New products for cast iron materials high-efficiency turning

Y B 7315





Brand-new cemented carbide substrate combined with optimized sintering technique, adhesive phase and hard phase giving substrate outstanding wear resistance as well as excellent toughness.



Through ingredients optimization, coating crystal grain size are further micronized, homogenized and possess outstanding overall performance and greatly improved tool life.



Crystal grain pre-insertio Al₂O₃ techniques

Extra fine Al₂O₃ coating with crystal grain pre-insertion techniques improving coating layer thickness and also demonstrate outstanding bonding strength, ensuring stability in cutting.



Upgrading coating surface treatment techniques

Well combination between coating surface and after-treatment technique, inserts are most suitable for cast iron materials high efficiency cutting at high speed condition.

-TC Geometry

O Dedicated materials for cast iron materials turning.

stable performance and strong purpose for general application, is suitable for occasions from finishing to roughing.

Special treatment on cutting edge, with stronger edges and excellent impact resistance performance.



Workpiece material:HT300 (HB200) Insert: CNMG120408-TC/YB7315

Cutting data: V_c=500m/min, f=0.2mm/r, a_p=1mm

Machine: Machine center

Cutting mode: dry cutting in continous



Grade

CVD

YB7315

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0.8 1.2 1.6 0.4 0.8 1.2

1.2

1.6

0.8 1.2 0.4 0.8 1.2

Results: stable and high efficiency machining by using ZCC·CT products, At same cutting condition, the lifetime of ZCC·CT products are 50% longer than that of company A, edge-chipping is easy to happen on company A's product.

Company A

Tool life (min/edge)

Specification	Dimension(mm)					Grade		Dimension(mm)			
	L	ØI.C	s	Ød	r	CVD	Specification	L	~! O		~ .
						YB7315			ØI.C	S	Ød
CCMT060204-TC	6.4	6.35	2.38	2.8	0.4	*	DNMG150612-TC	15.5	12.7	6.35	5.16
CCMT09T304-TC	9.7	9.525	3.97	4.4	0.4	*	SNMG120404-TC	12.7	12.7	4.76	5.16
CCMT09T308-TC	9.7	9.525	3.97	4.4	0.8	*	SNMG120408-TC	12.7	12.7	4.76	5.16
CCMT120404-TC	12.9	12.7	4.76	5.56	0.4	*	SNMG120412-TC	12.7	12.7	4.76	5.16
CCMT120408-TC	12.9	12.7	4.76	5.56	0.8	*	SNMG150616-TC	15.875	15.875	6.35	6.35
CNMG120404-TC	12.9	12.7	4.76	5.16	0.4	*	TNMG160404-TC	16.5	9.525	4.76	3.81
CNMG120408-TC	12.9	12.7	4.76	5.16	0.8	*	TNMG160408-TC	16.5	9.525	4.76	3.81
CNMG120412-TC	12.9	12.7	4.76	5.16	1.2	*	TNMG160412-TC	16.5	9.525	4.76	3.81
CNMG120416-TC	12.9	12.7	4.76	5.16	1.6	*	TNMG220412-TC	22	12.7	4.76	5.16
CNMG160608-TC	16.1	15.875	6.35	6.35	0.8	*	TNMG220416-TC	22	12.7	4.76	5.16
CNMG160612-TC	16.1	15.875	6.35	6.35	1.2	*	VNMG160404-TC	16.6	9.525	4.76	3.81
CNMG160616-TC	16.1	15.875	6.35	6.35	1.6	*	VNMG160408-TC	16.6	9.525	4.76	3.81
DNMG150404-TC	15.5	12.7	4.76	5.16	0.4	*	VNMG160412-TC	16.6	9.525	4.76	3.81
DNMG150408-TC	15.5	12.7	4.76	5.16	0.8	*	WNMG080404-TC	8.7	12.7	4.76	5.16
DNMG150412-TC	15.5	12.7	4.76	5.16	1.2	*	WNMG080408-TC	8.7	12.7	4.76	5.16
DNMG150608-TC	15.5	12.7	6.35	5.16	0.8	*	WNMG080412-TC	8.7	12.7	4.76	5.16