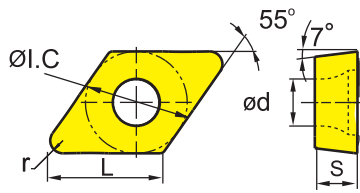


- Ideal machining conditions
- Normal machining conditions
- Unfavourable machining conditions

DCMT	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

Turning inserts



DC** positive insert				HC ¹ (CVD)								HC ¹ (PVD)			HT	HC ²	HW			
				P	M	K	N	S	H											
EM	DCMT070204-EM	0.4	0.19-2.25	0.06-0.17	●	●	●	●	●	●	●	●	●	●	●	●	●			
	DCMT070208-EM	0.8	0.38-2.25	0.08-0.23							●	●	●	●	●	●				
	DCMT11T304-EM	0.4	0.25-3.00	0.08-0.23							●	●	●	●	●	●				
Medium Cut	DCMT11T308-EM	0.8	0.5-3.0	0.1-0.3							●	●	●	●	●	●				
XM	DCMT11T304-XM	0.4	1-2.5	0.15-0.3	●	○														
	DCMT11T308-XM	0.8	1-2.5	0.15-0.35	●	●														
Medium Cut	DCMT11T312-XM	1.2	1-2.5	0.15-0.4	●	●														

● Ex stock ○ On demand
 YBC152F, YBC252F, YBM153F, YBM253F available

HC¹ Coated carbide
 HT Uncoated cermet
 HC² Coated cermet
 HW Uncoated carbide

Tool holder

SDACR/L	SDJCR/L	SDNCN	SDACR/L-SC	SDHCR/L-SC	SDJCR/L-SC	SDNCN-SC
Kr: 90°	Kr: 93°	Kr: 62°30'	Kr: 90°	Kr: 107°30'	Kr: 93°	Kr: 62°30'
A271	A272	A273	A308	A309	A310	A311
S***-SDQCR/L	A***-SDUCR/L	S***-SDZCR/L	E***-SDQCR/L			
Kr: 107°30'	Kr: 93°	Kr: 85°	Kr: 107°30'			
A336	A337	A338	A357			

System code > A48


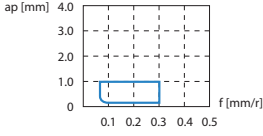
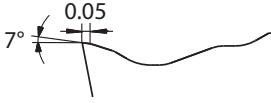


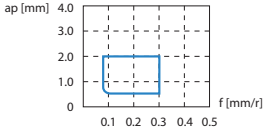
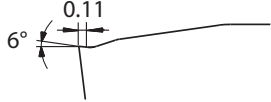


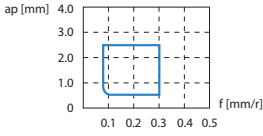
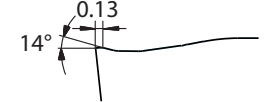


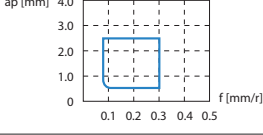
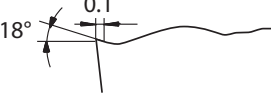


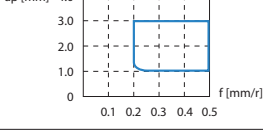
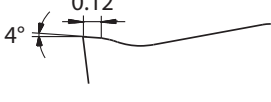


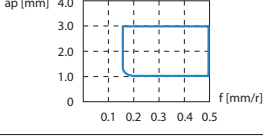
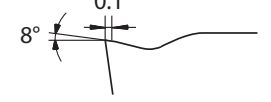



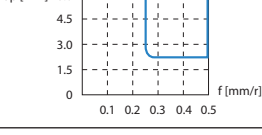

Grade selection > A42

Technical info > A501

Cutting data > A366



P Positive inserts

Chip breaker	Application		Application fields	Cutting edge design
SF	Fine-finishing			
HF	Finishing	 		
AHF	Finishing	 		
XF	Finishing	 		
HM	Medium machining	 		
XM	Medium machining	 		
HR	Roughing	  		

A

Turning

B

Milling

C

Drilling

D

Technical Information

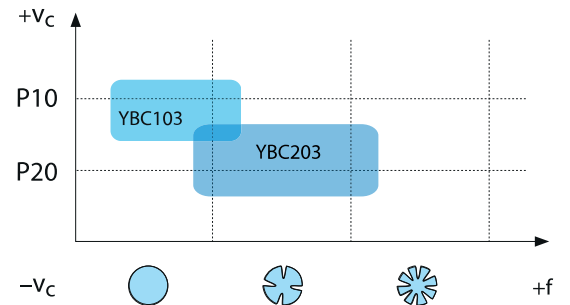
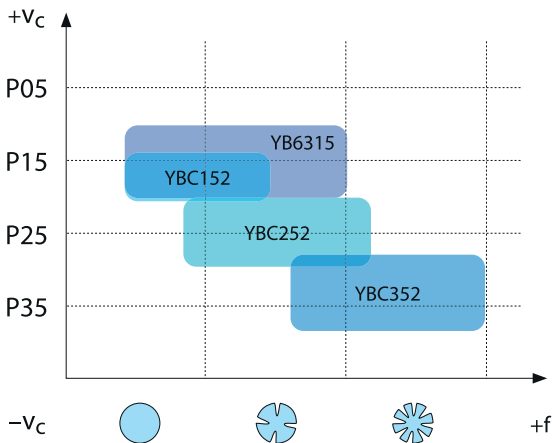
E

Index

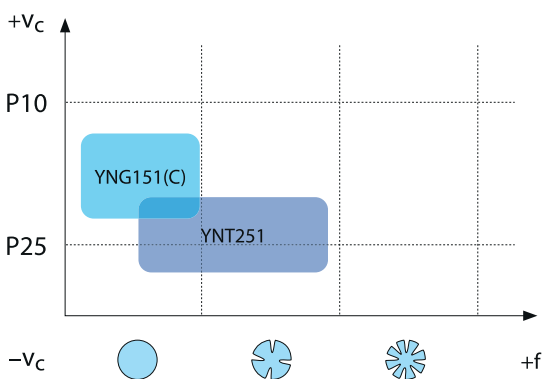
Coated cemented carbide CVD

Grade	ISO	Micro structure	Grade description
A	Turning		P10 grade with excellent wear resistance at higher cutting speeds. Latest sinter processes and CVD coating technologies enable a wide range of applications in the P material range.
B	Milling		CVD coated P10–P20 carbide grade for finishing to medium operation of steel, casting steel and high chrome material. Outstanding performance under high cutting speed and temperature with excellent wear resistance.
C	Drilling		CVD coated P10–P20 carbide grade for finishing to medium operation of steel and casting steel. Outstanding performance under higher cutting speed and temperature with excellent wear resistance.
D	Technical Information		P20 grade with exceptional wear resistance and toughness for reliable machining operations. Ultra-modern sintering technique and CVD coating technologies allow for a wide range of applications in the P material range.
E	Index		CVD coated P20–P35 carbide grade for medium operation to roughing of steel and casting steel. Optimal performance of wear resistance and toughness for a wide application field.
F	Index		CVD coated P20–P40 carbide grade for roughing operation of steel and casting steel. Optimal performance of wear resistance and toughness for a wide application field.
G	Index		CVD coated M10–M25 carbide grade for finishing to medium application in stainless steel. High wear resistance and capability against plastic deformation at higher cutting speed.
H	Index		CVD coated M15–M35 carbide grade for medium to roughing operation in stainless steel with wide application field. High wear resistance and capability against plastic deformation at higher cutting speed.

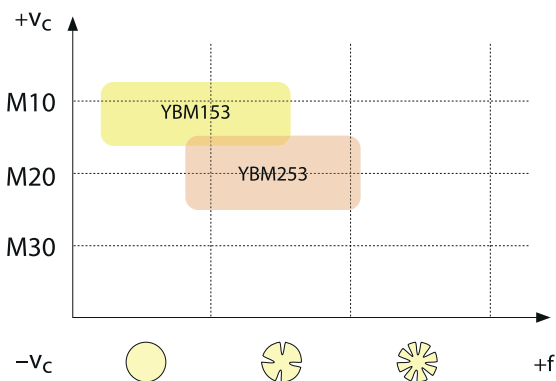
CVD coated carbide grades for steel



Cermet grades for steel



CVD coated carbide grades for stainless steel



A

Turning

B

Milling

C

Drilling

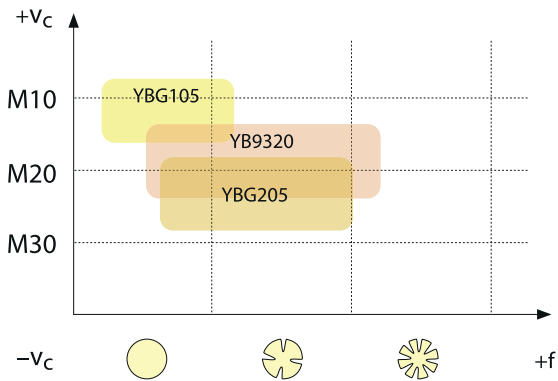
D

Technical Information

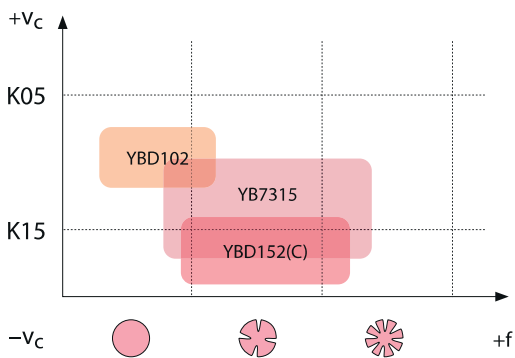
E

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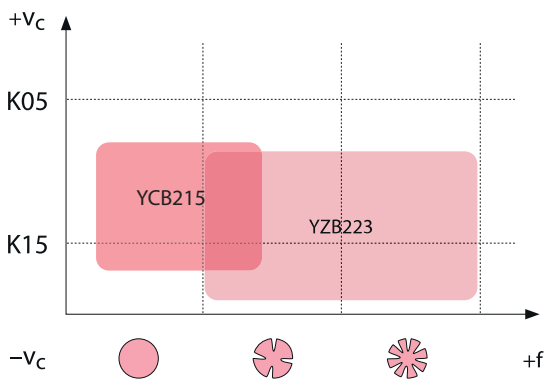
PVD coated carbide grades for stainless steel



CVD coated carbide grades for cast iron



CBN grades for cast iron



A

Turning

B

Milling

C

Drilling

D

Technical
Information

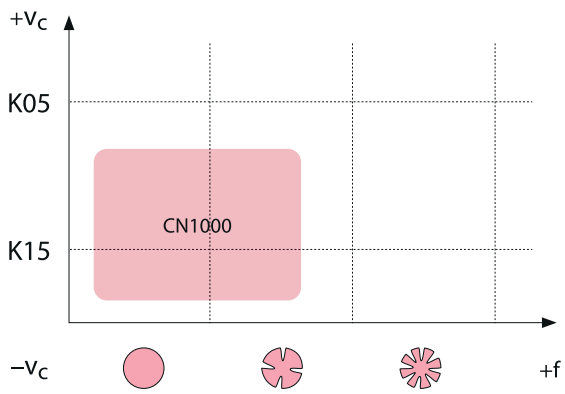
E

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A

Turning

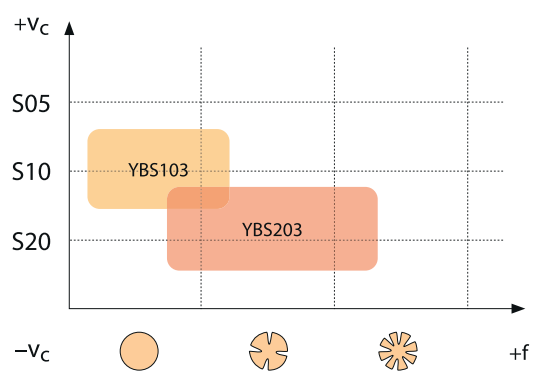
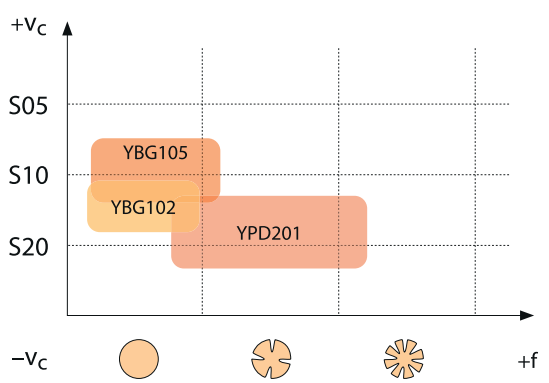
Ceramic grades for cast iron



B

Milling

PVD coated carbide grades for superalloys



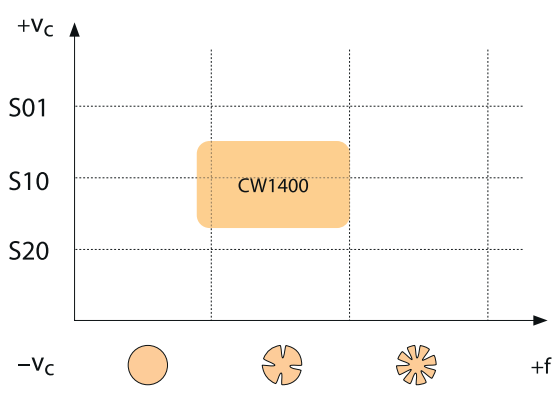
C

Drilling

D

Technical Information

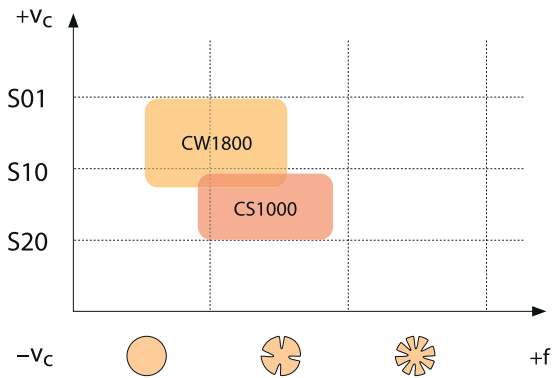
Ceramic grades for cobalt base alloys/HSS



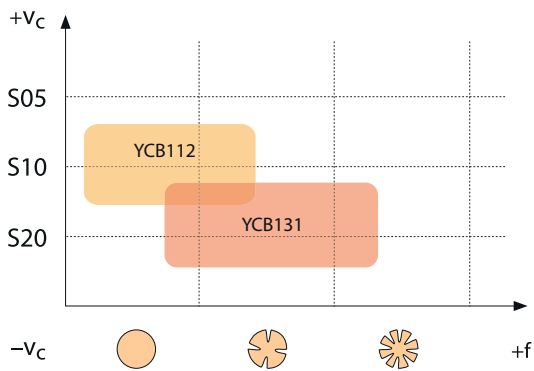
E

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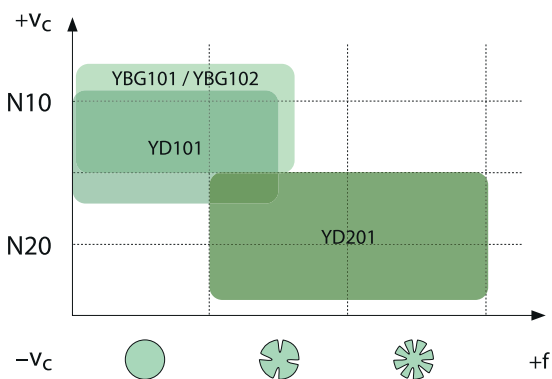
Ceramic grades for nickel base alloys



CBN grades for superalloys



Carbide grades for non-ferrous metals



A

Turning

B

Milling

C

Drilling

D

Technical Information

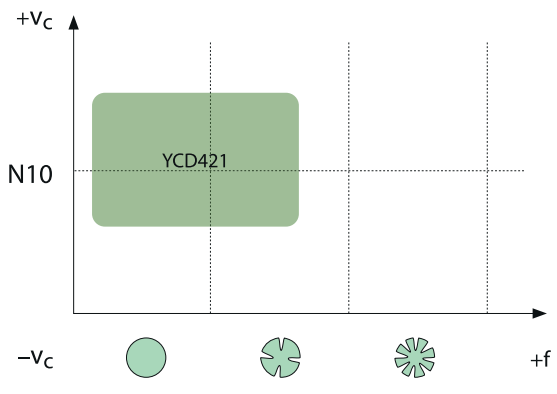
E

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A

Turning

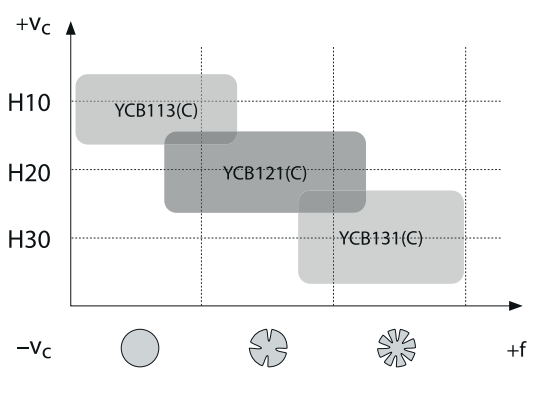
PCD grades for non-ferrous metals



B

Milling

CBN grades for hardened steel



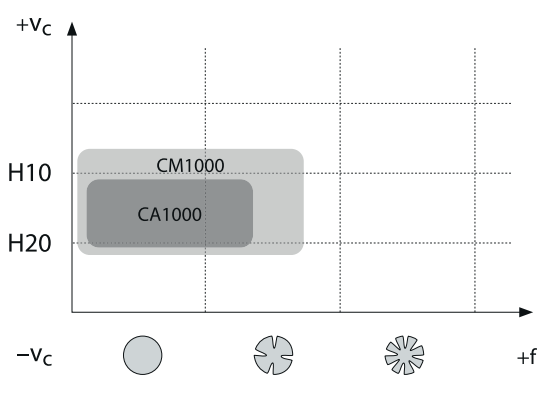
C

Drilling

D

Technical Information

Ceramic grades for hardened steel



E

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Application fields of grades – general turning

	ISO	HC ¹ (CVD)	HC ¹ (PVD)	HT	HC ²	Ceramic	HW	CBN	PCD
P	P01	YBC103		YNG151	YNG151C				
	P10	YB6315		YNT251					
	P20	YBC152							
	P30	YBC203							
	P40	YBC252							
		YBC352							
M	M01		YBG105	YNG151	YNG151C				
	M10	YBM153	YB9320						
	M20	YBM253	YBG205						
	M30								
	M40								
K	K01					CN1000		YCB215	YZB223
	K10	YBD102					YD201		
	K20	YBD152							
	K30	YB7315							
		YBD152C							
N	N01						YD101		YCD421
	N10		YBG101				YD201		
	N20		YBG102						
	N30								
S	S01		YBS103			CS1000		YCB112	
	S10		YBG102			CW1400		YCB131	
	S20		YBG105			CW1800			
	S30		YB9320	YPD201					
H	H01							YCB113(C)	
	H10							YCB121(C)	
	H20								YCB131(C)
	H30								

- P** Steel
- M** Stainless steel
- K** Cast iron

- N** Non-ferrous metals
- S** Heat-resistant alloys
- H** Hardened materials

- HC¹ Coated carbide
- HT Uncoated cermet
- HC² Coated cermet
- HW Uncoated carbide

A

Turning

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Milling

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C N G A 12 04 08 T 020 20 – 2 (W)

1 2 3 4 5 6 7 8 9 10 11 12

A

Turning

B

Milling

C















Drilling










D

Technical Information

E

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Insert shape		
A 	B 	C 
D 	E 	H 
K 	L 	M 
P 	S 	T 
V 	W 	Z Special







Clearance angle	
A 	B 
C 	D 
E 	F 
G 	N 
P 	O Special

Tolerance class			
Code	I.C [mm]	m [mm]	S [mm]
A	±0,025	±0,005	±0,025
C	±0,025	±0,013	±0,025
E	±0,025	±0,025	±0,025
F	±0,013	±0,005	±0,025
G	±0,025	±0,025	±0,130
H	±0,013	±0,013	±0,025
J	±0,05-0,15	±0,005	±0,025
K	±0,05-0,15	±0,013	±0,025
L	±0,05-0,15	±0,025	±0,025
M	±0,05-0,15	±0,08-0,20	±0,130
N	±0,05-0,15	±0,08-0,20	±0,025
U	±0,08-0,25	±0,13-0,38	±0,130

1

2



3

Fastening features (metric)	
Insert shape	
A 	B 
C 	N 
Q 	W 
X	Special

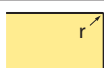
4

Cutting edge length l [mm]						
I.C [mm]	Insert shape					
	C	D	S	T	V	W
3,97				06		
5,0				09		
5,56				09		
6,0				09		
6,35	06	07		11	11	
8,0				09		
9,525	09	11	09	16	16	06
10,0				09		
12,0				09		
12,7	12	15	12	22	22	08
15,875	16		15	27		
16,0		19				
19,05	19		19	33		
20,0				09		
25,0	25	25				
25,4			25			
31,75				09		
32				09		





5

Insert thickness S [mm]			
			
Code	S	Code	S
02	2,38	06	6,35
T2	2,58	T6	6,75
03	3,18	07	7,94
T3	3,97	09	9,52
04	4,76	T9	9,72
T4	4,96	11	11,11
05	5,56	12	12,70
T5	5,95		

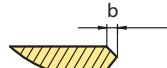
6

Nose radius r [mm]	
	
Code	r
00	–
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
32	3,2
X	Special
MO	Round inserts


7

Cutting edge profile		
Code	Cutting edge	Insert shape
E	Rounding	
F	Sharp edge	
T	Chamfer	
S	Chamfer + Rounding	





8

Chamfer width b [mm]	
	
Code	b
010	0,10
015	0,15
020	0,20
025	0,25
030	0,30
035	0,35
040	0,40
045	0,45
050	0,50
100	1,00
200	2,00

9

Chamfer angle α	
	
Code	α
05	5°
10	10°
15	15°
20	20°
25	25°
30	30°

10

Cutting edges	
Code	Form
1	
2	
3	
4	

11

Extra	
Code	Description
W	Wiper
HS	Full face single brazed CBN insert
M	Solid CBN with clamping dimple
CB	Chip breaker (CBN)
MED	Chip breaker, fine – medium (PCD)
ROF	Chip breaker, medium – roughing (PCD)
L (L/R)	Full-edge tipped (PCD)

12

A

Turning

B

Milling

C

Drilling

D

Technical Information

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