




Thread Milling Cutters

# WX-ST-PNC-3P

Volume 2



# WX-ST-PNC-3P THREAD MILLING CUTTERS



1 Due to use of high-hardness materials exceeding 50HRC, heat resistant steel, and even brittle materials, small-diameter internal threads are becoming increasingly difficult to machine.

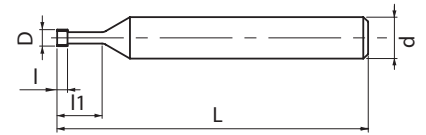
2 Along with the need for ultra-high speed and high precision operations, small machining centers without reverse function (tap cycles) have emerged.

3 The demands for internal threads are becoming increasingly difficult, such as “no room in pilot holes”, “high quality with no burrs”, and “high precision internal threads”.

4 Standard taps have difficulties machining nickel based alloys with water-soluble coolant.

# WX-ST-PNC-3P

Threading | Thread milling | Metric, Metric Fine & G



- Carbide thread milling cutter with 3 crest thread length
- WXS coating
- For all materials and hardened steels up to 50 HRC
- "ThreadPro" NC code generator software available

<b>P</b> ○ C < 0,2%	<b>P</b> ○ 0,25 < C < 0,4	<b>P</b> ○ C > 0,45%	<b>P</b> ○ SCM	<b>M</b> ○ INOX	<b>K</b> ○ GG	<b>K</b> ○ GGG	<b>N</b> ○ Al	<b>N</b> ○ AC,ADC	<b>S</b> ● Ti	<b>S</b> ● Ni	<b>H</b> ● 25-35 HRC	<b>H</b> ● 35-45 HRC	m/min
60-90	60-90	60-90	30-60	60-90	50-100	50-70	50-100	50-100	20-60	20-60	30-60	30-60	

<b>M</b>	<b>MF</b>	<b>G</b>	<b>MJ</b>	<b>CARBIDE</b>	<b>SC</b> D ≤ 1,3	<b>WXS</b> 1,5 ≤ D	<b>11°</b>	<b>h6</b>
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EDP	D	Minimum cutting bore Ø	P	L	I	I1	d	Z	Price
48216000	1,3	M1,8	0,35	40	1,05	5,4	3	3	
48216001	1,5	M2	0,4	40	1,2	6	3	3	
48216002	1,9	M2,5	0,45	40	1,35	7,5	6	3	
48216003	2,4	M3	0,5	60	1,5	9,5	6	3	
48216004	3,1	M4	0,7	60	2,1	12,7	6	3	
48216005	4	M5	0,8	60	2,4	15,8	6	3	
48216006	4,5	M6	1	60	3	20	6	4	
48216007	6	M8	1,25	60	3,75	24	6	4	
48216008	7,5	M10	1,5	80	4,5	33	8	4	
48216009	12	M16	1,5	100	4,5	50	12	5	
48216010	16	M20	1,5	100	4,5	50	16	5	
48216011	9,5	M12	1,75	80	5,25	38	10	5	
48216012	12	M16	2	100	6	50	12	5	
48216013	16	M20	2	100	6	50	16	5	
48216014	16	M20	2,5	100	7,5	50	16	5	
48216100	5,9	G1/8 G1/16	28	64	2,72	19,5	8	4	
48216101	10	G1/4 G3/8	19	80	4	30	10	5	
48216102	12	G1/2 G7/8	14	100	5,44	37	12	5	
48216103	16	G1 G2	11	100	6,93	48	16	5	

## CUTTING CONDITIONS

Work Material	Vc (m/min)	F (mm/tooth)	
Low Tensile Strength Steel	C~0,25%	60~90	0,02~0,08
Medium Tensile Strength Steel	C~0,25% ~ 0,45%	60~90	0,02~0,08
High Tensile Strength Steel	C0,45%~	60~90	0,02~0,08
Alloy Steel	SCM	30~60	0,01~0,03
Hardened Steel	25~45 HRC	30~60	0,01~0,03
	45~55 HRC	30~60	0,01~0,03
	50~60 HRC	-	-
Stainless Steel	SUS	60~90	0,02~0,08
Tool Steel	SKD	-	-
Cast Steel	SC	40~65	0,02~0,09
Cast Iron	FC	50~100	0,03~0,1
Ductile Cast Iron	FCD	50~70	0,03~0,1
Copper	Cu	-	-
Brass	Bs	-	-
Brass Casting	BsC	50~100	0,02~0,06
Bronze	PB	50~100	0,02~0,06
Aluminium Rolled Steel	AL	50~100	0,02~0,06
Aluminium Alloy Casting	AC, ADC	50~100	0,02~0,06
Magnesium Alloy Casting	MC	50~100	0,02~0,06
Zinc Alloy Casting	ZDC	50~100	0,02~0,06
Titanium Alloys	Ti-6AL-4V	20~60	0,01~0,03
Nickel Alloys	Inconel®	20~60	0,01~0,03
Thermosetting plastic	-	50~100	0,02~0,06
Thermoplastic	-	50~100	0,02~0,06



shaping your dreams

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