


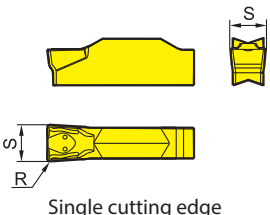




















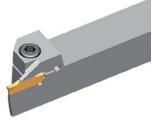
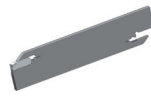
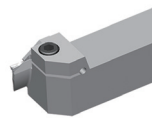
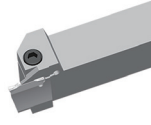
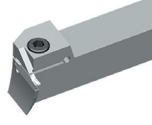
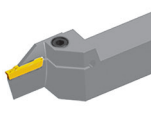
-  Ideal machining conditions
-  Normal machining conditions
-  Unfavourable machining conditions

Parting inserts

Parting & grooving insert (single sided)					HC ¹ (CVD)		HC ¹ (PVD)				HW	
 <p>Single cutting edge</p>	P											
	M											
	K											
	N											
	S											
	H											
ISO	R±0.1	S±0.10	f	YBC252 YBC251			YBG105 YBG102 YB9320 YBG205 YBG202 YBG302				YD101 YD201	
	ZTHS0504-MG	0.4	5	0,10-0,25					○	○	●	
	ZTKS0608-MG	0.8	6	0,13-0,30						○	●	

● Ex stock ○ On demand

HC¹ Coated carbide
HW Uncoated carbide

Tool holders					
QE*S*R/L	QZ**+QE**	QF*S*LL-H	QF*S*RR-H	QF*S*R/L-L	QF*S*R/L-H
					
A427	A431	A438	A438	A441	A442

System code > A398

Grade selection > A394

Technical info > A501

Cutting data > A456



A

Grooving

MM P M K S

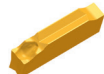


Turning

Sintered chip breaker with straight cutting edge for general machining of steel, stainless steel, cast iron and difficult-to-machine materials. Can be used for grooving, turning and parting off.

B

MG P M K S



Milling

Sintered chip breaker for general machining of steel, stainless steel, cast iron and difficult-to-machine materials. Can be used for grooving, turning and parting off.

C

MG P M K S



Drilling

Universal chip breaker with round profile for general machining of steel, stainless steel and cast iron. Suitable for grooving and profiling.

D

Ground precision chip breaker for grooving and turning applications. Suitable for machining of stainless steel. E-tolerance for high repeatability.

EG M P S

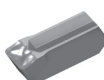


Technical Information

Ground precision chip breaker with round profile for grooving and turning applications. Suitable for machining of stainless steel. E-tolerance for high repeatability.

E

NM S



Index

Special chip breaker for machining of heat-resistant materials.

Parting & grooving Application fields of chip breakers

A Turning
B Milling
C Drilling
D Technical Information
E Index

Chip breaker	Application	P	M	K	N	S	H	Feed	Cutting edge design
ZT****-MM	Parting & grooving ✓								
	Turning ✓	✓	✓	✓		✓			
ZP****-MG	Parting & grooving ✓								
	Turning -	✓	✓	✓		✓			
ZT****-MG	Parting & grooving ✓								
	Turning ✓	✓	✓	✓		✓			
ZR****-MG	Parting & grooving ✓								
	Turning ✓	✓	✓	✓		✓			
ZT****-EG	Parting & grooving ✓								
	Turning ✓	✓	✓	✓		✓			
ZR****-EG	Parting & grooving ✓								
	Turning ✓	✓	✓	✓		✓			
ZI****-NM	Parting & grooving ✓								
	Turning ✓		✓		✓	✓			

✓ Very suitable ✓ Suitable

■ Parting & grooving
■ Turning

A
Turning

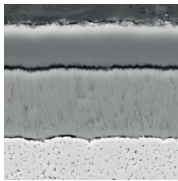
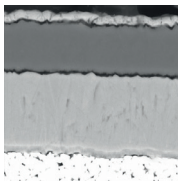
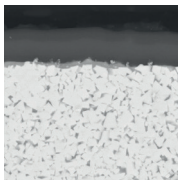
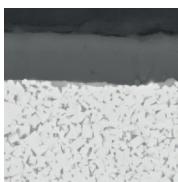
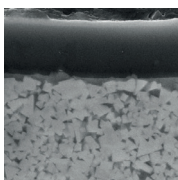
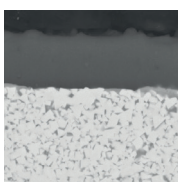
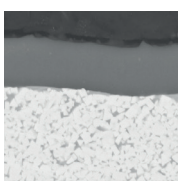
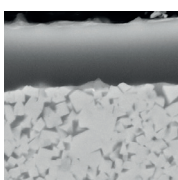
B
Milling

C
Drilling

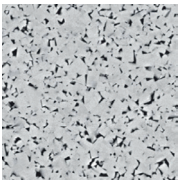
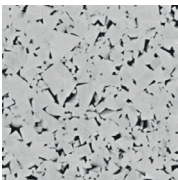
D
Technical Information

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Parting & grooving

Grade	ISO	Micro structure	Grade description
YBC252	P20 - P35		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.
YBC251	P20 - P35		CVD coated P20–P35 carbide grade for medium operation to roughing of steel and casting steel in lower cutting speed.
YBG105	S05 - S20		PVD multilayer coated S05–S20 carbide substrate for finishing to medium application of super alloy material but also stainless steel. Good wear resistance and thermal stability in a wide application field.
YBG102	S05 - S15		PVD coated S05–S15 carbide substrate for finishing to medium application of super alloy material, stainless steel and aluminum. Good wear resistance in a wide application field.
YB9320	P10 - P30 M10 - M25		PVD multilayer coated P10–P30/M10–M25 carbide substrate for finishing to medium machining of stainless steel, super alloys and steel (grooving/milling). Optimised coating stability for higher wear resistance and thermal stability in a wide range of applications.
YBG205	P10 - P30 M20 - M40 S15-S25		PVD multilayer coated P10–P30/M20–M40/S15–S25 carbide substrate for finishing to medium machining of stainless steel, super alloys and steel (milling). Excellent wear resistance and thermal stability in a wide range of applications.
YBG202	P10 - P30 M10 - M25		PVD coated P10–P30/M10–M25 carbide substrate for finishing to medium application of stainless steel and steel (milling). Good wear resistance in a wide application field.
YBG302	P15 - P30 M25 - M40		PVD coated P15–P30/M25–M40 carbide substrate for medium roughing application of stainless steel and steel (milling). Good wear resistance and toughness.

Parting & grooving

Grade	ISO	Micro structure	Grade description
YD101	K05 - K20 N05 - N20		Uncoated K05–K20/N05–N20 carbide substrate for fine to medium application in aluminum and other material.
YD201	K10 - K30 N10 - N30		Uncoated K10–K30/N10–N30 carbide substrate for medium application in aluminum and other material.

A

Turning

B

Milling

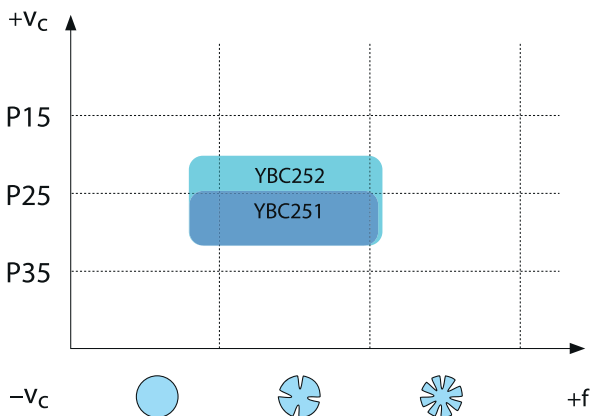
C

Drilling

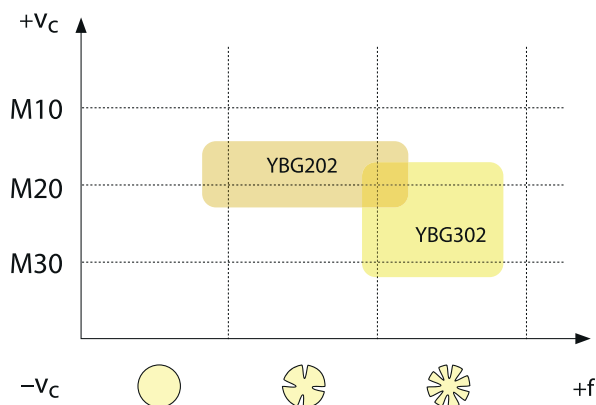
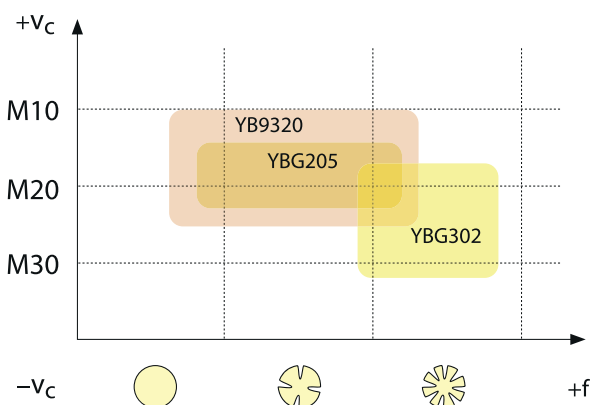
DTechnical
Information**E**

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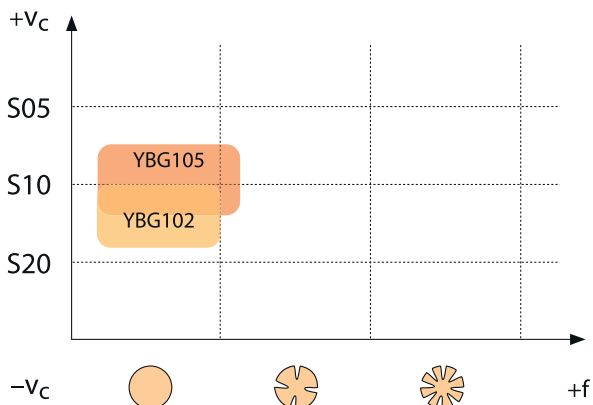
CVD coated carbide grades for steel



PVD coated carbide grades for stainless steel



PVD coated carbide grades for superalloys



A

Turning

B

Milling

C

Drilling

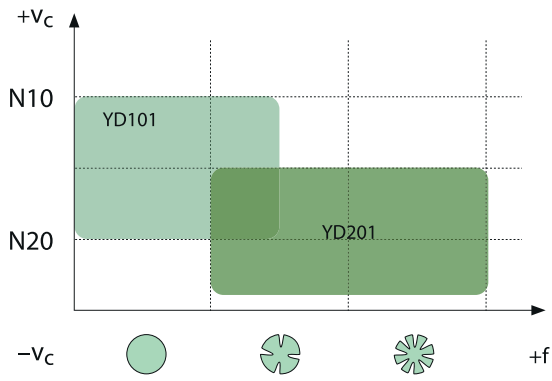
D

Technical Information

E

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Carbide grades for non-ferrous metals



A

Turning

B

Milling

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Information

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Application fields of grades – parting & grooving

	ISO	HC ¹ (CVD)	HC ¹ (PVD)	HT	HC ²	Ceramic	HW	CBN	PCD
A Turning	P01								
	P10								
	P20	YBC251 YBC252							
	P30								
	P40								
B Milling	M01								
	M10								
	M20		YBG202 YBG205 YB9320 YBG302						
	M30								
	M40								
C Drilling	K01								
	K10								
	K20								
	K30								
D Technical Information	N01						YD101 YD102		
	N10								
	N20								
	N30								
E Index	S01								
	S10		YBG102 YBG105						
	S20								
	S30								
F Index	H01								
	H10								
	H20								
	H30								

P	Steel
M	Stainless steel
K	Cast iron

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

HC ¹	Coated carbide
HT	Uncoated cermet
HC ²	Coated cermet
HW	Uncoated carbide

ZP G D 04 04 – M G

1 2 3 4 5 6 7

A

Turning

Application	
Code	Description
ZP	Parting
ZT	Grooving & turning
ZR	Form turning

Insert seat size [mm]	
Groove width	
Code	Description
B	2,0
E	2,5
F	3,0
G	4,0
H	5,0
K	6,0
L	8,0

B

Milling


1

2

C


Drilling

No. of cutting edges	
Code	Description
S	Single
D	Double

Insert thickness S [mm]	
	
Code	S
02	2,0
025	2,5
03	3,0
04	4,0
05	5,0
06	6,0
08	8,0

D

Technical Information

Nose radius r [mm]	
	
Code	r
02	0,2
03	0,3
04	0,4
08	0,8

Tolerance class [mm]	
Code	Description
M	±0,13
E	±0,025

E

Index

Chip breaker	
Code	Description
G	General chip breaker
F	Special chip breaker
M	Straight edge

7