

# M

# YB9320

The New generation PVD coating grade is suitable for stainless steel materials turning.

- By adopting atomic rearrangement technology, long range orderly arrangement of different coating materials are achieved with perfect matching of hardness and toughness, effectively solving the problem of high temperature instability of multilayer coating interface, improving the high temperature performance of coating.

- Nano multilayer coating with high toughness matrix and TiAlN substrate, unique ion etching technology, strengthening the edge, improving bonding strength between coating and substrate.

- Advanced surface treatment technology, optimized stress distribution, superior comprehensive performance.

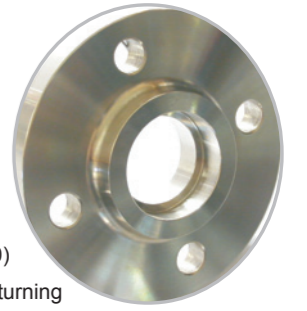
## -ADF Geometry

- Optimized geometry structure, can achieve perfect chip control in relatively wide range of parameter.
- Precision grinding technique, can achieve extremely high dimensional and indexing repeatability.
- Unique rake face structure design, ensuring edges' strength as well as reducing cutting resistance.
- Advanced edge treatment techniques and after-coating treatment techniques, guarantee surface quality and surface finish.



## -AHF Geometry

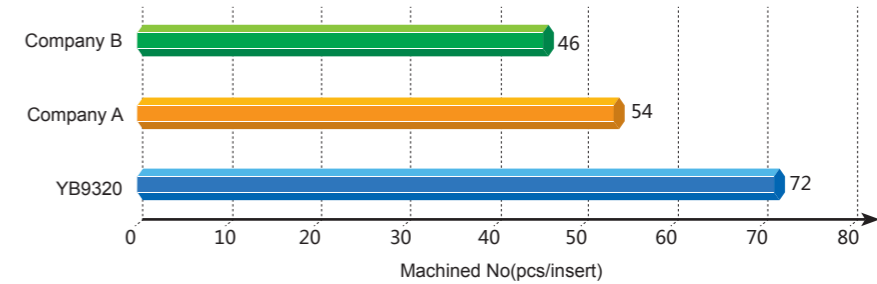
- Unique vibration reduction geometry design, even for slender shaft machining can achieve excellent surface quality.
- Based on advanced chip control design concept, excellent geometry is for general-purpose.
- Full-Grounding technique, greatly improved precision.
- Positive angle inserts, with sharper edges structure than ADF geometry, ensuring soft cutting action, optimized cutting material well balanced edge strength and sharpness.



### Case

Workpiece: flange  
 Workpiece material: stainless steel 316(HRC30)  
 Machining style: external turning and end face turning  
 Machine: CNC machine  
 Insert: YB9320/CNMG120408-ADF  
 Cutting data:  $V_c=160\text{m/min}$ ,  $f=0.2\text{mm/r}$ ,  $a_p=1\text{mm}$

### Tool life comparison



Result: Surface quality of ZCC-CT product is obviously superior to that of other companies, and tool life is 30% longer !

Specification	Dimension(mm)					Grade	
	L	ØI.C	S	Ød	r		PVD
							YB9320
CNMG120404-ADF	12.9	12.7	4.76	5.16	0.4	★	
CNMG120408-ADF	12.9	12.7	4.76	5.16	0.8	★	
CNMG120412-ADF	12.9	12.7	4.76	5.16	1.2	★	
DNMG150404-ADF	15.5	12.7	4.76	5.16	0.4	★	
DNMG150408-ADF	15.5	12.7	4.76	5.16	0.8	★	
DNMG150412-ADF	15.5	12.7	4.76	5.16	1.2	★	
DNMG150604-ADF	15.5	12.7	6.35	5.16	0.4	★	
DNMG150608-ADF	15.5	12.7	6.35	5.16	0.8	★	
DNMG150612-ADF	15.5	12.7	6.35	5.16	1.2	★	
SNMG120404-ADF	12.7	12.7	4.76	5.16	0.4	★	
SNMG120408-ADF	12.7	12.7	4.76	5.16	0.8	★	
SNMG120412-ADF	12.7	12.7	4.76	5.16	1.2	★	
TNMG160404-ADF	16.5	9.525	4.76	3.81	0.4	★	
TNMG160408-ADF	16.5	9.525	4.76	3.81	0.8	★	
TNMG160412-ADF	16.5	9.525	4.76	3.81	1.2	★	
VNMG160404-ADF	16.6	9.525	4.76	3.81	0.4	★	
VNMG160408-ADF	16.6	9.525	4.76	3.81	0.8	★	
WNMG080404-ADF	8.7	12.7	4.76	5.16	0.4	★	
WNMG080408-ADF	8.7	12.7	4.76	5.16	0.8	★	
WNMG080412-ADF	8.7	12.7	4.76	5.16	1.2	★	

Specification	Dimension(mm)					Grade	
	L	ØI.C	S	Ød	r		PVD
							YB9320
CCMT060204-AHF	6.4	6.35	2.38	2.8	0.4	★	
CCMT060208-AHF	6.4	6.35	2.38	2.8	0.8	★	
CCMT09T304-AHF	9.7	9.525	3.97	4.4	0.4	★	
CCMT09T308-AHF	9.7	9.525	3.97	4.4	0.8	★	
CCMT120404-AHF	12.9	12.7	4.76	5.56	0.4	★	
CCMT120408-AHF	12.9	12.7	4.76	5.56	0.8	★	
DCMT070204-AHF	7.8	6.35	2.38	2.8	0.4	★	
DCMT11T302-AHF	11.6	9.525	3.97	4.4	0.2	★	
DCMT11T304-AHF	11.6	9.525	3.97	4.4	0.4	★	
DCMT11T308-AHF	11.6	9.525	3.97	4.4	0.8	★	
SCMT09T304-AHF	9.525	9.525	3.97	4.4	0.4	★	
SCMT09T308-AHF	9.525	9.525	3.97	4.4	0.8	★	
TCMT110204-AHF	11	6.35	2.38	2.8	0.8	★	
TCMT110208-AHF	11	6.35	2.38	2.8	0.8	★	
TCMT16T304-AHF	16.5	9.525	3.97	4.4	0.4	★	
TCMT16T308-AHF	16.5	9.525	3.97	4.4	0.8	★	
VBMT160404-AHF	16.5	9.525	4.76	4.4	0.4	★	
VBMT160408-AHF	16.5	9.525	4.76	4.4	0.8	★	