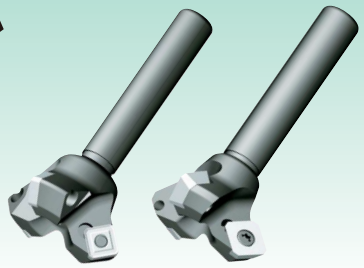
Aeromill / NEW TikoCutter

Smaller Shank (Aeromill) !

- Consider to use this Aeromill for Non-Rigidity Machines like Tapping Center !
- Choose various workpiece with Negative and Positive type Face Milling Cutters !



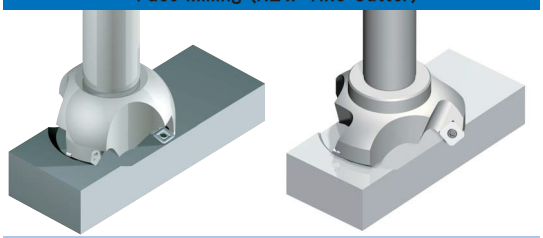
Face Milling (Aeromill)

φ30mm・φ40mm

Thin workpiece processing (NEW TikoCutter) !

- Consider to use NEW TikoCutter for Small Machining Center !
- Recommend NEW TikoCutter for thin workpiece (can manufacturer etc) Processing. Process without Chattering due to our original negative-positive Geometries method

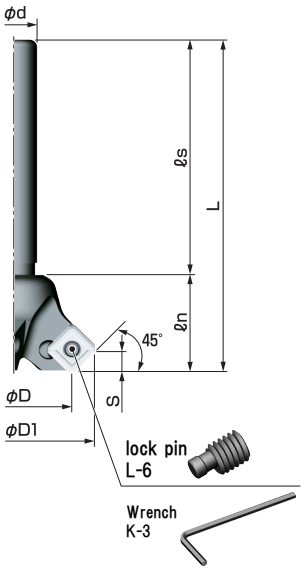
Face Milling (NEW Tiko Cutter)



φ60mm・φ80mm

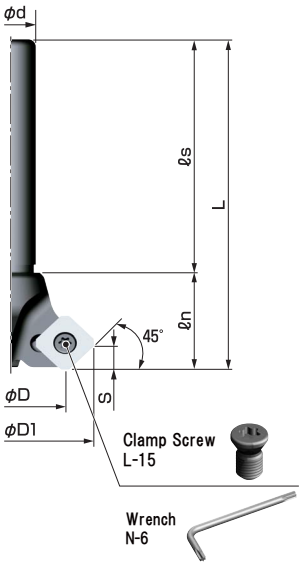
① Aeromill

NS type (Negative S)



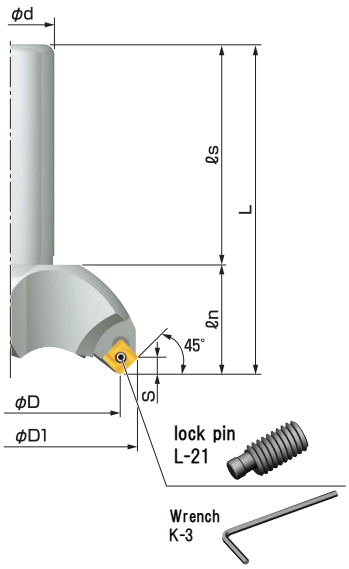
② Aeromill

PS type (Positive S)



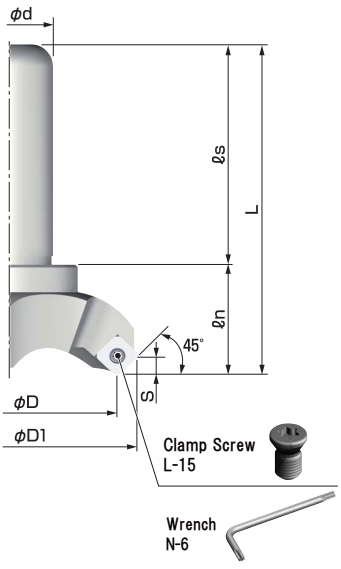
③ NEW Tiko Cutter

NS type (Negative S)



④ NEW Tiko Cutter

PS type (Positive S)



Body

Product name	Model No.		Fig.	blades	Dimensions (mm) φD	φD1	φd	L	ℓs	ℓn	S	Weight (g)	Inserts
Aeromill	NS	ARN12-30S	①	3	30	42	12	85	60	25	5.0	132	S32MOZ / S32GUR
		ARN16-40S	①	3	40	52	16	85	60	25	5.0	210	S32MOZ / S32GUR
	PS	ARP12-30S	②	3	30	43.2	12	85	60	25	6.0	116	S3H3MNZ / S3H3GNZ
		ARP16-40S	②	3	40	53.6	16	85	60	25	6.0	224	S3H3MNZ / S3H3GNZ
NEW TikoCutter	NS	TKN20-60S-03	③	3	60	73	20	120	80	40	5.0	668	S32MOZ / S32GUR
		TKN20-80S-03	③	3	80	93	20	120	80	40	5.0	826	S32MOZ / S32GUR
		TKN32-60S-03	③	3	60	73	32	120	80	40	5.0	968	S32MOZ / S32GUR
		TKN32-80S-03	③	3	80	93	32	120	80	40	5.0	1,126	S32MOZ / S32GUR
	PS	NEW TKP20-60S-03	④	3	60	74	20	120	80	40	6.0	600	S3H3MNZ / S3H3GNZ
		NEW TKP20-80S-03	④	3	80	94	20	120	80	40	6.0	780	S3H3MNZ / S3H3GNZ
		NEW TKP32-60S-03	④	3	60	74	32	120	80	40	6.0	900	S3H3MNZ / S3H3GNZ
		NEW TKP32-80S-03	④	3	80	94	32	120	80	40	6.0	1,070	S3H3MNZ / S3H3GNZ

※ Insert is not supplied as standard accessory
※ Clamp Screw, Lock Pin and wrench are supplied as standard accessories

⚠ Do not take reverse tightening when mounting or replacing insert
Due to the eccentricity locking mechanism, poor accuracy or breakage of Insert may be occurring.(Excepting PS type)

Cutting Conditions

S32MOZ

Material	Material Model / Feed per blade (fz)	NK2001	NK2050	AB01F	NK1010	NK2020	NK3030	NK6060	AC15T
		Cutting speed (m / min)							
General Steel	0.1~0.3	200~300	200~300	200~300		150~200	150~250	200~300	
Alloy Steel	0.1~0.3	200~250	200~250	200~250		150~200	150~250	200~300	
Stainless Steel	0.1~0.25					120~180	150~200	150~250	150
Aluminum, Resin,Brass									
Castings	0.1~0.3	200~250 ※FCD		200~250 ※FCD	150~200				

● Chamfered Insert nose increase feed speed per l-blade and make a good surface finishing
● Yellow marked rate is recommended for the workpiece listed

S32GUR

Material	Material Model	NK2001	NK1010	NK2020	NK3030	NK5050	NK6060	NK8080	DIA
General Steel	0.08~0.2	200~300		150~200					
Alloy Steel	0.08~0.2	200~250		150~200					
Stainless Steel	0.08~0.2			120~180	150~200		150~250	150~250 ※SUS316	
Aluminum, Resin,Brass	0.08~0.3		250~800			200~800		200~800	500~2,000
Castings	0.08~0.2	200~250 ※FCD	100~150						

● Insert breaker ensures sharp processing and R shaped nose ensure less cutting resistance, and recommended the workpiece which are easily chattered and a distortion arises
● Yellow marked rate is recommended for the workpiece listed

Material	Material Model	S3H3MNZ NK2001	S3H3MNZ NK2020	S3H3MNZ NK6060	S3H3MNZ AC15D	S3H3GNZ NK1010	S3H3GNZ NK9090
General Steel	0.08~0.2	200~300	150~200				
Alloy Steel	0.08~0.2	200~300	150~200				
Stainless Steel	0.1			150~250	150		
Aluminum, Resin,Brass	0.1~0.2					500~1,000	500~1,000
Castings							

● Chamfered Insert nose increase feed speed per l-blade and make a good surface finishing
● Yellow marked rate is recommended for the workpiece listed

Processing Example (Aeromill)

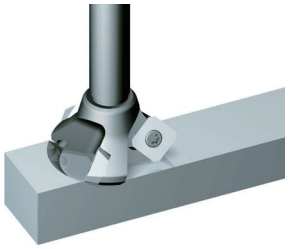
[Face Milling (PS type)]

■ Body : ARP16-40S
■ Insert : S3H3MNZ NK1010

● Material ····· A5052
● Rotation Speed·· 1,000r.p.m.
● Table feed····· 300mm/min
● Depth of Cut···· 0.5mm
● Cutting Oil····· None

Result

Machined surface good.



Processing Example (NEW TikoCutter)

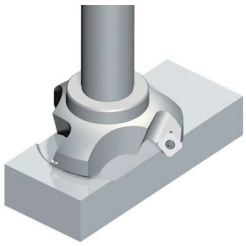
[Face Milling (PS type)]

■ Body : TKP32-80S-03
■ Insert : S3H3GNZ AC15N

● Material ····· S50C
● Rotation Speed·· 1060r.p.m.
● Table feed····· 636mm/min
● Depth of Cut···· 3mm
● Cutting Oil····· None

Result

Machined surface good.



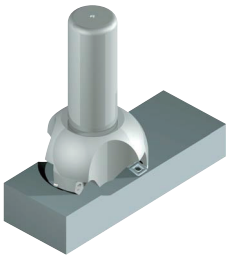
[Face Milling (NS type)]

■ Body : TKN32-60S-03
■ Insert : S32MOZ AC15T

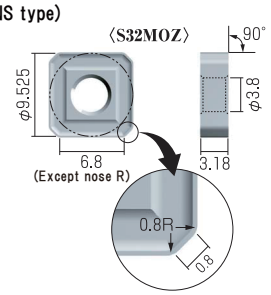
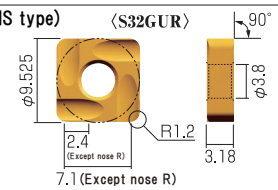
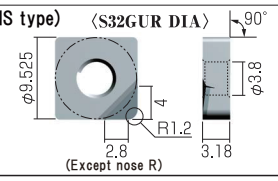
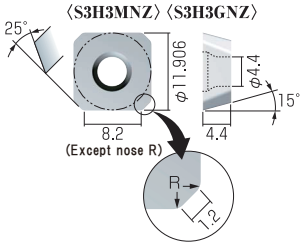
● Material ····· SUS304
● Rotation Speed·· 1,000r.p.m.
● Table feed····· 300mm/min
● Depth of Cut···· 2mm
● Cutting Oil····· None

Result

Machined surface good.



Insert

Fig.	Model.No.	Material	Blade Shape	Coating	Usable corner	Quantity per box
●(NS type) 〈S32MOZ〉 	S32MOZ NK2001	Cermet	Honing edge	None	8	12
	S32MOZ NK2050	Cermet	Honing edge	None	8	12
	S32MOZ AB01F	Cermet	Honing edge	AlCrN	8	12
	S32MOZ NK1010	Carbide K10	Sharp edge	None	8	12
	S32MOZ NK2020	Carbide M20	Honing edge	None	8	12
	S32MOZ NK3030	Carbide M20	Honing edge	TiN	8	12
	S32MOZ NK6060	Carbide M20	Honing edge	TiAlN	8	12
	S32MOZ AC15T	Fine particles Carbide	Honing edge	AlCrN	8	12
●(NS type) 〈S32GUR〉 	S32GUR NK2001	Cermet	Honing edge	None	8	12
	S32GUR NK1010	Carbide K10	Sharp edge	None	8	12
	S32GUR NK2020	Carbide M20	Honing edge	None	8	12
	S32GUR NK3030	Carbide M20	Honing edge	TiN	8	12
	S32GUR NK5050	Carbide K10	Sharp edge	TiN	8	12
	S32GUR NK6060	Carbide M20	Honing edge	TiAlN	8	12
	S32GUR NK8080	Carbide K10	Sharp edge	TiAlN	8	12
●(NS type) 〈S32GUR DIA〉 	S32GUR DIA	DIA	Sharp edge	None	1	1
●(PS type) 〈S3H3MNZ〉〈S3H3GNZ〉 	S3H3MNZ NK2001	Cermet	Honing edge	None	4	12
	S3H3GNZ NK1010	Carbide K10	Sharp edge	None	4	12
	S3H3MNZ NK2020	Carbide M20	Honing edge	None	4	12
	S3H3MNZ NK6060	Carbide M20	Honing edge	TiAlN	4	12
	S3H3GNZ NK9090 (鏡面研磨仕上げ)	Carbide K10	Sharp edge	None	4	12
	S3H3MNZ AC15D	Fine particles Carbide	Honing edge	AlCrN	4	12