕDc (Inch)	ϕDc (mm)	ϕDs (Inch)	ϕDs (mm)	ϕD2 (Inch)	ϕD2 (mm)	Rε (Inch)	Rε (mm)	Ap max (Inch)	Ap max (mm)	L1 (Inch)	L1 (mm)	L2 (Inch)	L2 (mm)
RCEI375H4R047S	●	4	3/8		3/8		.359		.047		9/32		2.50		3/4	
RCEI500H4R068S	●	4	1/2		1/2		.484		.068		3/8		2.75		1	
RCEM080H4R100S	●	4	.315	8	.315	8	.299	7.6	.039	1.0	.236	6	2.362	60	0.630	16
RCEM100H4R125S	●	4	.394	10	.394	10	.378	9.6	.049	1.25	.295	7.5	2.559	65	0.787	20
RCEM120H4R150S	●	4	.472	12	.472	12	.457	11.6	.059	1.5	.354	9	2.756	70	0.945	24

RCE-J6 (6-flute)

○No center cutting edge



Face Milling　Side Milling　Profiling　Ramping　Z=6



Tolerances

ϕDc / ϕDs	e8	h6
3/8", 8mm, 10mm	-.00098/-.00185"	+0/-.00035"
1/2", 12mm	-.00126/-.00232"	+0/-.00043"

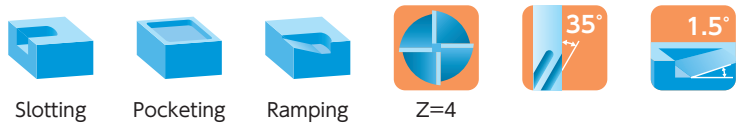
Heat Resistant Alloy | S ●　● : 1st Choice　● : 2nd choice

Item Number	Grade SX9	Flute	ϕDc (Inch)	ϕDc (mm)	ϕDs (Inch)	ϕDs (mm)	Rε (Inch)	Rε (mm)	Ap max (Inch)	Ap max (mm)	L1 (Inch)	L1 (mm)
RCEI375J6R047S	●	6	3/8		3/8		.047		9/32		2.50	
RCEI500J6R068S	●	6	1/2		1/2		.068		3/8		2.75	
RCEM080J6R100S	●	6	.315	8	.315	8	.039	1.0	.236	6	2.362	60
RCEM100J6R125S	●	6	.394	10	.394	10	.049	1.25	.295	7.5	2.559	65
RCEM120J6R150S	●	6	.472	12	.472	12	.059	1.5	.354	9	2.756	70

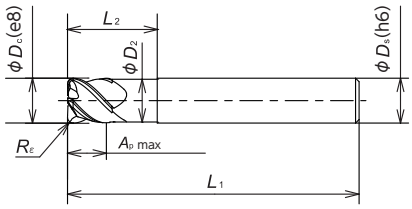
RCS for Cast Iron / HRSA Materials

RCS-H4

○No center cutting edge



Slotting　Pocketing　Ramping　Z=4



Tolerances

φDc / φDs	e8	h6
1/2", 12mm, 5/8", 16mm	-.00126/-.00232"	+0/-.00043"

Cast Iron	K	●
Heat Resistant Alloy	S	●

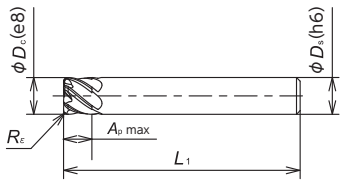
● : 1st Choice　● : 2nd choice

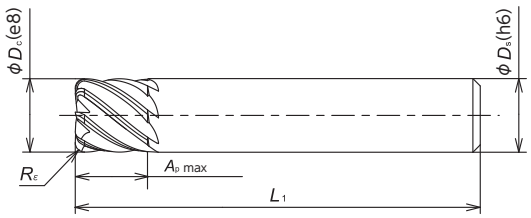
	Item Number	Grade SX9	Flute	φDc (Inch)	φDc (mm)	φDs (Inch)	φDs (mm)	φD2 (Inch)	φD2 (mm)	Rε (Inch)	Rε (mm)	Ap max (Inch)	Ap max (mm)	L1 (Inch)	L1 (mm)	L2 (Inch)	L2 (mm)
RCS-H4	RCSI500H4R068S	●	4	1/2		1/2		.484	12.3	.068	1.73	3/8		2.75	69.85	1	25.4
	RCSI625H4R078S	●	4	5/8		5/8		.605	15.4	.078	1.98	.469	11.91	3	76.2	1.25	31.75
	RCSM120H4R150S	●	4	.472	12	.472	12	.457	11.6	.059	1.5	.354	9	2.76	70	.954	24
	RCSM160H4R200S	●	4	.630	16	.630	16	.610	15.5	.079	2.0	.472	12	2.95	75	1.26	32

RCS-J6 / RCS-J8

○No center cutting edge

Face Milling　Side Milling　Profiling　Ramping　Z=6　Z=8





Tolerances

φDc / φDs	e8	h6
1/2", 12mm, 5/8", 16mm	-.00126/-.00232"	+0/-.00043"
3/4", 20mm	-.00157/-.00287"	+0/-.00051"

Cast Iron	K	●
Heat Resistant Alloy	S	●

● : 1st Choice　● : 2nd choice

	Item Number	Grade SX9	Flute	φDc (Inch)	φDc (mm)	φDs (Inch)	φDs (mm)	Rε (Inch)	Rε (mm)	Ap max (Inch)	Ap max (mm)	L1 (Inch)	L1 (mm)
RCS-J6	RCSI500J6R068S	●	6	1/2		1/2		.068	1.73	3/8		2.75	
	RCSI625J6R078S	●	6	5/8		5/8		.078	1.98	.469	11.91	3	
	RCSM120J6R150S	●	6	.472	12	.472	12	.059	1.5	.354	9	2.76	70
	RCSM160J6R200S	●	6	.630	16	.630	16	.079	2.0	.472	12	2.95	75
RCS-J8	RCSI750J8R094S	●	8	3/4		3/4		.094	2.38	.563	14.29	4.25	
	RCSM200J8R250S	●	8	.787	20	.787	20	.098	2.5	.984	15	4.33	110

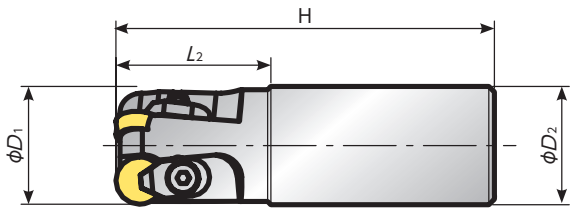
● : Stock
● : Stock (Newly added)
■□RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

AHM series

Accel High speed Mill

* Recommend using torque wrench @35lbs (4Nm)

A.R.+5°
R.R.-7°30'



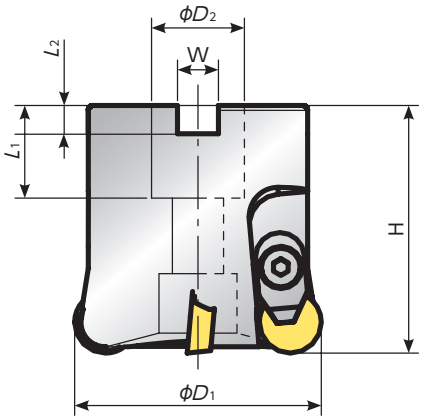
● Inch size cutters

Item Number	Stock		Dimensions (inch)				Clamp	Clamp Screw	Weight (lbs)	Insert
			ϕD_1	D_2	H	L_2				
RPIW0625E0625R02	●	2	.625	.625	3.160	1.250	C-423978	S-3-48*1/4SHCS	0.2	RPG 21.5
RPIW075E075R02	●	2	.750	.750	3.270	1.220	AMS-3	AOB-3S	0.4	RPG 21.5
RPIW100E100R03	●	3	1.000	1.000	3.270	1.000	AMS-4	AOB-4S	0.6	RPG 32
RPIW125E125R03	●	3	1.250	1.250	4.000	1.640	AMS-5T	AOB-5S-T25	1.1	RPG 43
RPIW150E150R03	●	3	1.500	1.500	4.000	1.830			1.6	

● Metric size cutters

Item Number	Stock		Dimensions (㎜)				Clamp	Clamp Screw	Weight (kg)	Insert
			ϕD_1	D_2	H	L_2				
JRPMW032E250R03	○	3	32	25	120	40	AMS-5T	AOB-5S-T25	0.4	RPG 43
JRPMW032E320R03	○		32	32					0.6	
JRPMW040E320R03	○		40	32					0.7	

A.R.+5°
R.R.-2°30' ~ -5°



● Inch size cutters

Item Number	Stock		Dimensions (inch)						Shim	Shim Screw	Clamp	Clamp Screw	A.R.	R.R.	Weight (lbs)	Insert
			ϕD_1	H	D_2	W	L_1	L_2								
RPIW200S075R04	●	4	2.00	2.00	.750	.32	.75	.22	ARP42A	M3*8	AMS-5T	AOB-5S-T25	+5°	+5°	0.9	RPG 43
RPIW300S100R05	●	5	3.00	2.00	1.000	.38	.75	.22					+5°	+5°	2.0	
RPIW400S125R06	●	6	4.00	2.00	1.250	.50	.82	.30					+5°	+5°	4.2	

●Metric size cutters

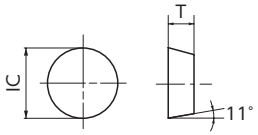
Item Number	Stock		Dimensions (㎜)						Shim	Shim Screw	Clamp	Clamp Screw	A.R.	R.R.	Weight (kg)	Insert
			ϕD_1	H	D_2	W	L_1	L_2								
JRPMW050S220R04	○	4	50	50	22	10.4	20	6.3	ARP42A	M3*8	AMS-5T	AOB-5S-T25	+5°	+5°	0.4	RPG 43
JRPMW063S220R04	○	4	63	50	22	10.4	20	6.3					+5°	+5°	0.6	
JRPMW080S254R05	○	5	80	50	25.4	9.5	25	6.0					+5°	+2°30′	0.9	

Inserts

(inch)	IC	T
RPG 21.5	1/4	3/32
RPG 32	3/8	1/8

(inch)	IC	T
RPG 43	1/2	3/16

● : 1st Choice ● : 2nd choice



		P	M	K	N	S	H
Steel	P			●		●	
Stainless Steel	M			●		●	
Cast Iron	K			●		●	
Non-Ferrous Material	N			●		●	
Heat Resistant Alloy	S			●		●	
Hardened Material	H			●		●	●

Item Number	ISO Item Number	IC	Ceramics					
			SiAlON				Whisker	Alumina - TiC
			SX7	SX3	SX9	SX5	WA1	HC7
RPG 21.5 E02	RPGN 060200 E004	1/4	●					
RPG 21.5 T0220	RPGN 060200 T00520	1/4		●	●	●	●	
RPG 21.5 T0320	RPGN 060200 T00820	1/4	●					
RPG 21.5 T0420	RPGN 060200 T01020	1/4					●	
RPG 32 E02	RPGN 090300 E004	3/8	●					
RPG 32 T0220	RPGN 090300 T00520	3/8		●	●		●	
RPG 32 T0320	RPGN 090300 T00820	3/8	●					
RPG 32 T0420	RPGN 090300 T01020	3/8					●	
RPG 43 E01	RPGN 120400 E002	1/2			●			
RPG 43 E02	RPGN 120400 E004	1/2	●					
RPG 43 T0220	RPGN 120400 T00520	1/2		●	●	●	●	
RPG 43 T0225	RPGN 120400 T00525	1/2			○			
RPG 43 T0320	RPGN 120400 T00820	1/2	●					
RPG 43 T0420	RPGN 120400 T01020	1/2			●	●	●	●
RPG 43 Z0620	RPGN 120400 Z01520	1/2					●	
RPG 43 Z0825	RPGN 120400 Z02025	1/2						●

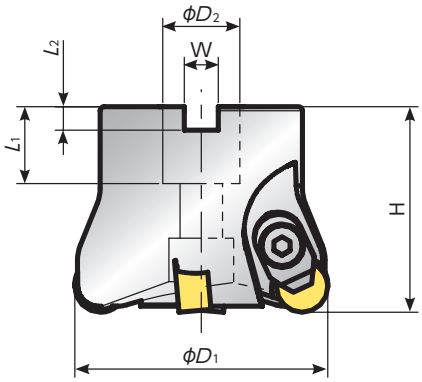
Recommend Cutting Conditions

Work Material		Grade	Dry	Wet	Cutting Speed (SFM) 200 700 1200 1700 2200 2700 3200 3700	Feed (IPT) .002 .003 .004 .005 .006 .007	Depth of Cut (inch)
S		SX7	●				~.150
Heat Resistant Alloys		SX3	●				~.150
		SX9	●				~.150
H		WA1	●	○			~.150
Hardened Steel	HRC 45-55	HC7	●	○			~.150
	HRC 55-65	WA1	●	○			~.150
		HC7	●	○			~.150

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

* Recommend using torque wrench @35lbs (4Nm)

A.R.-5°
R.R.-10°

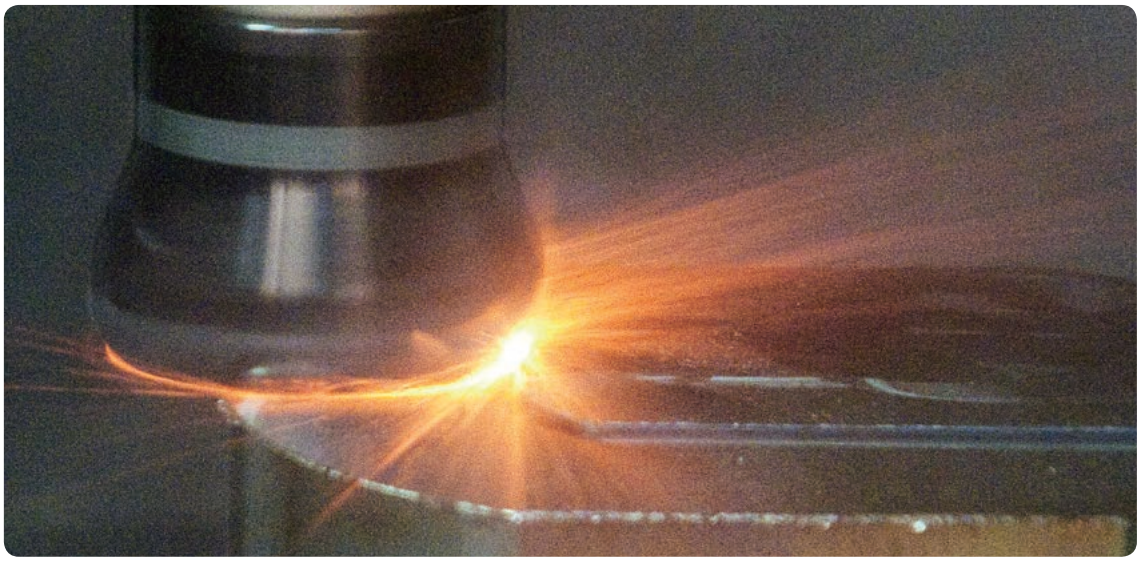


● Inch size cutters

Item Number	Stock		Dimensions (inch)						Clamp	Clamp Screw	Weight (lbs)	Insert
			ϕD1	H	ϕD2	W	L1	L2				
RNIW200S075R04-43	●	4	2.00	2.00	.750	.32	.75	.22	AMS-6T	AOB-6S-T30	1.0	RNG 43
RNIW200S075R03	●	3	2.00	2.00	.750	.32	.75	.22			1.0	RNG 45
RNIW250S075R04	●	4	2.50	2.00	.750	.32	.75	.22			1.3	
RNIW300S100R05	●	5	3.00	2.00	1.000	.38	.75	.22			1.6	
RNIW400S125R06	●	6	4.00	2.00	1.250	.51	.82	.30			4.2	

● Metric size cutters

Item Number	Stock		Dimensions (㎜)						Clamp	Clamp Screw	Weight (kg)	Insert
			ϕD1	H	ϕD2	W	L1	L2				
JRNMW050S220R03	○	3	50	50	22	10.4	20	6.3	AMS-6T	AOB-6S-T30	0.4	RNG 45
JRNMW063S220R04	○	4	63	50	22	10.4	20	6.3			0.6	
JRNMW080S254R05	○	5	80	50	25.4	9.5	25	6.0			0.9	

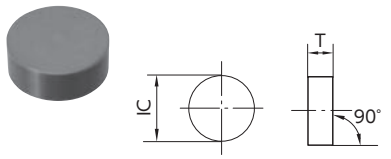


Inserts

● : 1st Choice ● : 2nd choice

(inch)	IC	T
RNG 43	1/2	3/16

(inch)	IC	T
RNG 45	1/2	5/16



Steel	P								
Stainless Steel	M								
Cast Iron	K	●	●	●	●	●	●	●	●
Non-Ferrous Material	N								
Heat Resistant Alloy	S	●	●	●	●	●			
Hardened Material	H					●			●

Item Number	ISO Item Number	IC	Ceramics							
			SiAlON				Whisker	Silicon Nitride		Alumina - TiC
			SX7	SX3	SX9	SX5	WA1	SX6	SP9	HC7
RNG 43 E01	RNGN 120400 E002	1/2			●					
RNG 43 E02	RNGN 120400 E004	1/2	●	●						
RNG 43 T0220	RNGN 120400 T00520	1/2		●	●	●	●			
RNG 43 T0225	RNGN 120400 T00525	1/2			○		○			
RNG 43 T0320	RNGN 120400 T00820	1/2	●							
RNG 43 T0420	RNGN 120400 T01020	1/2			●		●		●	●
RNG 43 T0820	RNGN 120400 T02020	1/2						●		
RNG 43 T0825	RNGN 120400 T02025	1/2			○					
RNG 43 Z0825	RNGN 120400 Z02025	1/2								●
RNG 45 E01	RNGN 120700 E002	1/2			●		●			
RNG 45 E02	RNGN 120700 E004	1/2	●	●						
RNG 45 T0220	RNGN 120700 T00520	1/2		●	●	●	●			
RNG 45 T0225	RNGN 120700 T00525	1/2			○		○			
RNG 45 T0320	RNGN 120700 T00820	1/2	●							
RNG 45 T0420	RNGN 120700 T01020	1/2			●	●	●			●
RNG 45 Z0620	RNGN 120700 Z01520	1/2					●			
RNG 45 Z0825	RNGN 120700 Z02025	1/2								●

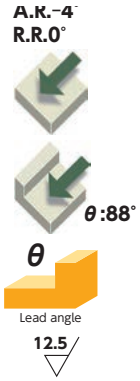
Recommend Cutting Conditions

Work Material		Grade	Dry	Wet	Cutting Speed (SFM) 200 700 1200 1700 2200 2700 3200 3700	Feed (IPT) .002 .003 .004 .005 .006 .007	Depth of Cut (inch)
S		SX7	●				~.150
Heat Resistant Alloys		SX3	●				~.150
		SX9	●				~.150
H		WA1	●	○			~.150
Hardened Steel	HRC 45-55	HC7	●	○			~.150
	HRC 55-65	WA1	●	○			~.150
		HC7	●	○			~.150

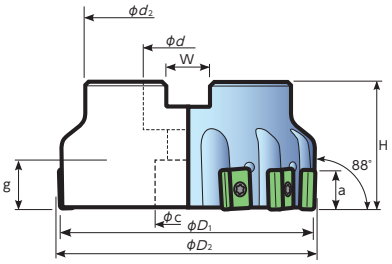
● : Stock
● : Stock (Newly added)
■□RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

XFM (Extreme Feed Mill) series

- Lead angle 88 degress - LNX324 〈A.R.-4° ,R.R.0°〉



Left hand added!



Inch size cutters

Item Number	Stock R	Stock L		Dimensions (inch) ϕD₁	ϕD₂	H	a	ϕd	W	ϕd₂	ϕc	g	Weight (lbs)	Insert
JXTM15IN-88-4R/L	●	●	4	1.50	1.55	1.75	.551	.750	.32	1.350	.610	—	1.0	LNX 324
JXTM15IN-88-5R/L	●	●	5	1.50	1.55	1.75	.551	.750	.32	1.350	.610	—	1.0	
JXTM20IN-88-6R/L	●	●	6	2.00	2.05	2.00	.551	.750	.32	1.770	.610	—	1.0	
JXTM25IN-88-8R/L	●	●	8	2.50	2.55	2.00	.551	1.000	.38	2.000	.760	—	1.5	
JXTM30IN-88-10R/L	●	●	10	3.00	3.04	2.00	.551	1.000	.38	2.362	.827	.539	2.4	
JXTM40IN-88-13R/L	●	●	13	4.00	4.04	2.00	.551	1.500	.64	3.150	2.000	.870	3.9	
JXTM50IN-88-16R/L	●	●	16	5.00	5.04	2.00	.551	1.500	.64	3.740	2.000	.870	6.5	
JXTM60IN-88-18R/L	●	●	18	6.00	6.05	2.00	.551	2.000	.75	4.000	2.800	1.120	8.0	

＊ 8 corners can be used when using right and left hand cutter.

Metric size cutters

Item Number	Stock R	Stock L		Dimensions (mm) ϕD₁	ϕD₂	H	a	ϕd	W	ϕd₂	ϕc	g	Weight (kg)	Insert
JXTM080-88-10R/L	○		10	80	83	50	14	25.4	9.5	58	36	14	1.1	LNX 324
JXTM100-88-13R/L	○		13	100	103	50	14	31.75	12.7	77	50	17	1.8	
JXTM125-88-16R/L	○		16	125	128	58	14	38.1	15.9	77	55	22	3.1	

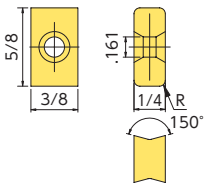
Spare Parts

Insert Screw	Wrench
LRIS-4＊12	LLR-25S

Screw Drivers (OP)

Bit	Handle	Handle & Bit
HLR-25S	XX2815-04	XX2815-04-25S

Inserts



Item Number	R	Silicon Nitride SX6	Silicon Nitride SP9
LNX 324-02 T0420 (LNX 324-08 T01020)	.031	●	●
LNX 324-03 T0420 (LNX 324-12 T01020)	.047	●	●
LNX 324-04 T0420 (LNX 324-16 T01020)	.063	●	●

＊ Recommend using torque wrench @35lbs (4Nm)

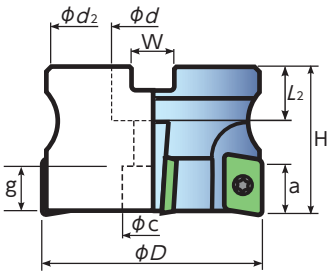
＊8 corners can be used when using right and left hand cutter.

Recommend Cutting Conditions

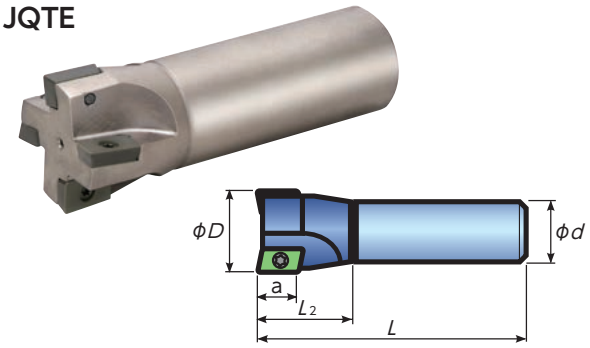
Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	●			~.300
	SP9	●	○			~.300
Ductile Iron	SP9	●	○			~.300

JQ series

JQTS



JQTE



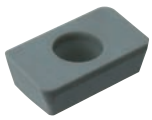
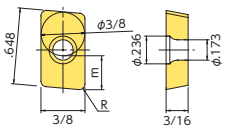
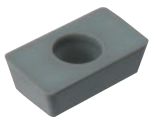
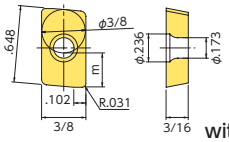
● JQTS Metric size cutters

Item Number	Stock		Dimensions (mm)									Weight (kg)	A.R.	R.R.	Insert Screw	Wrench	Insert
			ϕD	H	L_2	a	ϕd	W	$ϕd_2$	ϕc	g						
JQTS040-90-4R	●	4	40	40	18	14	16	8.4	35	12	4.2	0.2	+6°	−13°	FSI22-4.0∗11	T-15A	APCW 1604
JQTS050-90-5R	●	5	50	40	22	14	22	10.4	45	18	10.7	0.3	+6°	−10°			
JQTS063-90-6R	●	6	63	50	22	14	22	10.4	58	18	14.5	1.4	+6°	−12°			

● JQTE Metric size cutters

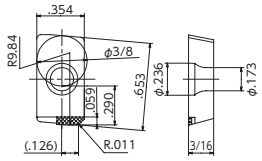
Item Number	Stock		Dimensions (mm)					Weight (kg)	A.R.	R.R.	Insert Screw	Wrench	Insert
			ϕD	L	L_2	a	ϕd						
JQTE020-90-1R	●	1	20	100	30	14	20	0.2	+6°	−13°	FSI23-4.0∗7	T-15A	APCW 1604
JQTE025-90-2R	●	2	25	100	30	14	25	0.3	+6°	−13°			
JQTE032-90-3R	○	3	32	110	35	14	32	0.5	+6°	−13°	FSI22-4.0∗11		
JQTE040-90-4R	○	4	40	110	37	14	32	0.6	+6°	−13°			

● Inserts

Shape	Item Number	R	m	Silicon Nitride SX6	Silicon Nitride SP9
 	**APCW 160408 T01020**	.031	.288	●	●
	APCW 160412 T01020	.047	.286	●	●
	APCW 160420 T01020	.079	.284	●	●
  with wiper	**APCW 1604 PDTR** The insert must be installed in all insert pockets	—		○	○

∗ Recommend using torque wrench @35lbs (4Nm)

● CBN Wiper Insert: Can install 1 or 2 CBN Wiper Inserts with ceramic insert.

Shape	Item Number	B30	B52
∗Slightly taller insert than ceramic inserts so can be installed in standard cutter. 	**APCW 1604 PDSRCE**	○	○

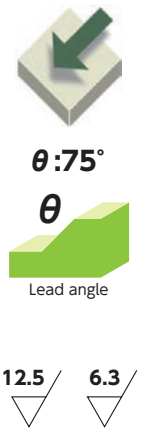
● Recommend Cutting Conditions

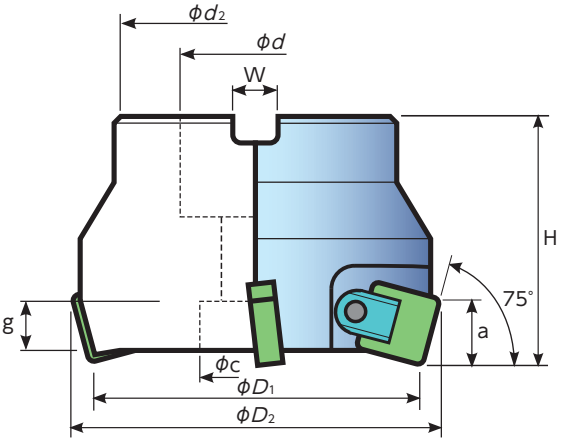
Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	○			~.320
	SP9	●	●			~.320
Ductile Iron	SP9	●	○			~.320

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only)
Ⓡ Ⓛ : 1-2 week delivery (Right / Left-hand only, Newly added)

HVM series
High Velocity Mill

Lead angle 75 degree -SN43〈A.R. -6° R.R. -10°〉





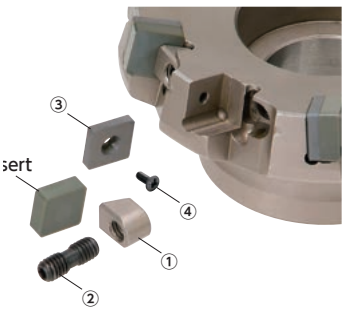
Inch size cutters

Item Number	Stock		Dimensions (inch)									Weight (lbs)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
JFDX25IN-75-06R	●	6	2.50	2.732	2.00	.472	.750	.32	2.362	.669	.760	2.0	SNG 43
JFDX30IN-75-08R	●	8	3.00	3.232	2.00	.472	1.000	.38	2.362	.827	.760	2.2	
JFDX40IN-75-10R	●	10	4.00	4.232	2.00	.472	1.500	.64	3.150	2.000	.850	3.3	
JFDX50IN-75-12R	●	12	5.00	5.232	2.00	.472	1.500	.64	3.740	2.000	.850	5.7	
JFDX60IN-75-16R	●	16	6.00	6.244	2.50	.472	2.000	.75	3.937	2.835	.945	8.8	

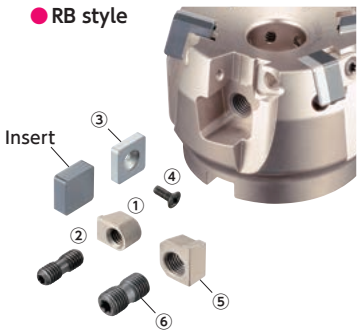
Metric size cutters

Item Number	Stock		Dimensions (mm)									Weight (kg)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
JFDX063-75-06R	○	6	63	70	50	12	22.0	10.4	58	18	18.5	0.8	SNG 43
JFDX080-75-08R	○	8	80	87	50	12	25.4	9.5	62	36	15.5	1.1	
JFDX080-75-08RB*	○	8	80	87	50	12	25.4	9.5	62	36	15.5	1.36	
JFDX080MM-75-08R		8	80	87	50	12	27.0	12.4	64	19	15.5	1.1	
JFDX100-75-10R	○	10	100	107	50	12	31.75	12.7	62	45	16.5	1.4	
JFDX100-75-10RB*	○	10	100	107	50	12	31.75	12.7	62	45	16.5	1.83	
JFDX100MM-75-10R		10	100	107	50	12	32.0	14.4	64	45	23.5	1.3	
JFDX125-75-12R	○	12	125	132	58	12	38.1	15.9	83	55	21.5	2.6	
JFDX125-75-12RB*	○	12	125	132	58	12	38.1	15.9	83	55	21.5	3.34	
JFDX125MM-75-12R		12	125	132	58	12	40.0	16.4	85	55	26.5	2.3	
JFDX160-75-16R		16	160	166	60	12	50.8	19	100	72	20.5	4.1	
JFDX160-75-16RB*		16	160	166	60	12	50.8	19	100	72	20.5	5.47	

* One insert pocket can be adjusted for height



● RB style

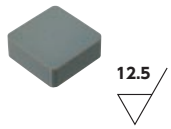
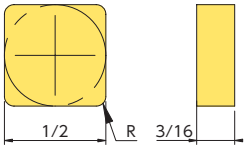
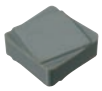
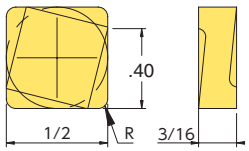
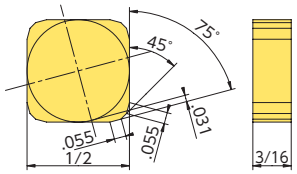


Spare Parts

Wedge	Wedge Screw	Torx Wrench	Shim	Shim Screw
①	② T15	T15	③	④
HLW175	WS0616-T15	T-15A	ASN423	M3×8

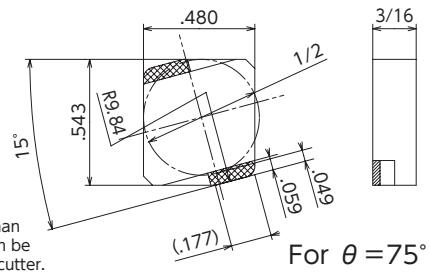
Wedge	Wedge Screw	Wrench
⑤	⑥	T25
HLW177	WS0816-T25	LLR-T25

● Inserts

Shape	Dimensions (inch)	Item Number	R	Silicon Nitride		Whisker
				SX6	SP9	WA1
 12.5	 1/2 R 3/16	**SNG 432 T0220**	.031			●
		SNG 432 T0420	.031	●	●	●
		SNG 433 T0220	.047			●
		SNG 433 T0420	.047	●	●	●
		SNG 434 T0220	.063			●
		SNG 434 T0420	.063	●	●	●
 12.5 with chipbreaker	 .40 1/2 R 3/16	**SNGF 433 TRCC413** Reduce tool pressure	.047	●		
		SNGF 433 RT0425 C421 Reduce tool pressure	.047		●	
6.3 with wiper	 45° 75° .055 1/2 .055 .031 3/16	**SNG 43EN TN** The insert must be installed in all insert pockets	—	●	●	

* Recommend using torque wrench @35lbs (4Nm)

● CBN Wiper Insert: Can install 1 or 2 CBN Wiper Inserts with ceramic inserts.

Dimensions (inch)	Item Number	R	CBN	
			B30	B52
 .480 3/16 1/2 .543 R9.84 15° .059 .049 (.177) For θ =75°	**FDX 1204-75-50R**	—	●	●

*Slightly taller insert than ceramic inserts so can be installed in standard cutter.

● Recommend Cutting Conditions

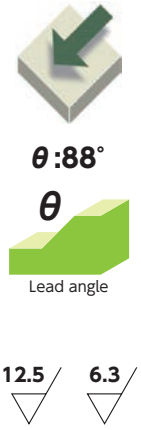
Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	●			~.220
	SP9	●	○			~.220
Ductile Iron	SP9	●	○			~.220

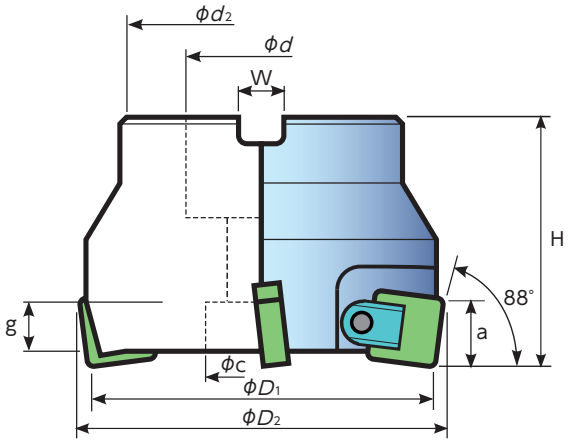
Inserts(SNG) ➡E13

● : Stock
● : Stock (Newly added)
■□RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

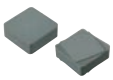
HVM series
High Velocity Mill

Lead angle 88 degree -SN43〈A.R. -6° R.R. -10°〉

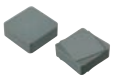


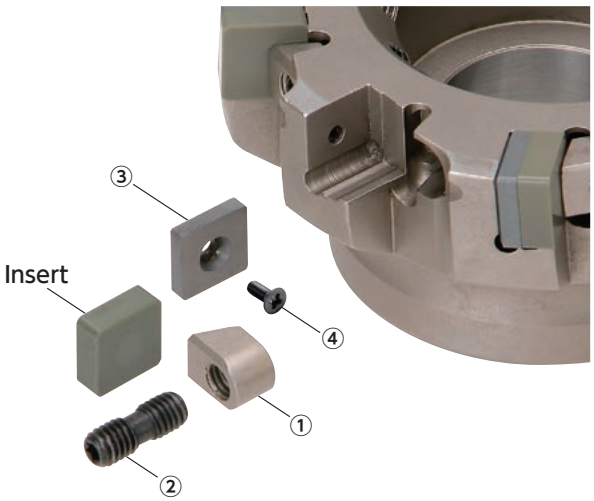


Inch size cutters

Item Number	Stock		Dimensions (inch)									Weight (lbs)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
JFDX25IN-88-06R	●	6	2.50	2.531	2.00	.472	.750	.32	2.362	.669	.760	1.8	 SNG 43
JFDX30IN-88-08R	●	8	3.00	3.031	2.00	.472	1.000	.38	2.362	.827	.760	2.1	
JFDX40IN-88-10R	●	10	4.00	4.031	2.00	.472	1.500	.64	3.150	2.000	.850	3.2	
JFDX50IN-88-12R	●	12	5.00	5.031	2.00	.472	1.500	.64	3.740	2.000	.850	5.8	

Metric size cutters

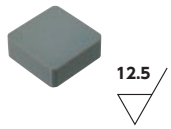
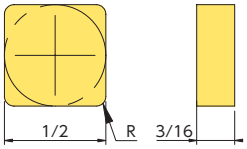
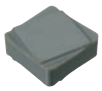
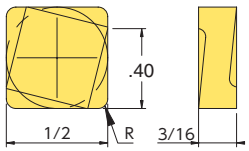
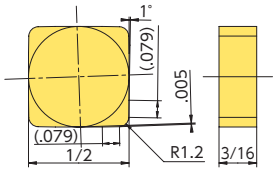
Item Number	Stock		Dimensions (mm)									Weight (kg)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
JFDX063-88-06R	○	6	63	64	50	12	22.0	10.4	58	18	13	0.8	 SNG 43
JFDX080-88-08R	○	8	80	81	50	12	25.4	9.5	62	36	13.5	1.0	
JFDX080MM-88-08R		8	80	81	50	12	27.0	12.4	64	19	13.5	1.1	
JFDX100-88-10R	○	10	100	101	50	12	31.75	12.7	62	45	16.5	1.4	
JFDX100MM-88-10R		10	100	101	50	12	32.0	14.4	64	45	23.5	1.3	
JFDX125-88-12R	○	12	125	126	58	12	38.1	15.9	83	55	21.5	2.6	
JFDX125MM-88-12R		12	125	126	58	12	40.0	16.4	85	55	26.5	2.5	
JFDX160-88-16R		16	160	156	60	12	50.8	19	100	72	20.5	4.1	



Spare Parts

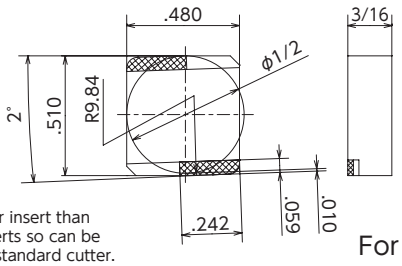
Wedge	Wedge Screw	Torx Wrench	Shim	Shim Screw
①	② T15	T15	③	④
HLW175	WS0616-T15	T-15A	ASN423	M3×8

Inserts

Shape	Dimensions (inch)	Item Number	R	Silicon Nitride		Whisker
				SX6	SP9	WA1
 12.5	 1/2 R 3/16	**SNG 432 T0220**	.031			●
		SNG 432 T0420	.031	●	●	●
		SNG 433 T0220	.047			●
		SNG 433 T0420	.047	●	●	●
		SNG 434 T0220	.063			●
		SNG 434 T0420	.063	●	●	●
 12.5 with chipbreaker	 .40 1/2 R 3/16	**SNGF 433 TRCC413** Reduce tool pressure	.047	●		
		SNGF 433 RT0425 C421 Reduce tool pressure	.047		●	
6.3 with wiper	 1° (.079) .005 (.079) 1/2 R1.2 3/16	**SNEN 1204ZN T01025** The insert must be installed in all insert pockets	—	●	●	

* Recommend using torque wrench @35lbs (4Nm)

CBN Wiper Insert: Can install 1 or 2 CBN Wiper Inserts with ceramic inserts.

Dimensions (inch)	Item Number	R	CBN	
			B30	B52
 .480 3/16 φ1/2 2° .510 R9.84 .242 .059 .010 For θ=88°	**FDX 1204-88-50R**	—	●	●

*Slightly taller insert than ceramic inserts so can be installed in standard cutter.

Recommend Cutting Conditions

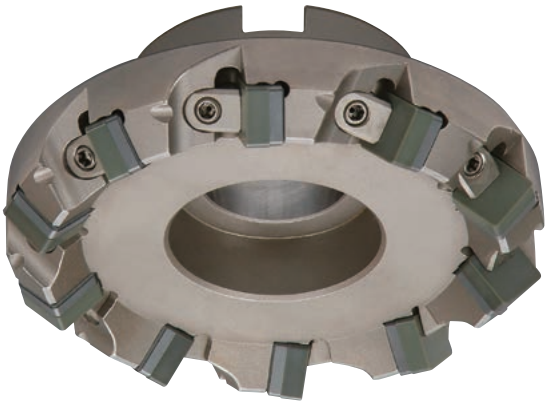
Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	**SX6**	●	●			~.220
Gray Cast Iron	**SP9**	●	○			~.220
Ductile Iron	**SP9**	●	○			~.220

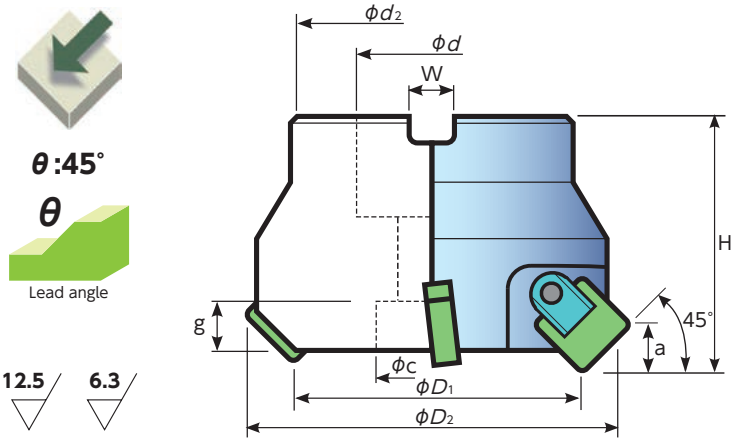
Inserts(SNG) ➡E13

● : Stock
● : Stock (Newly added)
■□RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

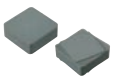
HVM (High Velocity Mill) series

Lead angle 45 degree -SN43〈A.R. -6° R.R. -10°〉

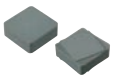


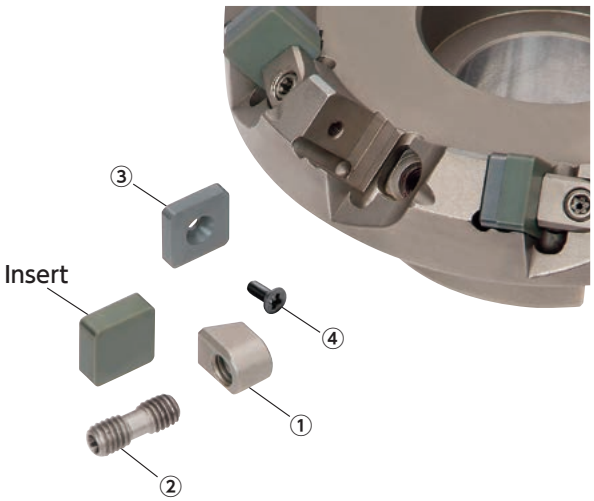


Inch size cutters

Item Number	Stock		Dimensions (inch)									Weight (lbs)	Insert
			ϕD₁	ϕD₂	H	a	ϕ d	W	ϕ d₂	ϕ c	g		
JFDX25IN-45-06R	●	6	2.50	3.129	2.00	.315	.750	.32	2.362	.669	.445	2.2	 SNG 43
JFDX30IN-45-08R	●	8	3.00	3.629	2.00	.315	1.000	.38	2.362	.827	.445	2.8	
JFDX40IN-45-10R	●	10	4.00	4.629	2.00	.315	1.500	.64	3.150	2.000	.535	3.9	
JFDX50IN-45-12R		12	5.00	5.629	2.00	.315	1.500	.64	3.740	2.000	.535	4.1	

Metric size cutters

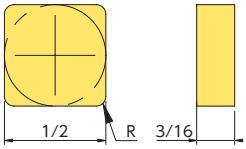
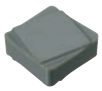
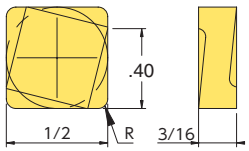
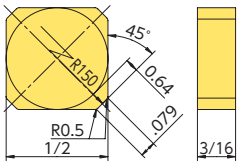
Item Number	Stock		Dimensions (mm)									Weight (kg)	Insert
			ϕD₁	ϕD₂	H	a	ϕ d	W	ϕ d₂	ϕ c	g		
JFDX063-45-06R	○	6	63	72	50	8	22.0	10.4	58	18	10.5	0.9	 SNG 43
JFDX080-45-08R	○	8	80	95	50	8	25.4	9.5	62	36	10.5	1.2	
JFDX080MM-45-08R	●	8	80	95	50	8	27.0	12.4	64	19	10.5	1.3	
JFDX100-45-10R	○	10	100	120	50	8	31.75	12.7	62	45	8.5	1.7	
JFDX100MM-45-10R	●	10	100	120	50	8	32.0	14.4	64	45	8.5	1.5	
JFDX125-45-12R	○	12	125	146	58	8	38.1	15.9	83	55	13.5	2.8	
JFDX125MM-45-12R	●	12	125	146	58	8	40.0	16.4	85	55	13.5	2.9	



Spare Parts

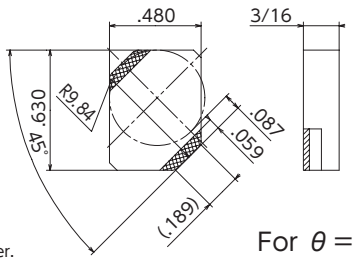
Wedge	Wedge Screw	Torx Wrench	Shim	Shim Screw
①	② T15	T15	③	④
HLW175	WS0616-T15	T-15A	ASN423	M3×8

Inserts

Shape	Dimensions (inch)	Item Number	R	Silicon Nitride		Whisker
				SX6	SP9	WA1
12.5	 1/2 R 3/16	**SNG 432 T0220**	.031			●
		SNG 432 T0420	.031	●	●	●
		SNG 433 T0220	.047			●
		SNG 433 T0420	.047	●	●	●
		SNG 434 T0220	.063			●
		SNG 434 T0420	.063	●	●	●
 12.5 with chipbreaker	 .40 1/2 R 3/16	**SNGF 433 TRCC413** Reduce tool pressure	.047	●		
		SNGF 433 RT0425 C421 Reduce tool pressure	.047		●	
6.3 with wiper	 45° R150 0.64 .079 R0.5 1/2 3/16	**SNG 43AN TW** The insert must be installed in all insert pockets	—	●	●	

* Recommend using torque wrench @35lbs (4Nm)

CBN Wiper Insert: Can install 1 or 2 CBN Wiper Inserts with ceramic inserts.

Dimensions (inch)	Item Number	R	CBN	
			B30	B52
 .480 3/16 .630 45° R9.84 .087 .059 (.189) For θ =45°	**FDX 1204-45-50R**	—	●	●

*Slightly taller insert than ceramic inserts so can be installed in standard cutter.

Recommend Cutting Conditions

Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	●○			~.220
Gray Cast Iron	SP9	●	○			~.220
Ductile Iron	SP9	●	○			~.220

Inserts(SNG) ➡E13

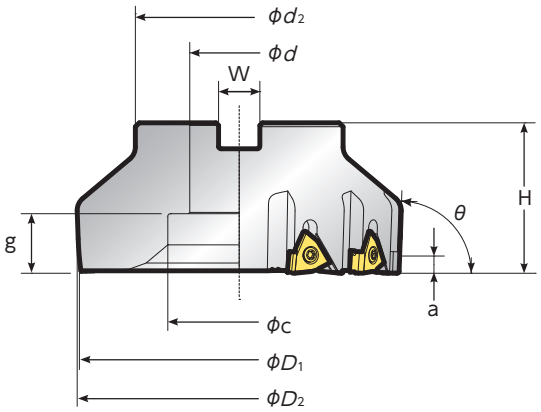
● : Stock
● : Stock (Newly added)
■□RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

TRI series

Lead angle 88 degress

A. R. 5°

R. R. 4°, 7°, 10°

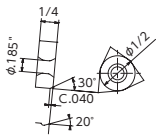
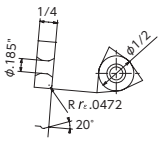


Metric size cutters

Item Number	Stock		Dimensions (mm)										Weight (kg)	Rake angle(°)		Insert Screw	Wrench
			ϕD₁	ϕD₂	H	a＊1	a＊2	ϕd	W	ϕd₂	ϕc	g		A.R.	R.R.		
JWNXM063C2200R06-A	○	6	63	63	50	5.5	4.5	22	10.4	60	18	15.5	0.9	+5	+4	FSI26-4.0 ＊12-LH	LLR-T15
JWNXM080A2540R08-A	○	8	80	80	50	5.5	4.5	25.4	9.5	60	36	15	1.1	+5	+7		
JWNXM100A3175R10-A	○	10	100	100	50	5.5	4.5	31.75	12.7	80	50	18	1.8	+5	+10		
JWNXM125A3810R12-A	○	12	125	125	58	5.5	4.5	38.1	15.9	80	55	23	3	+5	+10		
JWNXM160A5080R16-A	○	16	160	160	60	5.5	4.5	50.8	19	100	72	22	4.9	+5	+10		

＊1 Dimension when set the insert 「WNX44-C10T01020」
＊2 Dimension when set the insert 「WNX44-R12T01020」

Insert

Shape	Dimensions (inch)	Item number	C or r_ε	Silicon Nitride	
				SX6	SP9
		WNX44-C10T0420	C .040	○	○
		WNX44-R12T0420	R .0472	○	○

＊ Recommend using torque wrench @35lbs (4Nm)

○ : New standard stock items

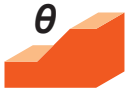
Recommend Cutting Conditions

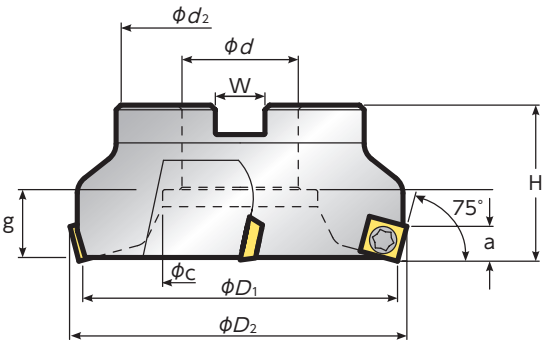
Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	●			~.220
	SP9	●	○			~.220
Ductile Iron	SP9	●	○			~.220

HSM High speed heavy mill series

● Lead angle 75 degress - SDW43 〈A.R.+12° ,R.R.0°〉

θ : 75°





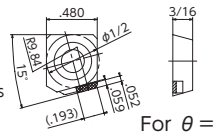
● Inch size cutters

Item Number	Stock		Dimensions (inch)									Weight (lbs)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
E250R100-SDW43-4C	●	4	2.500	2.780	2.000	.360	1.000	.38	2.290	.820	.787	1.9	SDCW 43
E300R100-SDW43-5C	●	5	3.000	3.280	2.000	.360	1.000	.38	2.290	.820	.787	2.4	
E400R150-SDW43-6C	●	6	4.000	4.280	2.000	.360	1.500	.64	3.200	2.000	.875	3.7	
E500R150-SDW43-7C	●	7	5.000	5.280	2.000	.360	1.500	.64	3.200	2.000	.875	5.4	

● Metric size cutters

Item Number	Stock		Dimensions (mm)									Weight (kg)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
JSDW063-75-04R	○	4	63	70.6	50	9.1	22	10.4	58	18	14	0.8	SDCW 43
JSDW080-75-05R	○	5	80	83.3	50	9.1	25.4	9.5	62	36	15.5	1.0	
JSDW100-75-06R	○	6	100	108.7	50	9.1	31.75	12.7	58	45	16.5	1.3	
JSDW125-75-07R	○	7	125	134.1	58	9.1	38.1	15.9	79	55	21.5	2.5	
JSDW160-75-10R		10	160	165	68	9.1	50.8	19	100	72	28.5	4.0	

● CBN Wiper Insert: Can install 1 or 2 CBN Wiper Inserts with ceramic inserts.

Shape	Item Number	CBN	
		B30	B52
 ＊Slightly taller insert than ceramic inserts so can be installed in standard cutter. For θ=75°	SDW 1204-75-50R	○	○

● Spare Parts

Insert Screw	Torx Wrench
	T20
FSI21-5.0＊12.45	T-20

● Inserts

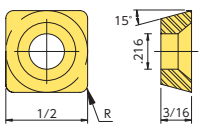


Fig.1: SDCW43

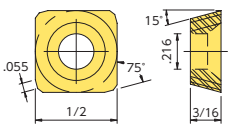


Fig.2: SDCW43EE with wiper

Item Number	R	Fig.	Silicon Nitride	
			SX6	SP9
SDCW 432 T0420	.031	1	●	○
SDCW 433 T0420	.047	1	●	
SDCW 434 T0420	.063	1	●	
SDCW 43EER T0420*	—	2	●	○

＊ Recommend using torque wrench @35lbs(4Nm)

＊ The insert must be installed in all insert pockets

● Recommend Cutting Conditions

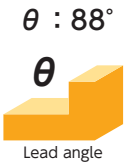
Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	●			~.220
	SP9	●	○			~.220
Ductile Iron	SP9	●	○			~.220

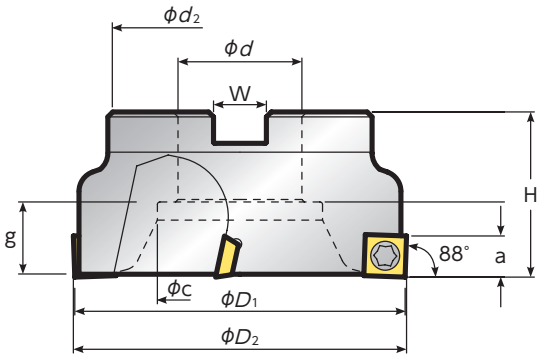
Inserts(SDCW) ➡E12

● : Stock
● : Stock (Newly added)
■□RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

HSM High Speed Shear Mill series

Lead angle 88 degress - SDW43 〈A.R.+12° ,R.R.0°〉





Inch size cutters

Item Number	Stock		Dimensions (inch)									Weight (lbs)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
P250R100-SDW43-4C	●	4	2.500	2.590	2.000	.400	1.000	.38	2.290	.820	.787	1.7	SDCW 43
P300R100-SDW43-6C	●	6	3.000	3.070	2.000	.400	1.000	.38	2.290	.820	.787	2.2	
P400R150-SDW43-8C	●	8	4.000	4.070	2.000	.400	1.500	.64	3.200	2.000	.875	3.5	
P500R150-SDW43-10C	●	10	5.000	5.070	2.000	.400	1.500	.64	3.200	2.000	.875	5.2	

Spare Parts

Insert Screw	Torx Wrench
	T20
FSI21-5.0＊12.45	T-20

Inserts

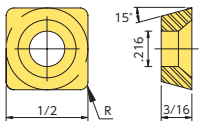


Fig.1: SDCW43

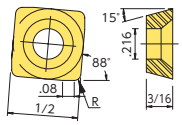


Fig.2: SDCW43PE with wiper

Item Number	R	Fig.	Silicon Nitride	
			SX6	SP9
SDCW 432 T0420	.031	1	●	○
SDCW 433 T0420	.047	1	●	
SDCW 434 T0420	.063	1	●	
SDCW 43PE T0420R*	.031	2	●	

＊ Recommend using torque wrench @35lbs (4Nm)

＊ The insert must be installed in all insert pockets

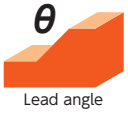
Recommend Cutting Conditions

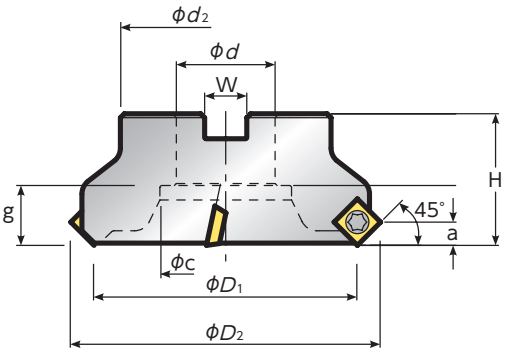
Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	●			~.220
	SP9	●	○			~.220
Ductile Iron	SP9	●	○			~.220

Inserts(SDCW) ➔E12

● Lead angle 45 degress - SDW43 〈A.R.+12° ,R.R.0°〉

θ : 45°





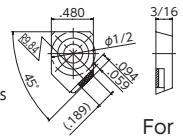
● Inch size cutters

Item Number	Stock		Dimensions (inch)									Weight (lbs)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
A300R100-SDW43-6C	●	6	3.000	3.740	2.000	.260	1.000	.38	2.290	.820	.787	2.3	SDCW 43
A400R150-SDW43-7C	●	7	4.000	4.740	2.000	.260	1.500	.64	3.200	2.000	.875	3.3	
A500R150-SDW43-8C	●	8	5.000	5.740	2.000	.260	1.500	.64	3.810	2.120	.871	5.0	

● Metric size cutters

Item Number	Stock		Dimensions (mm)									Weight (kg)	Insert
			ϕD1	ϕD2	H	a	ϕd	W	ϕd2	ϕc	g		
JSDW080-45-06R	○	6	80	95.0	50	6.6	25.4	9.5	62	36	18	1.1	SDCW 43
JSDW100-45-07R	○	7	100	120.4	50	6.6	31.75	12.7	58	45	16	1.4	
JSDW125-45-08R	○	8	125	145.8	58	6.6	38.1	15.9	79	55	21	2.6	

● CBN Wiper Insert: Can install 1 or 2 CBN Wiper Inserts with ceramic inserts.

Shape	Item Number	CBN	
		B30	B52
＊Slightly taller insert than ceramic inserts so can be installed in standard cutter.  For θ＝45°	SDW 1204-45-50R	●	●

● Spare Parts

Insert Screw	Torx Wrench
	T20
FSI21-5.0＊12.45	T-20

● Inserts

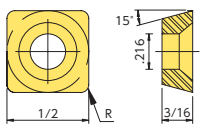


Fig.1: SDCW43

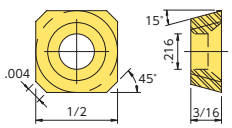


Fig.2: SDCW43AE with wiper

Item Number	R	Fig.	Silicon Nitride	
			SX6	SP9
SDCW 432 T0420	.031	1	●	○
SDCW 433 T0420	.047	1	●	
SDCW 434 T0420	.063	1	●	
SDCW 43AE T0420*	—	2	●	○

＊ Recommend using torque wrench @35lbs (4Nm)

＊ The insert must be installed in all insert pockets

● Recommend Cutting Conditions

Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 700 1200 1700 2200 2700 3200 3700 4200	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
K						
Gray Cast Iron	SX6	●	●			~.200
	SP9	●	○			~.200
Ductile Iron	SP9	●	○			~.200

Inserts(SDCW) ➡E12

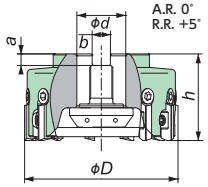
● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

HFC High Feed Cutter series Adjustable type

Features

- ***More teeth = More productivity***
- ***Light weight aluminum body***
- ***Adjustable edge height***
- ***Produces outstanding surface finishes***
- ***Internal coolant supply***
- ***Inserts can be reground up to 4 times***
- ***Guaranteed setup service is available***

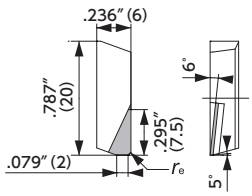
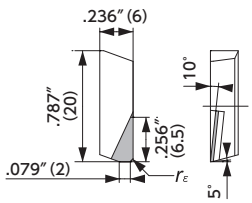
Cutter



Item Number	Stock		Weight	Dimensions ϕD		h		ϕ d		b		a		Max RPM	Arbor style	Arbor bolt	Recommended tightening torque	
			lbs*	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm				N • m	lb • ft
JHF050C2200R07	●	7	0.5	1.969	50	1.772	45	.866	22.0	.409	10.4	.409	6.3	20,000	FMC22	CS1040A	20	14.8
JHF063C2200R10	●	10	0.8	2.480	63	1.772	45	.866	22.0	.409	10.4	.409	6.3	20,000	FMC22	CS1040A	20	14.8
JHF080A2540R12	●	12	1.1	3.150	80	1.772	45	1.000	25.4	.374	9.5	.374	6.0	18,000	FMA25.4	MBC-M12	40	29.5
JHF100A2540R16	●	16	1.6	3.937	100	1.772	45	1.000	25.4	.374	9.5	.374	6.0	18,000	FMA25.4	MBC-M12	40	29.5
JHF125A2540R22	●	22	2.4	4.921	125	1.772	45	1.000	25.4	.374	9.5	.374	6.0	15,000	FMA25.4	MBC-M12	40	29.5

∗ Includes inserts and parts

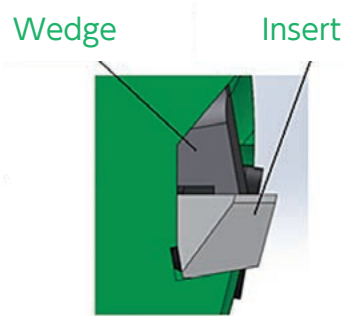
Insert

	Item Number	PCD	Corner angle	Max DOC		A.R.	r_ε		Wiper
		PD1		inch	mm		inch	mm	
For Standard use 	HFT802006C05	●	90°	.295	7.5	6°	.02 chamfer	C0.5	Yes (Rounded)
	HFT802006R04	●	90°	.295	7.5	6°	R .016	R0.4	Yes (Rounded)
For less tool pressure 	HFT70201W05	●	90°	.256	6.5	10°	Double chamfer		Yes (Straight)

Spare Parts

Item number	Arbor bolt	Wedge	Axial set screw		Wedge set screw	
			Screw	Screwdriver	Screw	Screwdriver
JHF050C2200R07	CS1040A	HLW179	CS0510A	LW-4	WS0512	LW-2.5
JHF063C2200R10						
JHF080A2540R12	MBC-M12					
JHF100A2540R16						
JHF125A2540R22						

Safety clamp mechanism

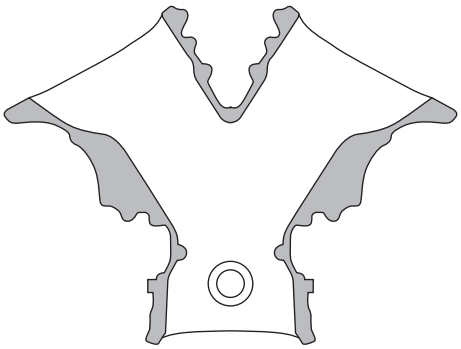


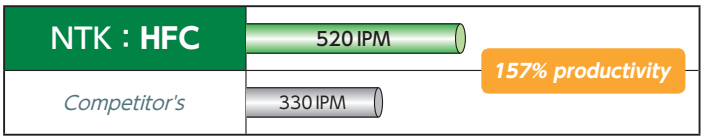
●Unique sphenoidal pocket prevents inserts from becoming dislodged

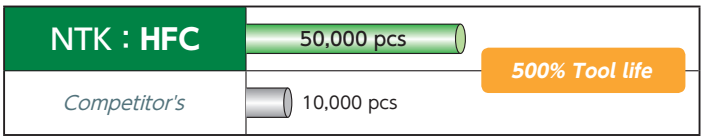
Field Result

Part : Chain Cover
Material : ADC12
Cutter : JHF125A2540R22
Insert : HFT802006C05 PD1

	NTK	Competitor's
Number of edges	**22**	14
RPM	10,000	10,000
SFM	12,877	←
IPM	**520**	330
IPT	.0024	←
DOC	.111 (1 Pass)	.080+.031 (2 Passes)
Tool life	**50,000pcs**	10,000pcs







Recommend Cutting Conditions

Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 1000 3000 5000 7000 9000 11000 13000 15000 17000 19000	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
N						
Aluminum Alloy (Si≦13)	PD1	○	●			-.250
Aluminum Alloy (Si≧13)	PD1	○	●			-.250

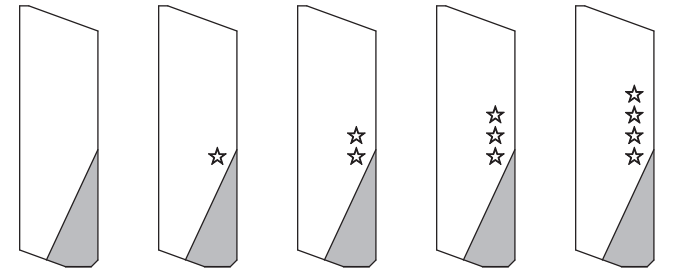
● : Stock
● : Stock (Newly added)
■□RL : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

NTK Regrind Program

- *Inserts can be reground up to (4*) times*
- *The cutter's diameter and height of the insert will change by .004" after each regrind*
- *The set of inserts placed back into the cutter must have the same amount of stars indicating number of regrinds*

**The number of regrinds per insert may vary depending upon cutting conditions*

Each insert will be marked with a star to indicate how many times it has been reground.



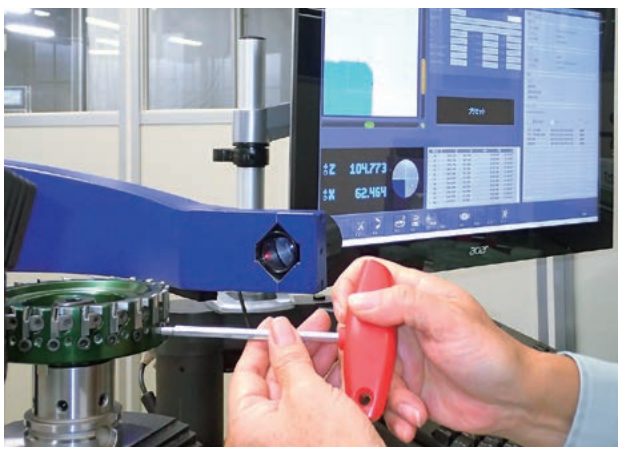
New	After 1st regrinding	After 2nd regrinding	After 3rd regrinding	After 4th regrinding

1. *Send the inserts back to our NTK Wixom office with the appropriate paperwork. Minimum order is 30 pcs.*
   (Note: Send in inserts with the same amount of regrind stars. For orders greater than 50 pcs, NTK will manage the inserts in lots for regrind process.)
2. *Delivery will be 6-8 weeks upon receiving your inserts*
3. *The insert number will be changed to the following HFT802006C05 RPD1*
4. *When installing NTK inserts into a cutter, please make sure that all the inserts have the same number of regrind stars*

NTK's Worry free guaranteed setting

- ***NTK offers cleaning, resetting and rebalancing service to customer for new and reground inserts.***
- ***NTK's guaranteed setting provides stable and worry free* operation.**

Re-setting



±.002mm height run out (±.00008")

Re-balancing

Balance grade: G 2.5

Adjusting and handling instructions for High Feed Cutter

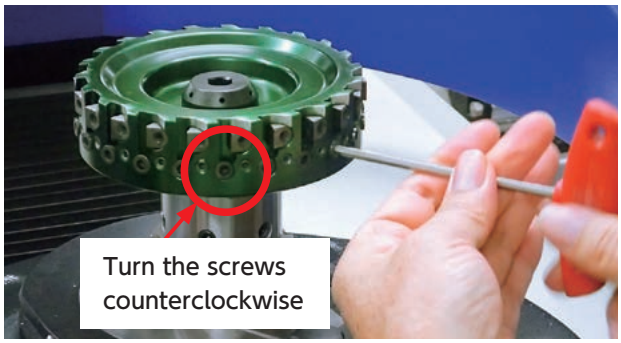
Operational procedure

1. Loosen the axial adjustment screw
2. Install the inserts (initially tighten)
3. Clean the inserts
4. Adjust height of inserts (initial)
5. Tighten the wedge set screw
6. Adjust height of inserts (final)

Tools for setup

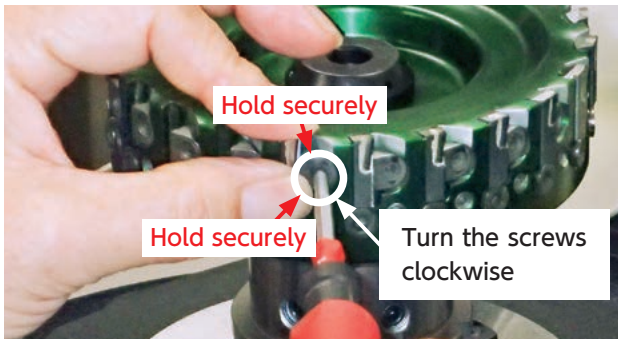
- Tool presetter
- Air blower
- Clay
- 4.0mm Hex wrench
- 2.5mm Hex torque-wrench

1. Loosen the axial adjustment screw



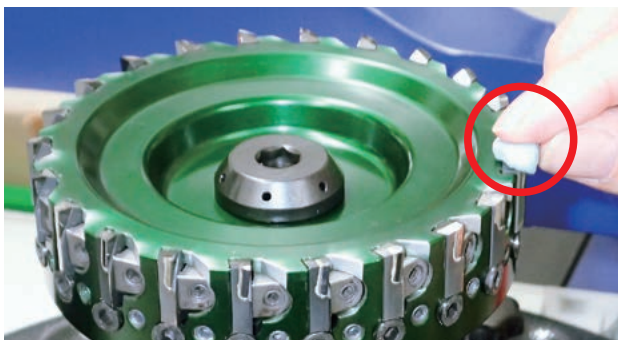
Loosen axial set screw until the screw head is 1 to 2 mm from cutter body.
Clean up insert pocket using air.

2. Install the inserts (initially tighten)



Install the insert to cutter pocket. Tighten wedge set screw with 1Nm torque while pushing insert to cutter center using two fingers. (do not overtighten)

3. Clean the inserts

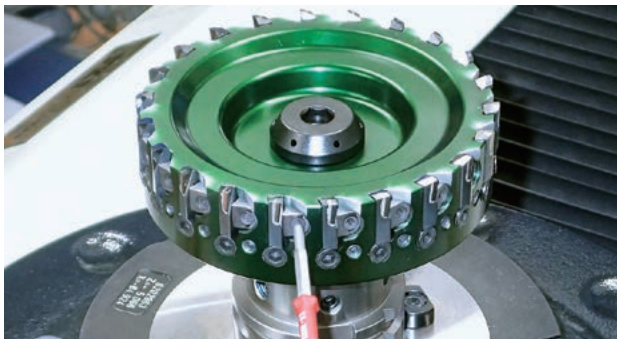


Clean up insert edges using clay.

4. Adjust height of inserts (initial)

Tighten axial set screw of each insert until you reach around 44.980 mm height dimension.
Adjust other inserts within 0.01mm range.

5. Tighten the wedge set screw

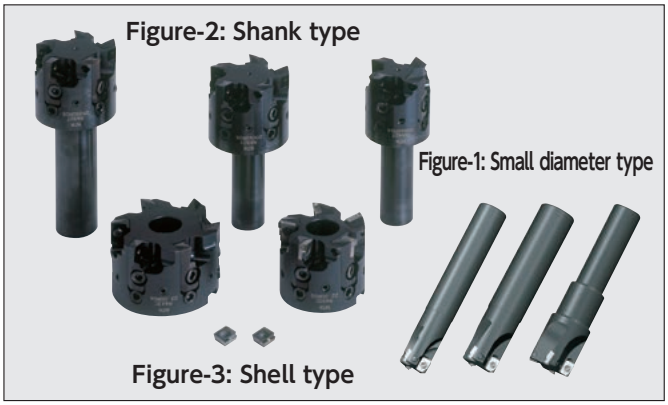


Tighten wedge set screws with 4Nm torque.

6. Adjust height of inserts (final)

Tighten axial set screws to get 45.000 mm height dimension.
Adjust other inserts within +/- 0.002 mm range.

HPC series Fixed type/Adjustable type

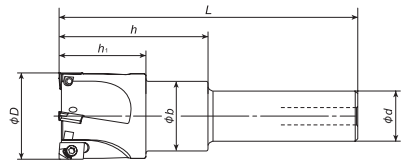


Features

- ***A wide range of sizes***
  The diameters range from ϕ.787" - ϕ3.937" for the HPC series
- ***Excellent rigidity (HPC)***
  The material for the HPC body is steel, achieving exceptional reliability

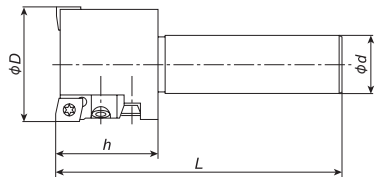
HPC (steel body) ϕ20 - ϕ100 (ϕ.787" - ϕ.3.937")

Figure 1 Small diameter type



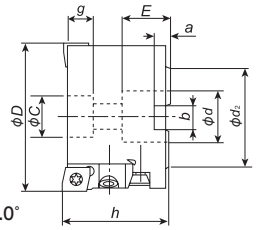
A.R.+9° R.R.+4°

Figure 2 Shank type



A.R.+6° R.R.−3°~+3°

Figure 3 Shell type



A.R.+6° R.R.0°

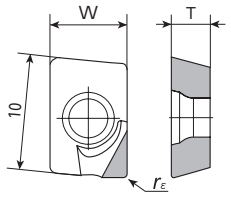
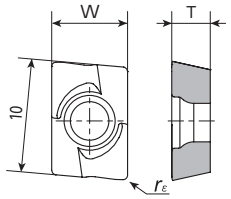
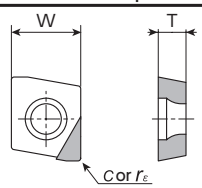
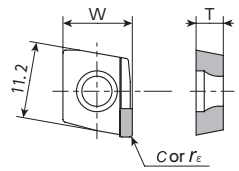
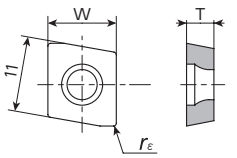
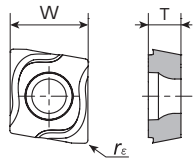
● Metric size Cutters

	Figure	Item number	Stock		ϕD	h	ϕd	L	h1	E	ϕb	b	a	ϕd2	ϕc	g	Weight (kg)	Max. RPM allowed (RPM)	Item number of applicable insert
Fixed type	1	RD020T20070R03	○	3	20	30	20	100	30	–	–	–	–	–	–	–	0.23	18,000	HDA style
		RD025T25070R03	○	3	25	40	25	110	40	–	–	–	–	–	–	–	0.37	18,000	
		RD030T20060R04	○	4	30	60	20	120	35	–	25	–	–	–	–	–	0.33	18,000	
		RD032T20060R04	○	4	32	60	20	120	35	–	26	–	–	–	–	–	0.36	18,000	
		RD035T20060R04	○	4	35	60	20	120	35	–	28	–	–	–	–	–	0.36	18,000	
	2	RA040T20060R04K	○	4	40	45	20	105	–	–	–	–	–	–	–	–	0.45	18,000	HAL style HAT style HAN style HLA style
		RA040T25080R04K	○	4	40	45	25	125	–	–	–	–	–	–	–	–	0.6	18,000	
		RA050T20060R05K	○	5	50	45	20	105	–	–	–	–	–	–	–	–	0.6	18,000	
		RA050T25080R05K	○	5	50	45	25	125	–	–	–	–	–	–	–	–	0.75	18,000	
		RA050T32080R05K	○	5	50	45	32	125	–	–	–	–	–	–	–	–	0.9	18,000	
	3	RA050C22.00R05K	○	5	50	45	22	–	–	20	–	10.4	6.3	42	18	11	0.4	18,000	
		RA063C22.00R06K	○	6	63	45	22	–	–	20	–	10.4	6.3	42	18	11	0.73	18,000	
		RA080A25.40R07K	○	7	80	43	25.4	–	–	26	–	9.5	6.0	50	38.9	15	0.95	15,000	
		RA100A31.75R09K		9	100	45	31.75	–	–	32	–	12.7	8.0	60	61	11	1.6	10,000	
Adjustable type	2	RA040T20060R04	○	4	40	45	20	105	–	–	–	–	–	–	–	–	0.45	18,000	
		RA040T25080R04	○	4	40	45	25	125	–	–	–	–	–	–	–	–	0.60	18,000	
		RA050T20060R05	○	5	50	45	20	105	–	–	–	–	–	–	–	–	0.60	18,000	
		RA050T25080R05	○	5	50	45	25	125	–	–	–	–	–	–	–	–	0.75	18,000	
		RA050T32080R05	○	5	50	45	32	125	–	–	–	–	–	–	–	–	0.90	18,000	
	3	RA050C22.00R05	○	5	50	45	22	–	–	20	–	10.4	6.3	42	18	11	0.40	18,000	
		RA063C22.00R06	○	6	63	45	22	–	–	20	–	10.4	6.3	42	18	11	0.73	18,000	
		RA080A25.40R07	○	7	80	43	25.4	–	–	26	–	9.5	6.0	50	38.9	15	0.95	15,000	
		RA100A31.75R09	○	9	100	45	31.75	–	–	32	–	12.7	8.0	60	61	11	1.6	10,000	

● Recommend Cutting Conditions

Work Material	Grade	Dry	Wet	Cutting Speed (SFM) 1000 3000 5000 7000 9000 11000 13000 15000 17000 19000	Feed (IPT) .002 .004 .006 .008 .010 .012	Depth of Cut (inch)
N						
Aluminum Alloy (Si≦13)	PD1	○	●			~.200
	TM1	○	●			~.200
Aluminum Alloy (Si≧13)	PD1	○	●			~.200
	TM1	○	●			~.200

Inserts

Shape	Item number	Corner angle	w	T	Cutting edge length	A.R.	R.R.	r_ε	Wiper	PCD PD1	PVD coated carbide TM1	Cutter Type (figure)
	**HDA4015R04**	0°	6.7	3.4	4.0	+9°	+4°	0.4	Provided	●		1
 with chipbreaker	**HDA4505R04**	0°	6.7	3.4	Min. 5.0	+9°	+4°	0.4	Provided		○	1
	**HAL3515R04**	0°	10	4.0	3.5	+6°	0°	0.4	Provided	●		2 3
	HAT6021R04		10		6.0			0.4		●		
	HAT6021C05		10		6.0			C0.5		○		
	HRT6021R04 Regrindable		10.2		Min. 6.0			0.4		○		
	**HAL3515C05**	0°	10	4.0	3.5	+6°	0°	C0.5	Provided	○		2 3
	HRL3515R04 Regrindable				Min. 3.5			0.4		○		
	**HAN9521R04N**	0°	10	4.0	Min. 6.0	+6°	−3°	0.4	Provided		○	2 3
 with chipbreaker	**HLA8521R04**	0°	10.078	4.0	Min. 6.0	+6°	+3°	0.4	Provided		○	2 3

* Recommend using torque wrench @35lbs (4Nm)

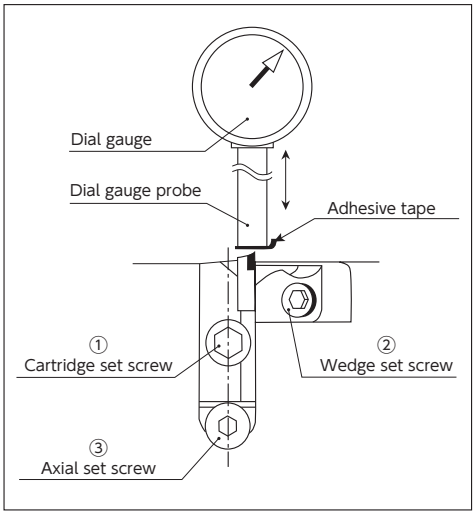
Spare Parts

Item number	Cartridge	Axial setscrew	Cartridge setscrew	Insert clamping screw	Handle	Torx screwdriver	Hex-screwdriver	Clamping bolt
RD020T20070R03				FSI0306A	2814HS (OP)	U107T10 (OP)		
RD025T25070R03				FSI0307A				
RD030T20060R04								
RD032T20060R04								
RD035T20060R04								
RA040T20060R04/K	RA06P03NC	CS0510A	CS0510T	FSI035104A	2814HS (OP)	U107T15 〈Torx〉 (OP)	U104-40 〈Hex〉 (OP)	
RA040T25080R04/K								
RA050T20060R05/K								
RA050T25080R05/K								
RA050T32080R05/K								
RA050C22.00R05/K								CS1040A (OP) (coolant through)
RA063C22.00R06/K								MBC-M12 (OP)
RA080A25.40R07/K								MBC-M16 (OP)
RA100A31.75R09/K								

● : Stock
● : Stock (Newly added)
■ □ R L : While stocks last
R L : Stock (Right / Left-hand only)
R L : Stock (Right / Left-hand only, Newly added)
Ⓜ : Mirror finish
○ : 1-2 week delivery
○ : 1-2 week delivery (Newly added)
💧 : Coolant through
ⓇⓁ : 1-2 week delivery (Right / Left-hand only)
ⓇⓁ : 1-2 week delivery (Right / Left-hand only, Newly added)

Insert Presetting and PCD Damage Preventative Measures for HPC

■Be sure to clean all the insert pockets before carrying out the following steps:



●Step1: Preventative measures against insert chipping

Attach a piece of adhesive tape (preferably, a tape low in adhesion) to the end of a dial gauge's probe.

●Step2: Mounting inserts

For HPC: First, install the cartridges to the body, then, tighten each insert with the insert clamping screw at 3 N·m.

【Caution: If you mount inserts in a cartridge first, it's not possible to install the cartridges to the body.】

●Step3: Temporary tightening (using a torque-wrench)

Tighten set screw (1) first, at 4 N·m.

●Step4: Setting

While watching the reading on the dial gauge, rotate set screw (2) so that the insert with the highest cutting edge is lifted by +0.03 mm. Next, with this position as the reference, set the cutting edges of all other inserts with variations in run out to stay within +/− 5 microns (10 microns in terms of range).

●Step5

Remove the probe from the dial gauge.

●Step6: Tightening set screws (using a torque wrench)

For HPC, tighten set screw (1) at 8 N·m.

■Supplemental explanation

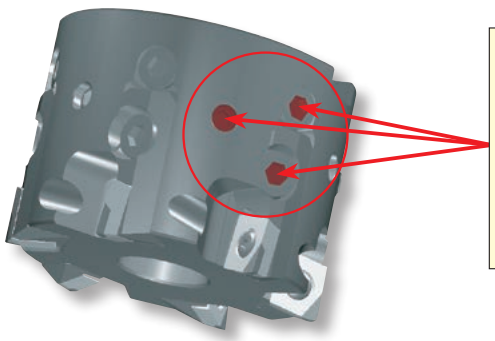
1. Even after the set screws have been tightened, the run out of the cutting edges should stay within approximately +/− 10 microns (20 microns in terms of range).
2. In the above case, NTK standard inserts (excluding some of them; see the note below for details.) and re-ground NTK inserts will not affect the tool life and surface finish.

HPC Fixed Type

No need for pre-setting

No need for cutting edge adjustments!

(The only requirement is clamping and unclamping of the inserts with the clamping bolt)



【Note】

The holes for the axial setscrews and balance adjusting screws are filled with a special material, thus, no screwdrivers and hex-wrenches can be inserted in them.

※The color of the special material is different from the color of the actual product body.