

New indexable milling tool for the machining of high quality workpieces

Pro-L Mill



The completion of Indexable Milling Tool for high qualified workpiece

- Improved perpendicularity and lower cutting resistance by composition of clearance face and High Helix edge
- Improved chip flow due to helical type design of chip pocket and application of coolant system



Pro-L Mill

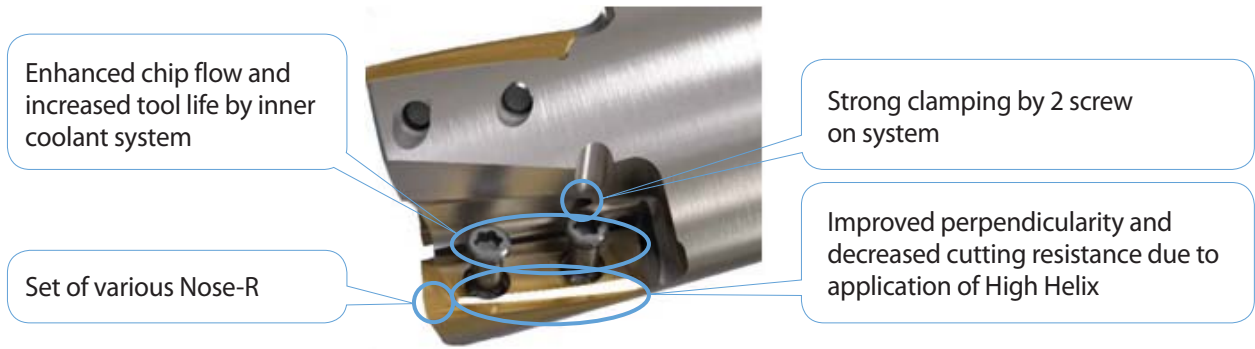


New indexable milling tool for the machining of high quality workpieces





Pro-L Mill

- Improved perpendicularity and lower cutting resistance by composition of clearance face and High Helix edge
- Productivity increase due to more than half as much of Depth of Cut comparing to existing product
- Strong clamping design by adaption of double screw on system
- Improved chip flow due to helical type design of chip pocket and application of coolant system

Features



Chip breakers

Insert's type	Edge type	Usage	Features
MA 		Al	Application of the edge optimized for Aluminum machining and buffed finish ensure excellent machining quality
ML 		Hard-to-cut material	Design of Low cutting resistance Chip Breaker ensures excellent machining quality for light cutting and Hard-to-cut material

Selection of Grade and Chip Breaker

category	M Stainless steel	N Aluminum alloy	S HRSA
Grade	PC5400	H01	PC5300
MA		○	
ML	○		○

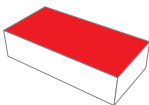
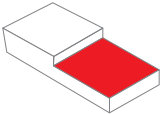
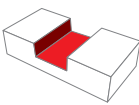
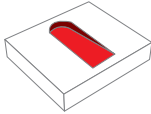
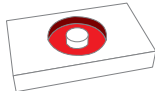
Cutting Performance

N Al6061 (HRC30)

- **Cutting condition**
 - vc = 500m/min
 - fz = 0.2mm/t
 - ap = 30 ~ 60mm
 - ae = 1 ~ 5mm(finishing : 5mm, roughing : 1mm)
 - z = 3

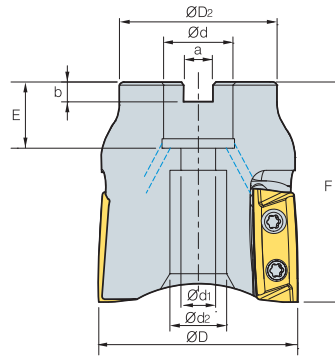


Uses

Facing	Shouldering	Slotting	Ramping	Helical cutting
				



PALCM *New*



Designation	Stock		ØD	ØD2	Ød	Ød ₁	Ød ₂	Ød ₃	a	b	E	E1	F	ap	
PALCM 063HR		4	63	50	22	11	18	-	10.4	6.3	21	28	70	34	0.57

(mm)

● Stock item

▶ Available Inserts



Type	Designation	Cermet		Coated								Uncoated			Page
		CN2000	CN30	NCM325	NCM335	PC3500	PC3600	PC3545	PC9530	PC6510	PC5300	PC5400	A30	G10E	
Ø63	LXET 340504PEFR-63-MA														E10
	3405PEFR-63-MA														
	340512PEFR-63-MA														
	340516PEFR-63-MA														
	340504PEER-63-ML														
	3405PEER-63-ML														
	340512PEER-63-ML														
	340516PEER-63-ML														

▶ Available Arbors

Designation	Ød	Available Arbors
PALCM 063HR	22	BT□□-FMC22-□□

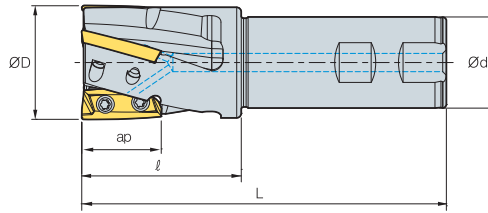
▶ Parts

Specification		
Ø63	Screw FTGA0511-P	Wrench TW20-100

▶ Available Inserts E10

▶ Available Adaptors E318~E320

PALS (Single Edge) New



• AR: 12°~16°
• RR: -5°~9°

(mm)

Designation	Stock		ØD	Ød	l	L	ap	
PALS 032HR-2S20		2	32	20	50	140	25	0.36
032HR-2S25		2	32	25	50	140	25	0.48
032HR-2S32		2	32	32	50	140	25	0.71
040HR-2S32		2	40	32	50	140	25	0.85
040HR-2S40		2	40	40	50	140	25	1.16
040HR-2S42		2	40	42	50	140	25	1.26
040HR-3S32		3	40	32	50	140	25	0.80
040HR-3S40		3	40	40	50	140	25	1.10
040HR-3S42		3	40	42	50	140	25	1.20
050HR-3S32		3	50	32	70	160	34	1.10
050HR-3S40		3	50	40	70	160	34	1.40
050HR-3S42		3	50	42	70	160	34	1.50
063HR-4S32		4	63	32	70	160	34	1.60
063HR-4S40		4	63	40	70	160	34	1.92
063HR-4S42		4	63	42	70	160	34	2.00

● Stock item

Available Inserts



LXET-MA



LXET-ML

Type	Designation	Cermet		Coated						Uncoated			Type	Designation	Cermet		Coated						Uncoated			Page														
		CN2000	CN30	NCM325	NCM335	PC3500	PC3600	PC3545	PC9530	PC6510	PC5300	PC5400			A30	G10E	H01	CN2000	CN30	NCM325	NCM335	PC3500	PC3600	PC3545	PC9530		PC6510	PC5300	PC5400	A30	G10E	H01								
Ø32	LXET 250404PEFR-32-MA													Ø50	LXET 340504PEFR-50-MA																	E10								
	2504PEFR-32-MA														LXET 3405PEFR-50-MA																									
	250412PEFR-32-MA														LXET 340512PEFR-50-MA																									
	250416PEFR-32-MA														LXET 340516PEFR-50-MA																									
	250404PEER-32-ML														LXET 340504PEER-50-ML																									
	2504PEER-32-ML														LXET 3405PEER-50-ML																									
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	250416PEER-32-ML														LXET 340516PEER-50-ML																									
Ø40	LXET 250404PEFR-40-MA													Ø63	LXET 340504PEFR-63-MA																									
	2504PEFR-40-MA														LXET 3405PEFR-63-MA																									
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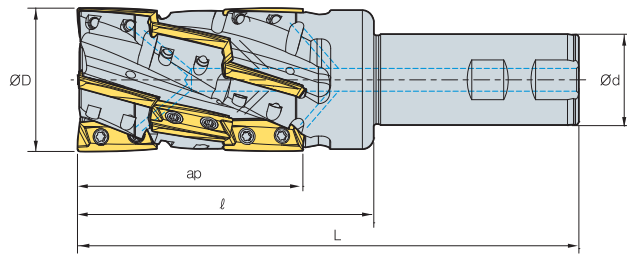
Parts

Specification			
	Screw	Wrench	Wrench
Ø32	FTKA0408	TW15S	-
Ø40	FTKA0410	TW15S	-
Ø50	FTGA0510-P	-	TW20-100
Ø63	FTGA0511-P	-	TW20-100

Available Inserts E10



PALS (Multi Edge) *New*



• AR : 16°
• RR : -8°

Designation	Stock		Ød	Ød ₁	l ₁	l ₂	ap	
PALS 063HM-4S32		12	63	32	130	220	96	1.60
063HM-4S40		12	63	40	130	220	96	1.92
063HM-4S42		12	63	42	130	220	96	2.00

(mm)

● Stock item

▶ Available Inserts



Type	Designation	Cermet		Coated							Uncoated			Page	
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	340504PEER-63-ML														
	3405PEER-63-ML														
	340512PEER-63-ML														

▶ Parts

Specification		
Ø63	Screw FTGA0511-P	Wrench TW20-100

▶ Available Inserts E10