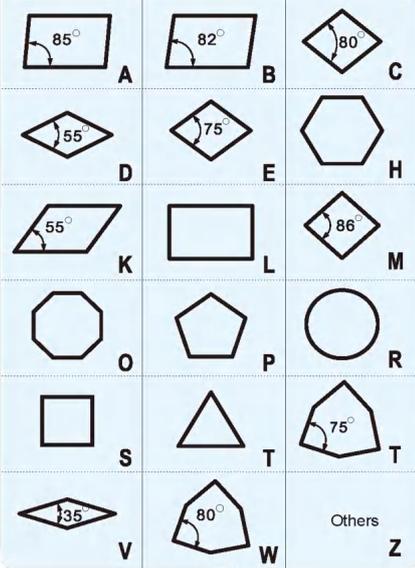
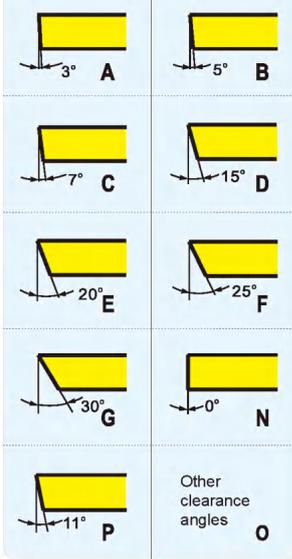


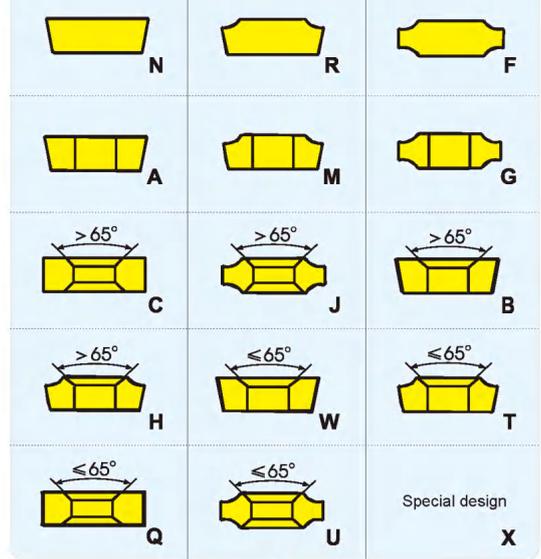
Insert shape



Major cutting edge Clearance angle

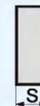
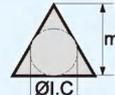
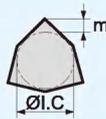


Chip-breaker and/or fixing type



T N M G

Tolerances, inch



Letter Symbol	Tolerances in inches			Inscribed circle diameter	Tolerances for M		Tolerances for d																			
	m	s	d		Class M	Class U	Class M.J.K.L	Class U																		
A	±0.0002	±0.001	±0.0010	0.250	±0.003	±0.005	±0.002	±0.003																		
F	±0.0002	±0.001	±0.0005	0.375	±0.003	±0.005	±0.002	±0.003																		
C	±0.0005	±0.001	±0.0010	0.500	±0.005	±0.008	±0.003	±0.005																		
H	±0.0005	±0.001	±0.0010	0.625	±0.006	±0.011	±0.004	±0.007																		
E	±0.0010	±0.001	±0.0010	0.750	±0.006	±0.011	±0.004	±0.007																		
G	±0.0010	±0.005	±0.0010	1.000	±0.007	±0.015	±0.005	±0.010																		
J	±0.0002	±0.01	±0.002	Insert shape D <table border="1"> <thead> <tr> <th>Inscribed circle diameter</th> <th>Tolerances for M</th> <th>Tolerances for M</th> </tr> </thead> <tbody> <tr> <td>±0.250</td> <td>±0.004</td> <td>±0.002</td> </tr> <tr> <td>±0.375</td> <td>±0.004</td> <td>±0.002</td> </tr> <tr> <td>±0.500</td> <td>±0.006</td> <td>±0.003</td> </tr> <tr> <td>±0.625</td> <td>±0.007</td> <td>±0.004</td> </tr> <tr> <td>±0.750</td> <td>±0.007</td> <td>±0.004</td> </tr> </tbody> </table>					Inscribed circle diameter	Tolerances for M	Tolerances for M	±0.250	±0.004	±0.002	±0.375	±0.004	±0.002	±0.500	±0.006	±0.003	±0.625	±0.007	±0.004	±0.750	±0.007	±0.004
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Inscribed circle diameter

Code(inch)	2	3	4	5	6	8
Inscribed circle diameter(inch)	0.250	0.375	0.500	0.625	0.750	1.000

Nose radius

Code(inch)	0	1	2	3	4	5	6
Nose radius (inch)	0.008	0.016	0.031	0.047	0.063	0.079	0.094

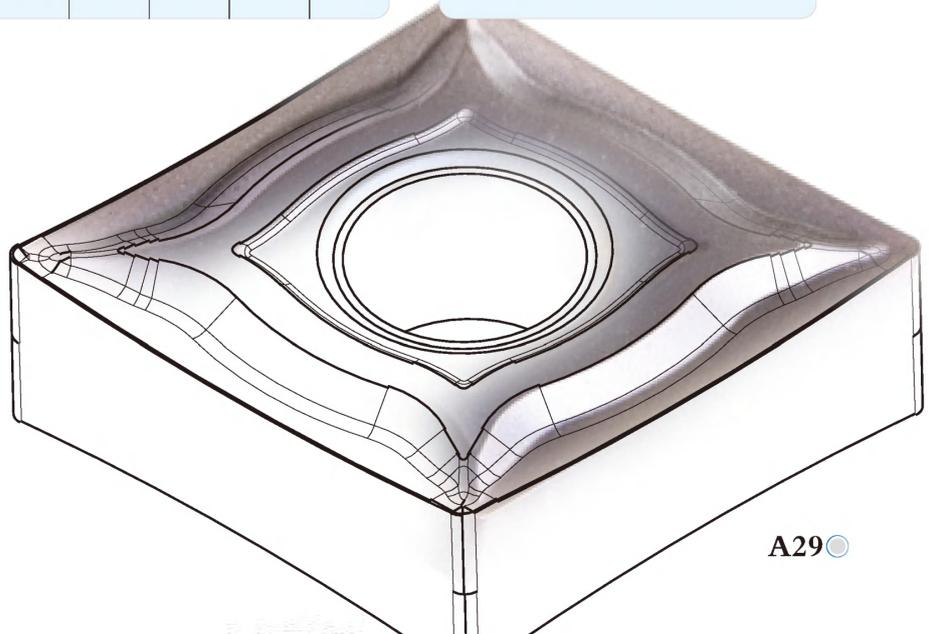
4 3 2 - DM

Insert thickness

Code(inch)	2	3	4	5	6
Inscribed radius diameter(inch)	0.125	0.187	0.250	0.313	0.375

Chip-breakers code

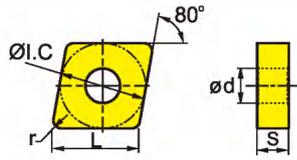
Position 10 indicates the cutting properties & chip-breakers of inserts



Turning

General turning inserts

CN (Negative inserts)



😊 Good working conditions 😐 General working conditions ☹ Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
M Stainless steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
K Cast iron	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
N Ferrite materials	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
S Heat-resistant steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊

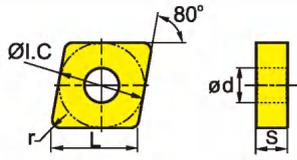
Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																						
		L	$\varnothing I.C$	S	$\varnothing d$	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
XM  Semi-finishing	CNMG431-XM	0.508	0.500	0.187	0.203	0.016	●	●																					
	CNMG432-XM	0.508	0.500	0.187	0.203	0.031	●	●																					
	CNMG433-XM	0.508	0.500	0.187	0.203	0.047	●	●																					
	CNMG434-XM	0.508	0.500	0.187	0.203	0.063	●	●																					
	CNMG542-XM	0.634	0.625	0.250	0.250	0.016	●	●																					
	CNMG543-XM	0.634	0.625	0.250	0.250	0.031	●	●																					
	CNMG544-XM	0.634	0.625	0.250	0.250	0.047	●	●																					
	CNMG642-XM	0.760	0.750	0.250	0.314	0.016	●	●																					
	CNMG643-XM	0.760	0.750	0.250	0.314	0.031	●	●																					
	CNMG644-XM	0.760	0.750	0.250	0.314	0.047	●	●																					
DM  Semi-finishing	CNMG321-DM	0.382	0.375	0.125	0.150	0.016			○	○										●									
	CNMG322-DM	0.382	0.375	0.125	0.150	0.031				○											●								
	CNMG431-DM	0.508	0.500	0.187	0.203	0.016		●	●				●								●					●			
	CNMG432-DM	0.508	0.500	0.187	0.203	0.031		●	●				●								●					●			
	CNMG433-DM	0.508	0.500	0.187	0.203	0.047		●	●				○								●					●			
	CNMG434-DM	0.508	0.500	0.187	0.203	0.063				○											○								
	CNMG542-DM	0.634	0.625	0.250	0.250	0.031		●	●												●								
	CNMG543-DM	0.634	0.625	0.250	0.250	0.047			○	●											○								
	CNMG544-DM	0.634	0.625	0.250	0.250	0.063			●	○											○								
	CNMG642-DM	0.760	0.750	0.250	0.313	0.031			○	○											○								
	CNMG643-DM	0.760	0.750	0.250	0.313	0.047			●	●											○								
	CNMG644-DM	0.760	0.750	0.250	0.313	0.063				●											○								

● Always stock available ○ Produce according to order



Applicable tool

CN □ □ (Negative inserts)



☺ Good working conditions ☹ General working conditions ☹ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201		
P Steel	☺☺☺☺☺☺	☺☺☺☺☺☺	☺☺☺☺☺☺	☺☺☺☺☺☺	☺☺☺☺☺☺																				☺☺	☺☺				
M Stainless steel		☺☺☺☺☺☺	☺☺☺☺☺☺	☺☺☺☺☺☺	☺☺☺☺☺☺																					☺☺	☺☺			
K Cast iron			☺☺☺☺☺☺	☺☺☺☺☺☺	☺☺☺☺☺☺																						☺☺	☺☺		
N Ferrite materials				☺☺☺☺☺☺	☺☺☺☺☺☺																						☺☺	☺☺		
S Heat-resistant steel					☺☺☺☺☺☺																						☺☺	☺☺		

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide								
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052				YBD102	YBD152	YNG151	YNG151C	YD101	YD201		
EM Semi-finishing	CNMG431-EM	0.508	0.500	0.187	0.203	0.016							●	●							●													
	CNMG432-EM	0.508	0.500	0.187	0.203	0.031							●	●							●													
	CNMG433-EM	0.508	0.500	0.187	0.203	0.047							●	●							●													
	CNMG542-EM	0.634	0.625	0.250	0.250	0.031						○		○	●						●													
	CNMG543-EM	0.634	0.625	0.250	0.250	0.047								○	●						●													
	CNMG544-EM	0.634	0.625	0.250	0.250	0.063								○	●						●													
NM Semi-finishing	CNMG431-NM	0.508	0.500	0.187	0.203	0.016					○																				○			
	CNMG432-NM	0.508	0.500	0.187	0.203	0.031					●												○									○		
	CNMG433-NM	0.508	0.500	0.187	0.203	0.047						○											○									○		
DR Roughing	CNMG432-DR	0.508	0.500	0.187	0.203	0.031		●	●	●											●											●		
	CNMG433-DR	0.508	0.500	0.187	0.203	0.047		○	●	●												●											●	
	CNMG434-DR	0.508	0.500	0.187	0.203	0.063		○	○	○												●											●	
	CNMG542-DR	0.634	0.625	0.250	0.250	0.031				○												○												○
	CNMG543-DR	0.634	0.625	0.250	0.250	0.047				●											●													○
	CNMG544-DR	0.634	0.625	0.250	0.250	0.063				●																								○
	CNMG642-DR	0.760	0.750	0.250	0.250	0.031				○												●												○
	CNMG643-DR	0.760	0.750	0.250	0.313	0.047			○	●	●												○											○
	CNMG644-DR	0.760	0.750	0.250	0.313	0.063			○	●	●																							○
	CNMG646-DR	0.760	0.750	0.250	0.313	0.094			○	○	○																							○

● Always stock available ○ Produce according to order

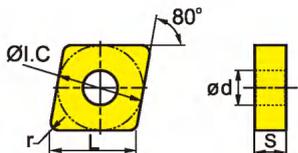


Applicable tool

CN

(Negative inserts)

☺ Good working conditions ☹ General working conditions 😞 Adverse working conditions



Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
Steel	☺☺☺☺☺☺☺	☹☹☹☹☹☹☹☹	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺
Stainless steel	☹☹☹☹☹☹☹☹	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺
Cast iron	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☹☹☹☹☹☹☹☹	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺
Ferrite materials	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺
Heat-resistant steel	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	Cermet YNG151	Coated Cermet YNG151C	Cemented carbide YD101	Cemented carbide YD201
DR Roughing	CNMM643-DR	0.760	0.750	0.250	0.313	0.047				○																			
	CNMM644-DR	0.760	0.750	0.250	0.313	0.063			●																				
	CNMM646-DR	0.760	0.750	0.250	0.313	0.094			○																				
	CNMM866-DR	1.015	1.000	0.375	0.359	0.094			●																				
SNR Roughing	CNMG432-SNR	0.508	0.500	0.187	0.203	0.031					○	●			○							○							
	CNMG433-SNR	0.508	0.500	0.187	0.203	0.047					○	●			○							○							
	CNMG542-SNR	0.634	0.625	0.250	0.250	0.031					○	●			○							○							
	CNMG544-SNR	0.634	0.625	0.250	0.250	0.063					○	●			○							○							
	CNMG644-SNR	0.760	0.750	0.250	0.313	0.063					○	●			○							○							
ER Roughing	CNMG432-ER	0.508	0.500	0.187	0.203	0.031															●								
	CNMG433-ER	0.508	0.500	0.187	0.203	0.047																●							
	CNMG543-ER	0.634	0.625	0.250	0.250	0.047																●							
	CNMG544-ER	0.634	0.625	0.250	0.250	0.063																●							
	CNMG643-ER	0.760	0.750	0.250	0.313	0.047																●							
	CNMG644-ER	0.760	0.750	0.250	0.313	0.063																●							
ER Roughing	CNMM856-ER	1.015	1.000	0.313	0.359	0.094				●											●								
	CNMM858-ER	1.015	1.000	0.313	0.359	0.126				●												●							
	CNMM866-ER	1.015	1.000	0.375	0.359	0.094				●												●							
	CNMM868-ER	1.015	1.000	0.375	0.359	0.126				●												●							

● Always stock available ○ Produce according to order



▶ A118



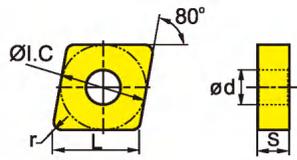
▶ A122



▶ A131

Applicable tool

CN (Negative inserts)



☺ Good working conditions ☹ General working conditions 😞 Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
P Steel	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
M Stainless steel	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
K Cast iron	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
N Ferrite materials	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
S Heat-resistant steel	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide													Cermet	Cemented carbide											
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215			YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated cermet	YD101	YD201	
Without chipbreaker (flat top)	CNMA431	0.508	0.500	0.187	0.203	0.016																										
	CNMA432	0.508	0.500	0.187	0.203	0.031																	●	○	○							
	CNMA433	0.508	0.500	0.187	0.203	0.047																	●	●	●							
	CNMA434	0.508	0.500	0.187	0.203	0.063																	●	●	○							
	CNMA542	0.634	0.625	0.250	0.250	0.031																		○								
	CNMA543	0.634	0.625	0.250	0.250	0.047																			●							
	CNMA544	0.634	0.625	0.250	0.250	0.063																	○	●	○							
	CNMA643	0.760	0.750	0.250	0.313	0.047																		●	○	●						
	CNMA644	0.760	0.750	0.250	0.313	0.063																		○	●	●						
Conventional chipbreaker	CNMG431	0.508	0.500	0.187	0.203	0.016																	○									
	CNMG432	0.508	0.500	0.187	0.203	0.031			●	●														●	●							
	CNMG433	0.508	0.500	0.187	0.203	0.047			●	●													○	○	○							

● Always stock available ○ Produce according to order

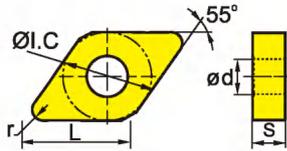


Applicable tool

Turning

General turning inserts

DN □ □ (Negative inserts)



😊 Good working conditions 😐 General working conditions ☹ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
P Steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
N Ferrite materials	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
S Heat-resistant steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																					
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated Cermet	Cemented carbide
XF Finishing	DNMG331-XF	0.457	0.375	0.187	0.125	0.016	●	○																				
	DNMG332-XF	0.457	0.375	0.187	0.125	0.031	●	○																				
	DNMG441-XF	0.610	0.500	0.250	0.203	0.016	●	●																				
	DNMG442-XF	0.610	0.500	0.250	0.203	0.031	●	●																				
	DNMG443-XF	0.610	0.500	0.250	0.203	0.047	●	●																				
DF Finishing	DNMG331-DF	0.457	0.375	0.187	0.150	0.016		○	○																	●		
	DNMG332-DF	0.457	0.375	0.187	0.150	0.031		○	○																			
	DNMG333-DF	0.457	0.375	0.187	0.150	0.047		○																				
	DNMG431-DF	0.610	0.500	0.187	0.203	0.016		●	●																			
	DNMG432-DF	0.610	0.500	0.187	0.203	0.031		●	●																			
	DNMG433-DF	0.610	0.500	0.187	0.203	0.047		○	○																			
	DNMG441-DF	0.610	0.500	0.250	0.203	0.016		●	●																			
	DNMG442-DF	0.610	0.500	0.250	0.203	0.031		●	○												○							
	DNMG443-DF	0.610	0.500	0.250	0.203	0.047		○																				
SF Finishing	DNMG331-SF	0.457	0.375	0.187	0.150	0.016																				○	●	
	DNMG431-SF	0.610	0.500	0.187	0.203	0.016																				○	●	
	DNMG432-SF	0.610	0.500	0.187	0.203	0.031																				○	●	
	DNMG441-SF	0.610	0.500	0.250	0.203	0.016																				○	●	
	DNMG442-SF	0.610	0.500	0.250	0.203	0.031																				○	●	

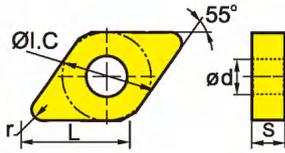
● Always stock available ○ Produce according to order



Applicable tool

DN □ □

(Negative inserts)



☺ Good working conditions ☹ General working conditions ☹ Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺
M	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺
K	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺
N	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺
S	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺



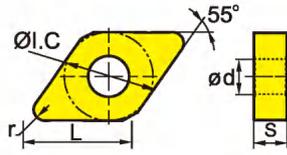
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated cermet	YD101	YD201
EF Finishing	DNMG331-EF	0.457	0.375	0.187	0.150	0.016							●	●					○										
	DNMG332-EF	0.457	0.375	0.187	0.150	0.031								○	●				○										
	DNMG333-EF	0.457	0.375	0.187	0.150	0.047								○	●				○										
	DNMG431-EF	0.610	0.500	0.187	0.203	0.016								●	●				○										
	DNMG432-EF	0.610	0.500	0.187	0.203	0.031								●	●				○										
	DNMG433-EF	0.610	0.500	0.187	0.203	0.047								○	●				○										
	DNMG441-EF	0.610	0.500	0.250	0.203	0.016								●	●				○										
	DNMG442-EF	0.610	0.500	0.250	0.203	0.031								●	●				○										
	DNMG443-EF	0.610	0.500	0.250	0.203	0.047								○	●				○										
NF Finishing	DNEG431-NF	0.610	0.500	0.187	0.203	0.016																							
	DNEG432-NF	0.610	0.500	0.187	0.203	0.031																							
	DNEG441-NF	0.610	0.500	0.250	0.203	0.016								●															○
	DNMG442-NF	0.610	0.500	0.250	0.203	0.031								●															○
NGF Finishing	DNEG432-NGF	0.610	0.500	0.187	0.203	0.031							○	●					○										
	DNEG433-NGF	0.610	0.500	0.187	0.203	0.047							○	●					○										
	DNEG442-NGF	0.610	0.500	0.250	0.203	0.031							○	●					○										
	DNEG443-NGF	0.610	0.500	0.250	0.203	0.047							○	●					○										

● Always stock available ○ Produce according to order



Applicable tool

DN (Negative inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated cermet YNG151C	Cemented carbide YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																	Cermet YNG151	Coated cermet YNG151C	Cemented carbide YD101	YD201		
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052					YBD102	YBD152
PM Semi-finishing	DNMG331-PM	0.457	0.375	0.187	0.150	0.016			●	○															●				
	DNMG332-PM	0.457	0.375	0.187	0.150	0.031			●	○														●	○				
	DNMG333-PM	0.457	0.375	0.187	0.150	0.047				○																			
	DNMG431-PM	0.610	0.500	0.187	0.203	0.016			●	○																			
	DNMG432-PM	0.610	0.500	0.187	0.203	0.031			●	○															●	●			
	DNMG433-PM	0.610	0.500	0.187	0.203	0.047				○															○	●			
	DNMG434-PM	0.610	0.500	0.187	0.203	0.063				○																			
	DNMG441-PM	0.610	0.500	0.250	0.203	0.016			●	○																●	●		
	DNMG442-PM	0.610	0.500	0.250	0.203	0.031				○	●														●	●			
	DNMG443-PM	0.610	0.500	0.250	0.203	0.047			●	●															●	○			
	DNMG444-PM	0.610	0.500	0.250	0.203	0.063				○																			
XM Semi-finishing	DNMG331-XM	0.457	0.375	0.187	0.125	0.016	●	●																					
	DNMG332-XM	0.457	0.375	0.187	0.125	0.031	●	●																					
	DNMG333-XM	0.457	0.375	0.187	0.125	0.047	●	●																					
	DNMG431-XM	0.610	0.500	0.187	0.203	0.016	●	○																					
	DNMG432-XM	0.610	0.500	0.187	0.203	0.031	●	○																					
	DNMG433-XM	0.610	0.500	0.187	0.203	0.047	●	○																					
	DNMG441-XM	0.610	0.500	0.250	0.203	0.016	●	●																					
	DNMG442-XM	0.610	0.500	0.250	0.203	0.031	●	●																					
	DNMG443-XM	0.610	0.500	0.250	0.203	0.047	●	●																					
	DNMG444-XM	0.610	0.500	0.250	0.203	0.063	●	●																					

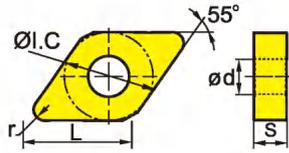
● Always stock available ○ Produce according to order



Applicable tool

DN □□

(Negative inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	Steel (P)	Stainless steel (M)	Cast iron (K)	Ferrite materials (N)	Heat-resistant steel (S)
Steel (P)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Stainless steel (M)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Cast iron (K)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Ferrite materials (N)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Heat-resistant steel (S)	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊

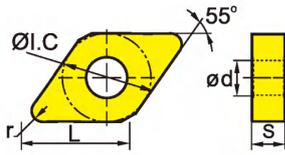
Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated cermet YNG151C	Cemented carbide YD101	Cemented carbide YD201
DM  Semi-finishing	DNMG331-DM	0.457	0.375	0.187	0.150	0.016			●	○										○									
	DNMG332-DM	0.457	0.375	0.187	0.150	0.031			●	●											●								
	DNMG333-DM	0.457	0.375	0.187	0.150	0.047			○	○																			
	DNMG431-DM	0.610	0.500	0.187	0.203	0.016			○	●																	○		
	DNMG432-DM	0.610	0.500	0.187	0.203	0.031			●	●																	●		
	DNMG433-DM	0.610	0.500	0.187	0.203	0.047			●	●																			
	DNMG434-DM	0.610	0.500	0.187	0.203	0.063				○																			
	DNMG441-DM	0.610	0.500	0.250	0.203	0.016			●	●												●				●			
	DNMG442-DM	0.610	0.500	0.250	0.203	0.031			●	●												●							
	DNMG443-DM	0.610	0.500	0.250	0.203	0.047			●	●																			
	DNMG444-DM	0.610	0.500	0.250	0.203	0.063				○	○																		
EM  Semi-finishing	DNMG331-EM	0.457	0.375	0.187	0.150	0.016								○	●				○	●									
	DNMG332-EM	0.457	0.375	0.187	0.150	0.031															○	●							
	DNMG333-EM	0.457	0.375	0.187	0.150	0.047																○	●						
	DNMG431-EM	0.610	0.500	0.187	0.203	0.016									●	●					○	●							
	DNMG432-EM	0.610	0.500	0.187	0.203	0.031									●	●					○	●							
	DNMG433-EM	0.610	0.500	0.187	0.203	0.047									○	●					○	●							
	DNMG441-EM	0.610	0.500	0.250	0.203	0.016									●	●					○	●							
	DNMG442-EM	0.610	0.500	0.250	0.203	0.031					○				●	●					○	●							
	DNMG443-EM	0.610	0.500	0.250	0.203	0.047									○	●					○	●							
DNMG444-EM	0.610	0.500	0.250	0.203	0.063									○	●					○	●								
NM  Semi-finishing	DNMG433-NM	0.610	0.500	0.187	0.203	0.047					○									○								○	
	DNMG443-NM	0.610	0.500	0.250	0.203	0.047					●										○							○	

● Always stock available ○ Produce according to order



Applicable tool

DN [] [] (Negative inserts)

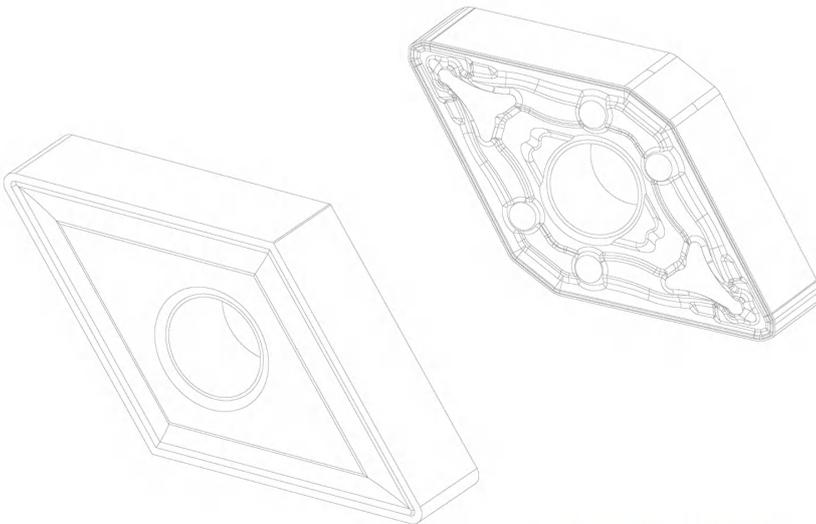


☺ Good working conditions ☹ General working conditions ☹ Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
M	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
K	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
N	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
S	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide													Cermet	Coated cermet	Cemented carbide								
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215				YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C
 Roughing	DNMG442-SNR	0.610	0.500	0.250	0.203	0.031																								
	DNMG443-SNR	0.610	0.500	0.250	0.203	0.047						○	●		○							○								
 Without chipbreaker (flat top)	DNMA432	0.610	0.500	0.187	0.203	0.031																●	●	○						
	DNMA441	0.610	0.500	0.250	0.203	0.016																	○	○	○					
	DNMA442	0.610	0.500	0.250	0.203	0.031																	○	●	●					
	DNMA443	0.610	0.500	0.250	0.203	0.047																	○	○	○					
	DNMA444	0.610	0.500	0.250	0.203	0.063																		○	○					

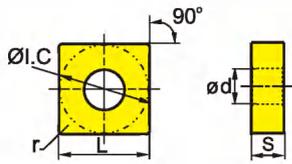
● Always stock available ○ Produce according to order



Applicable tool

SN

(Negative inserts)



😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	Coated cemented carbide																				Cermet	Coated cermet	Cemented carbide		
	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151				YNG151C	YD101
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
K Cast iron																		☹️	☹️	☹️	☹️	☹️	☹️	☹️	
N Ferrite materials																						😊	😊	😊	
S Heat-resistant steel				😊	😊																	😊	😊	😊	

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide						
		L	ØI.C	S	Ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103				YBD052	YBD102	YBD152	YNG151	YNG151C	YD101
 Finishing	SNMG431-XF	0.500	0.500	0.187	0.203	0.016	●	●																							
	SNMG432-XF	0.500	0.500	0.187	0.203	0.031	●	●																							
	SNMG433-XF	0.500	0.500	0.187	0.203	0.047	●	●																							
 Finishing	SNMG432-DF	0.500	0.500	0.187	0.203	0.031			○																		○				
	SNMG433-DF	0.500	0.500	0.187	0.203	0.047			○	○																					
 Finishing	SNMG321-EF	0.375	0.375	0.125	0.150	0.016											○	●													
	SNMG322-EF	0.375	0.375	0.125	0.150	0.031											○	●													
	SNMG323-EF	0.375	0.375	0.125	0.150	0.047											○	●													
	SNMG431-EF	0.500	0.500	0.187	0.203	0.016								●	●						○										
	SNMG432-EF	0.500	0.500	0.187	0.203	0.031								●	●						○										
	SNMG433-EF	0.500	0.500	0.187	0.203	0.047								○	●						○										
	SNMG542-EF	0.625	0.625	0.250	0.250	0.031								○	●						○										
SNMG543-EF	0.625	0.625	0.250	0.250	0.047								○	●						○											
 Finishing	SNMG321-SF	0.375	0.375	0.125	0.150	0.016																				○	●				
	SNMG322-SF	0.375	0.375	0.125	0.150	0.031																				○	●				
	SNMG431-SF	0.500	0.500	0.187	0.203	0.016																				○	●				
	SNMG432-SF	0.500	0.500	0.187	0.203	0.031																					○	●			
	SNMG433-SF	0.500	0.500	0.187	0.203	0.047																					○	●			
	SNMG542-SF	0.625	0.625	0.250	0.250	0.031																					○	●			

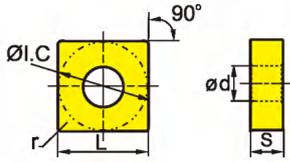
● Always stock available ○ Produce according to order



Applicable tool

SN

(Negative inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	Good working conditions (😊)												General working conditions (😐)				Adverse working conditions (😞)													
	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201		
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel																														
K Cast iron																														
N Ferrite materials																														
S Heat-resistant steel																														

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide					
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052				YBD102	YBD152	YNG151	YNG151C	YD101
PM Semi-finishing	SNMG321-PM	0.375	0.375	0.125	0.150	0.016																									
	SNMG322-PM	0.375	0.375	0.125	0.150	0.031			○	○														○							
	SNMG323-PM	0.375	0.375	0.125	0.150	0.047			○	○																					
	SNMG431-PM	0.500	0.500	0.187	0.203	0.016			○	○															○						
	SNMG432-PM	0.500	0.500	0.187	0.203	0.031			●	○															●	●					
	SNMG433-PM	0.500	0.500	0.187	0.203	0.047			●	○															●	●					
	SNMG434-PM	0.500	0.500	0.187	0.203	0.063				○																○					
	SNMG542-PM	0.625	0.625	0.250	0.250	0.031				○																					
	SNMG543-PM	0.625	0.625	0.250	0.250	0.047			●	○															○	●					
	SNMG644-PM	0.750	0.750	0.250	0.313	0.063				○																					
XM Semi-finishing	SNMG431-XM	0.500	0.500	0.187	0.203	0.016	●	●																							
	SNMG432-XM	0.500	0.500	0.187	0.203	0.031	●	●																							
	SNMG433-XM	0.500	0.500	0.187	0.203	0.047	●	●																							
	SNMG434-XM	0.500	0.500	0.187	0.203	0.063	●	●																							
	SNMG542-XM	0.625	0.625	0.250	0.250	0.031	●	●																							
	SNMG543-XM	0.625	0.625	0.250	0.250	0.047	●	●																							
	SNMG544-XM	0.625	0.625	0.250	0.250	0.063	●	●																							
	SNMG642-XM	0.750	0.750	0.250	0.313	0.031	●	●																							
	SNMG643-XM	0.750	0.750	0.250	0.313	0.047	●	●																							
SNMG644-XM	0.750	0.750	0.250	0.313	0.063	●	●																								

● Always stock available ○ Produce according to order



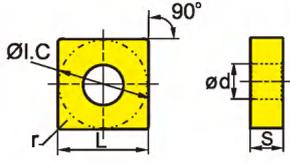
Applicable tool

Turning

General turning inserts

SN □□ (Negative inserts)

😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions



Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
Steel	😊	😊	😊	😊	😊
Stainless steel	😊	😊	😊	😊	😊
Cast iron	😊	😊	😊	😊	😊
Ferrite materials	😊	😊	😊	😊	😊
Heat-resistant steel	😊	😊	😊	😊	😊

A

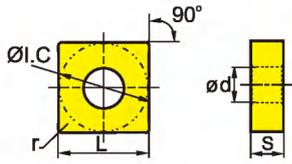
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated Cermet	Coated Cermet	Cemented carbide
 Semi-finishing	SNMG321-DM	0.375	0.375	0.125	0.150	0.016			○	○																			
	SNMG322-DM	0.375	0.375	0.125	0.150	0.031			○	○																			
	SNMG431-DM	0.500	0.500	0.187	0.203	0.016			●	○																			
	SNMG432-DM	0.500	0.500	0.187	0.203	0.031				○																			
	SNMG433-DM	0.500	0.500	0.187	0.203	0.047			●	●																	○		
	SNMG434-DM	0.500	0.500	0.187	0.203	0.063				○																			
	SNMG542-DM	0.625	0.625	0.250	0.250	0.031				○	○																		
	SNMG543-DM	0.625	0.625	0.250	0.250	0.047			●	●																			
	SNMG544-DM	0.625	0.625	0.250	0.250	0.063				○																			
	SNMG643-DM	0.750	0.750	0.250	0.313	0.047				○	○																		
	SNMG644-DM	0.750	0.750	0.250	0.313	0.063					○																		
 Semi-finishing	SNMG431-EM	0.500	0.500	0.187	0.203	0.016								●	●			○	●										
	SNMG432-EM	0.500	0.500	0.187	0.203	0.031								●	●			○	●										
	SNMG433-EM	0.500	0.500	0.187	0.203	0.047								●	●			○	●										
	SNMG434-EM	0.500	0.500	0.187	0.203	0.063								○	●			○	●										
	SNMG543-EM	0.625	0.625	0.250	0.250	0.047								●	●			○	●										
	SNMG544-EM	0.625	0.625	0.250	0.250	0.063								○	●			○	●										
 Semi-finishing	SNMG432-NM	0.500	0.500	0.187	0.203	0.031							●															○	

● Always stock available ○ Produce according to order



Applicable tool

SN (Negative inserts)



😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
P Steel	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
N Ferrite materials	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊
S Heat-resistant steel	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊

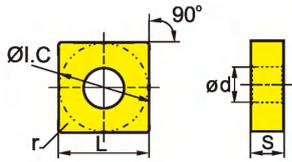
Inserts shape	Type	Dimensions (inch)					Coated cemented carbide															Cermet	Cemented carbide								
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253			YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
 DR Roughing	SNMG432-DR	0.500	0.500	0.187	0.203	0.031			○	●														○	○						
	SNMG433-DR	0.500	0.500	0.187	0.203	0.047			○															○							
	SNMG434-DR	0.500	0.500	0.187	0.203	0.063			○	○																					
	SNMG542-DR	0.625	0.625	0.250	0.250	0.031				○																					
	SNMG543-DR	0.625	0.625	0.250	0.250	0.047				●														○	○						
	SNMG544-DR	0.625	0.625	0.250	0.250	0.063				●														○	○						
	SNMG546-DR	0.625	0.625	0.250	0.250	0.094				○																					
	SNMG643-DR	0.750	0.750	0.250	0.313	0.047				○																					
	SNMG644-DR	0.750	0.750	0.250	0.313	0.063				●	●													○	○						
	SNMG646-DR	0.750	0.750	0.250	0.313	0.094				○	●																				
 DR Roughing	SNMM643-DR	0.750	0.750	0.250	0.313	0.047				○																					
	SNMM644-DR	0.750	0.750	0.250	0.313	0.063			○	●																					
	SNMM646-DR	0.750	0.750	0.250	0.313	0.094			●	○																					
	SNMM856-DR	1.000	1.000	0.313	0.359	0.094				○	●																				
	SNMM866-DR	1.000	1.000	0.375	0.359	0.094				●																					

● Always stock available ○ Produce according to order



Applicable tool

SN (Negative inserts)

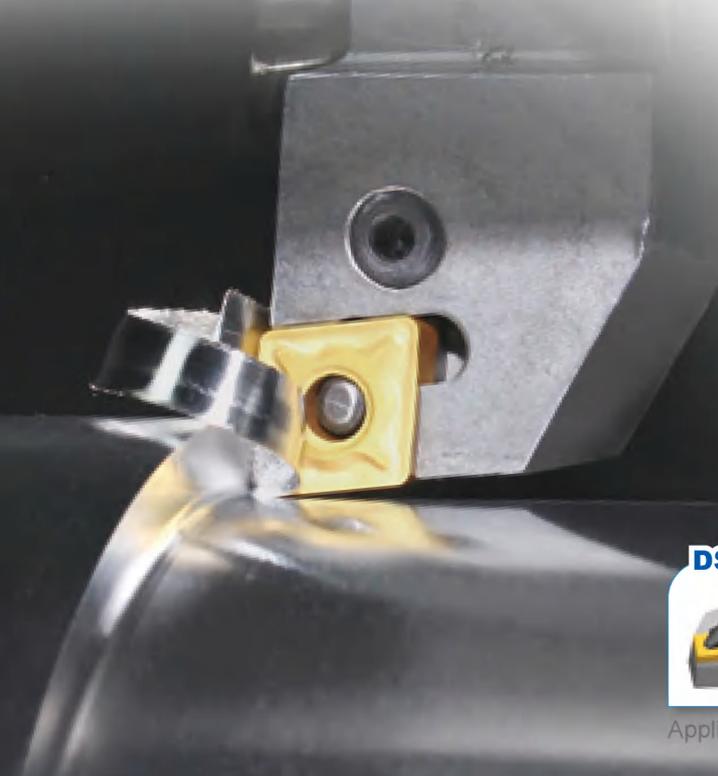


😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
P Steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
N Ferrite materials	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
S Heat-resistant steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊

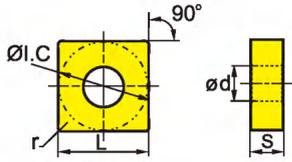
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
 Roughing	SNMG432-ER	0.500	0.500	0.187	0.203	0.031																							
	SNMG433-ER	0.500	0.500	0.187	0.203	0.047																							
	SNMG542-ER	0.625	0.625	0.250	0.250	0.031																							
	SNMG543-ER	0.625	0.625	0.250	0.250	0.047																							
	SNMG643-ER	0.750	0.750	0.250	0.313	0.047																							
	SNMG644-ER	0.750	0.750	0.250	0.313	0.063																							
 Roughing	SNMM856-ER	1.000	1.000	0.313	0.359	0.094				●																			
	SNMM858-ER	1.000	1.000	0.313	0.359	0.126				●																			
	SNMM866-ER	1.000	1.000	0.375	0.359	0.094				●																			
	SNMM868-ER	1.000	1.000	0.375	0.359	0.126				●																			
 Roughing	SNMG431-SNR	0.500	0.500	0.187	0.203	0.016																							
	SNMG432-SNR	0.500	0.500	0.187	0.203	0.031							●																

● Always stock available ○ Produce according to order



Applicable tool

SN (Negative inserts)



☺ Good working conditions ☹ General working conditions ☹ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
P Steel	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
M Stainless steel	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
K Cast iron	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
N Ferrite materials	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺
S Heat-resistant steel	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺	☺☺☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																Cemented carbide						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103		YBD052	YBD102	YBD152	YNG151	YNG151C	YD101
	SNMG432	0.500	0.500	0.187	0.203	0.031														●									
	SNMG433	0.500	0.500	0.187	0.203	0.047				○																			
	SNMA321	0.375	0.375	0.125	0.150	0.016																			○				
	SNMA322	0.375	0.375	0.125	0.150	0.031																	○	○					
	SNMA431	0.500	0.500	0.187	0.203	0.016																		○					
	SNMA432	0.500	0.500	0.187	0.203	0.031																	○	●	●				●
	SNMA434	0.500	0.500	0.187	0.203	0.063																	○	○	●				
	SNMA542	0.625	0.625	0.250	0.250	0.031																			●				
	SNMA643	0.750	0.750	0.250	0.313	0.047																	○	○	●				
SNMA644	0.750	0.750	0.250	0.313	0.063																		●	●					

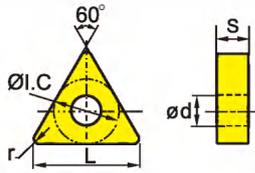
● Always stock available ○ Produce according to order



Applicable tool

TN □ □

(Negative inserts)

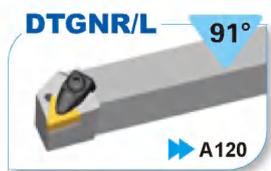


😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel		😊	😊	😊	😊																				😊	😊		
K Cast iron																							😊	😊	😊	😊		😊
N Ferrite materials																										😊	😊	
S Heat-resistant steel																										😊	😊	

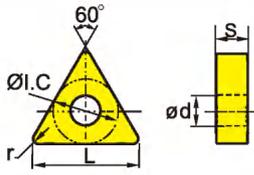
Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide		
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052				YBD102	YBD152
XF Finishing	TNMG331-XF	0.650	0.375	0.187	0.150	0.016	●	●																				
	TNMG332-XF	0.650	0.375	0.187	0.150	0.031	●	●																				
DF Finishing	TNMG331-DF	0.650	0.375	0.187	0.150	0.016			●	●										○						●		
	TNMG332-DF	0.650	0.375	0.187	0.150	0.031			●	●																●		
	TNMG333-DF	0.650	0.375	0.187	0.150	0.047				○	○																	
	TNMG432-DF	0.866	0.500	0.187	0.203	0.031			●	○																		
SF Finishing	TNMG221-SF	0.433	0.250	0.125	0.089	0.016																			○	●		
	TNMG331-SF	0.650	0.375	0.187	0.150	0.016																			○	●		
	TNMG332-SF	0.650	0.375	0.187	0.150	0.031																			○	●		
	TNMG432-SF	0.866	0.500	0.187	0.203	0.031																			○	●		
	TNMG433-SF	0.866	0.500	0.187	0.203	0.047																			○	●		
EF Finishing	TNMG221-EF	0.433	0.250	0.125	0.089	0.016																						
	TNMG222-EF	0.433	0.250	0.125	0.089	0.031																						
	TNMG331-EF	0.650	0.375	0.187	0.150	0.016																						
	TNMG332-EF	0.650	0.375	0.187	0.150	0.031																						
	TNMG333-EF	0.650	0.375	0.187	0.150	0.047																						
	TNMG431-EF	0.866	0.500	0.187	0.203	0.016																						
	TNMG432-EF	0.866	0.500	0.187	0.203	0.031																						
	TNMG433-EF	0.866	0.500	0.187	0.203	0.047																						

● Always stock available ○ Produce according to order



Applicable tool

TN □ □ (Negative inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S
Steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Stainless steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Cast iron	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Ferrite materials	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
Heat-resistant steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊



Inserts shape	Type	Dimensions(inch)					Coated cemented carbide														Cermet	Coated cermet	Cemented carbide													
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201				
 Semi-finishing	TNMG221-PM	0.433	0.250	0.125	0.089	0.016			●	○																										
	TNMG222-PM	0.433	0.250	0.125	0.089	0.031			●	○																										
	TNMG331-PM	0.650	0.375	0.187	0.150	0.016			●	●															●	●										
	TNMG332-PM	0.650	0.375	0.187	0.150	0.031			●	●															●	●										
	TNMG333-PM	0.650	0.375	0.187	0.150	0.047			●	○															●	●										
	TNMG432-PM	0.866	0.500	0.187	0.203	0.031			●	○															●	○										
	TNMG433-PM	0.866	0.500	0.187	0.203	0.047			●	○															○	○										
	TNMG434-PM	0.866	0.500	0.187	0.203	0.063				○																		○								
 Semi-finishing	TNMG331-XM	0.650	0.375	0.187	0.150	0.016	●	●																												
	TNMG332-XM	0.650	0.375	0.187	0.150	0.031	●	●																												
	TNMG333-XM	0.650	0.375	0.187	0.150	0.047	●	●																												
	TNMG334-XM	0.650	0.375	0.187	0.150	0.063	●	●																												
	TNMG432-XM	0.866	0.500	0.187	0.203	0.031	●	●																												
	TNMG433-XM	0.866	0.500	0.187	0.203	0.047	●	●																												
 Semi-finishing	TNMG222-DM	0.433	0.250	0.125	0.089	0.031			○	○																										
	TNMG331-DM	0.650	0.375	0.187	0.150	0.016		●	●					○												●										
	TNMG332-DM	0.650	0.375	0.187	0.150	0.031			●	●																	○									
	TNMG333-DM	0.650	0.375	0.187	0.150	0.047			○	●																										
	TNMG431-DM	0.866	0.500	0.187	0.203	0.016			●	●																○										
	TNMG432-DM	0.866	0.500	0.187	0.203	0.031			●	●																	○									
	TNMG433-DM	0.866	0.500	0.187	0.203	0.047			○	○																										
TNMG434-DM	0.866	0.500	0.187	0.203	0.063			○	○																											

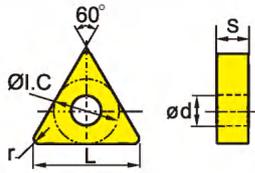
● Always stock available ○ Produce according to order



Applicable tool

TN

(Negative inserts)

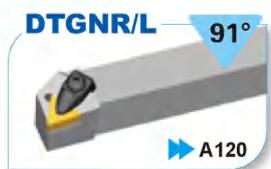


😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

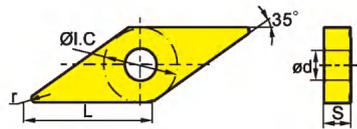
Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide							
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103				YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
 Semi-finishing	TNMG331-EM	0.650	0.375	0.187	0.150	0.016							●	●																		
	TNMG332-EM	0.650	0.375	0.187	0.150	0.031							●	●																		
	TNMG333-EM	0.650	0.375	0.187	0.150	0.047							○	●																		
	TNMG432-EM	0.866	0.500	0.187	0.203	0.031							●	●																		
	TNMG433-EM	0.866	0.500	0.187	0.203	0.047							○	●																		
	TNMG434-EM	0.866	0.500	0.187	0.203	0.063							○	●																		
 Roughing	TNMG332-DR	0.650	0.375	0.187	0.150	0.031			○	○														○	○							
	TNMG333-DR	0.650	0.375	0.187	0.150	0.047			○	○														●	●							
	TNMG432-DR	0.866	0.500	0.187	0.203	0.031				○														○								
	TNMG433-DR	0.866	0.500	0.187	0.203	0.047				○															○							
 Roughing	TNMG332-ER	0.650	0.375	0.187	0.150	0.031															●											
	TNMG333-ER	0.650	0.375	0.187	0.150	0.047															●											
	TNMG432-ER	0.866	0.500	0.187	0.203	0.031															●											
	TNMG433-ER	0.866	0.500	0.187	0.203	0.047															●											
 Roughing	TNMG332-SNR	0.650	0.375	0.187	0.150	0.031						○	●		○							○										
 Without chipbreaker (flat top)	TNMA331	0.650	0.375	0.187	0.150	0.016																	○	●	●							
	TNMA332	0.650	0.375	0.187	0.150	0.031																	●	●	●							
	TNMA333	0.650	0.375	0.187	0.150	0.047																	●	○	○							
	TNMA334	0.650	0.375	0.187	0.150	0.063																		○	○							
	TNMA431	0.866	0.500	0.187	0.203	0.016																		○	○	○						
	TNMA432	0.866	0.500	0.187	0.203	0.031																		○	○	○						
	TNMA544	1.083	0.625	0.250	0.250	0.063																			○							

● Always stock available ○ Produce according to order



Applicable tool

VN (Negative inserts)



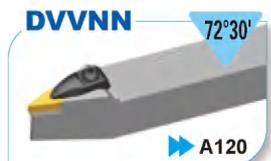
😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
M	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
K	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
N	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
S	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊



Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide				
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103				YBD052	YBD102	YBD152	YNG151
XF  Finishing	VNMG331-XF	0.654	0.375	0.187	0.150	0.016	●	●																					
	VNMG332-XF	0.654	0.375	0.187	0.150	0.031	●	●																					
	VNMG333-XF	0.654	0.375	0.187	0.150	0.047	●	●																					
DF  Finishing	VNMG331-DF	0.654	0.375	0.187	0.150	0.016			●	●									●										
	VNMG332-DF	0.654	0.375	0.187	0.150	0.031			●	○																			
EF  Finishing	VNMG331-EF	0.654	0.375	0.187	0.150	0.016												○	●										
	VNMG332-EF	0.654	0.375	0.187	0.150	0.031												○	●										
	VNMG333-EF	0.654	0.375	0.187	0.150	0.047												○	●										
NF  Finishing	VNEG331-NF	0.654	0.375	0.187	0.150	0.016																							
	VNEG332-NF	0.654	0.375	0.187	0.150	0.031																							
NGF  Finishing	VNEG332-NGF	0.654	0.375	0.187	0.150	0.016																							
	VNEG333-NGF	0.654	0.375	0.187	0.150	0.031																							
SF  Finishing	VNMG331-SF	0.654	0.375	0.187	0.150	0.016																							
	VNMG332-SF	0.654	0.375	0.187	0.150	0.031																							

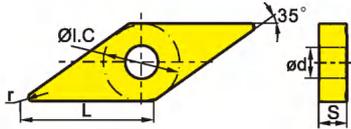
● Always stock available ○ Produce according to order



Applicable tool

VN □ □ (Negative inserts)

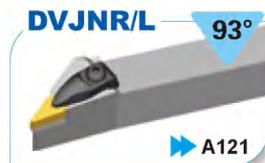
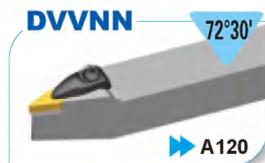
😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions



Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel			😊	😊	😊			😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																						😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials																										😊	😊	😊	😊
S Heat-resistant steel						😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide				
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052				YBD102	YBD152	YNG151	YNG151C
PM Semi-finishing	VNMG331-PM	0.654	0.375	0.187	0.150	0.016			●	○															○					
	VNMG332-PM	0.654	0.375	0.187	0.150	0.031			●	○														●	●					
	VNMG333-PM	0.654	0.375	0.187	0.150	0.047				○														○	○					
XM Semi-finishing	VNMG331-XM	0.654	0.375	0.187	0.125	0.016	●	●																						
	VNMG332-XM	0.654	0.375	0.187	0.125	0.031	●	●																						
	VNMG333-XM	0.654	0.375	0.187	0.125	0.047	●	●																						
DM Semi-finishing	VNMG332-DM	0.654	0.375	0.187	0.150	0.031			●	●										○										
	VNMG333-DM	0.654	0.375	0.187	0.150	0.047				○	○									○										
EM Semi-finishing	VNMG331-EM	0.654	0.375	0.187	0.150	0.016								●	●				○	●										
	VNMG332-EM	0.654	0.375	0.187	0.150	0.031								●	●				○	●										
NM Semi-finishing	VNMG333-NM	0.654	0.375	0.187	0.150	0.047						○										○						○		
SNR Roughing	VNMG332-SNR	0.654	0.375	0.187	0.150	0.031						○	●		○							○								
	VNMG333-SNR	0.654	0.375	0.187	0.150	0.047						○	●		○								○							

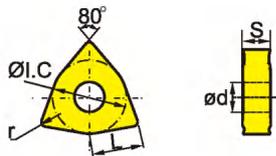
● Always stock available ○ Produce according to order



Applicable tool

WN (Negative inserts)

😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions



Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
P Steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
N Ferrite materials	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
S Heat-resistant steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊

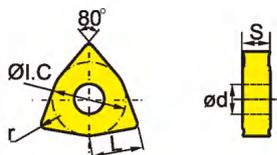
Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																							
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YN151	YN151C	YD101	YD201	
 Finishing	WNEG431-NF	0.343	0.500	0.187	0.203	0.016																								
	WNEG432-NF	0.343	0.500	0.187	0.203	0.031						○																	○	
 Finishing	WNMG3(2.5)1-EF	0.256	0.375	0.156	0.150	0.016								○	●					○										
	WNMG3(2.5)2-EF	0.256	0.375	0.156	0.150	0.031								○	●					○										
	WNMG3(2.5)3-EF	0.256	0.375	0.156	0.150	0.047								○	●					○										
	WNMG331-EF	0.256	0.375	0.187	0.150	0.016								●	●					○										
	WNMG332-EF	0.256	0.375	0.187	0.150	0.031								●	●					○										
	WNMG431-EF	0.343	0.500	0.187	0.203	0.016								●	●					○										
	WNMG432-EF	0.343	0.500	0.187	0.203	0.031								●	●					○										
 Semi-finishing	WNMG3(2.5)1-DM	0.256	0.375	0.156	0.150	0.016																								
	WNMG3(2.5)2-DM	0.256	0.375	0.156	0.150	0.031																								
	WNMG3(2.5)3-DM	0.256	0.375	0.156	0.150	0.047																								
	WNMG332-DM	0.256	0.375	0.187	0.150	0.031				●	●									●										
	WNMG333-DM	0.256	0.375	0.187	0.150	0.047					○																			
	WNMG431-DM	0.343	0.500	0.187	0.203	0.016				●	●				○					○										
	WNMG432-DM	0.343	0.500	0.187	0.203	0.031				●	●									○										
	WNMG433-DM	0.343	0.500	0.187	0.203	0.047				●	●									○										
	WNMG434-DM	0.343	0.500	0.187	0.203	0.063																								

● Always stock available ○ Produce according to order



Applicable tool

WN □ □ (Negative inserts)



☺ Good working conditions ☹ General working conditions 😞 Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P	☺	☺	☺	☺	☺
M	☺	☺	☺	☺	☺
K		☺	☺	☺	☺
N				☺	☺
S					☺

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide														Cermet	Coated cermet	Cemented carbide																		
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251				YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201									
 Semi-finishing	WNMG431-NM	0.343	0.500	0.187	0.203	0.016																																			
	WNMG432-NM	0.343	0.500	0.187	0.203	0.031					○																														
	WNMG433-NM	0.343	0.500	0.187	0.203	0.047					○																														
 Roughing	WNMG332-DR	0.256	0.375	0.187	0.150	0.031			○	○																															
	WNMG333-DR	0.256	0.375	0.187	0.150	0.047				○																															
	WNMG432-DR	0.343	0.500	0.187	0.203	0.031			○	●	●																														
	WNMG433-DR	0.343	0.500	0.187	0.203	0.047			○	●	●																														
	WNMG434-DR	0.343	0.500	0.187	0.203	0.063					○																														
 Roughing	WNMG432-SNR	0.343	0.500	0.187	0.203	0.031					○	●																													
	WNMG433-SNR	0.343	0.500	0.187	0.203	0.047					○	●																													
	WNMA3(2.5)2	0.256	0.375	0.156	0.150	0.031																																			
	WNMA331	0.256	0.375	0.187	0.150	0.016																																			
	WNMA332	0.256	0.375	0.187	0.150	0.031																																			
	WNMA333	0.256	0.375	0.187	0.150	0.047																																			
	WNMA431	0.343	0.500	0.187	0.203	0.016																																			
	WNMA432	0.343	0.500	0.187	0.203	0.031																																			
WNMA433	0.343	0.500	0.187	0.203	0.047																																				
WNMA434	0.343	0.500	0.187	0.203	0.063																																				

● Always stock available ○ Produce according to order

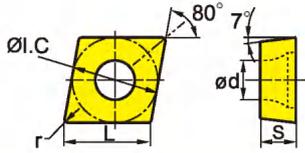


Applicable tool



CC

(Positive inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
M	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
K	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
N	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊
S	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊😊



Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																							
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
SF Precision machining	CCGT2(1.5)0-SF	0.252	0.250	0.094	0.110	0.008																								
	CCGT2(1.5)1-SF	0.252	0.250	0.094	0.110	0.016																								
	CCGT3(2.5)1-SF	0.382	0.375	0.156	0.173	0.016																								
XF Finishing	CCMT2(1.5)0-XF	0.252	0.250	0.094	0.110	0.008	●	●																						
	CCMT2(1.5)1-XF	0.252	0.250	0.094	0.110	0.016	●	●																						
	CCMT2(1.5)2-XF	0.252	0.250	0.094	0.110	0.031	●	●																						
	CCMT3(2.5)0-XF	0.382	0.375	0.156	0.173	0.008	●	●																						
	CCMT3(2.5)1-XF	0.382	0.375	0.156	0.173	0.016	●	●																						
HF Finishing	CCMT2(1.5)0-HF	0.252	0.250	0.094	0.110	0.008			●	●				●												○			○	
	CCMT2(1.5)1-HF	0.252	0.250	0.094	0.110	0.016			●	○				●											●	●	●		●	
	CCMT2(1.5)2-HF	0.252	0.250	0.094	0.110	0.031			●					●											●	●	○		○	
	CCMT3(2.5)0-HF	0.382	0.375	0.156	0.173	0.008				○				●												●	●	○		○
	CCMT3(2.5)1-HF	0.382	0.375	0.156	0.173	0.016			●	●				●											●	●	●	○	○	
	CCMT3(2.5)2-HF	0.382	0.375	0.156	0.173	0.031			●	○				●											○	○	○	○	○	○
	CCMT431-HF	0.508	0.500	0.187	0.219	0.016				○	○														●	○				
CCMT432-HF	0.508	0.500	0.187	0.219	0.031				○																○	○				
EF Finishing	CCMT2(1.5)0-EF	0.252	0.250	0.094	0.110	0.008							○	●	●					○										
	CCMT2(1.5)1-EF	0.252	0.250	0.094	0.110	0.016							○	●	●					○										
	CCMT3(2.5)0-EF	0.382	0.375	0.156	0.173	0.008							○	●	●					○										
	CCMT3(2.5)1-EF	0.382	0.375	0.156	0.173	0.016							○	●	●					○										
	CCMT3(2.5)2-EF	0.382	0.375	0.156	0.173	0.031							○	●	●					○										
	CCMT431-EF	0.508	0.500	0.187	0.219	0.016							○	●	●					○										

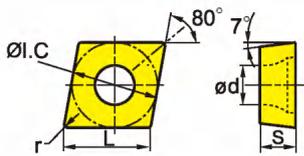
● Always stock available ○ Produce according to order



Applicable tool

CC

(Positive inserts)



😊 Good working conditions 😐 General working conditions ☹ Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

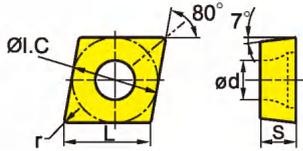
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide					
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103				YBD052	YBD102	YBD152	YNG151	YNG151C
XM Semi-finishing	CCMT3(2.5)1-XM	0.382	0.375	0.156	0.173	0.016	●	●																						
	CCMT3(2.5)2-XM	0.382	0.375	0.156	0.173	0.031	●	●																						
	CCMT3(2.5)3-XM	0.382	0.375	0.156	0.173	0.047	●	●																						
	CCMT431-XM	0.500	0.500	0.187	0.219	0.016	●	●																						
	CCMT432-XM	0.500	0.500	0.187	0.219	0.031	●	●																						
	CCMT433-XM	0.500	0.500	0.187	0.219	0.047	●	●																						
HM Semi-finishing	CCMT2(1.5)1-HM	0.252	0.250	0.094	0.110	0.016		●	●			●							●				●	●					●	
	CCMT2(1.5)2-HM	0.252	0.250	0.094	0.110	0.031		●	○			●							○				○	●						
	CCMT3(2.5)1-HM	0.382	0.375	0.156	0.173	0.016		●	●			●							●				●	●						
	CCMT3(2.5)2-HM	0.382	0.375	0.156	0.173	0.031		●	●			●							●				●	●						
	CCMT431-HM	0.508	0.500	0.187	0.219	0.016		●	○										○				○	○						
	CCMT432-HM	0.508	0.500	0.187	0.219	0.031		●	●			○						●				●	●							
EM Semi-finishing	CCMT2(1.5)1-EM	0.252	0.250	0.094	0.110	0.016						●	●					○	●											
	CCMT2(1.5)2-EM	0.252	0.250	0.094	0.110	0.031						●	●					○	●											
	CCMT3(2.5)1-EM	0.382	0.375	0.156	0.173	0.016						●	●						○	●										
	CCMT3(2.5)2-EM	0.382	0.375	0.156	0.173	0.031						●	●						○	●										
	CCMT431-EM	0.508	0.500	0.187	0.219	0.016						●	●						○	●										
	CCMT432-EM	0.508	0.500	0.187	0.219	0.031						●	●						○	●										
	CCMT433-EM	0.508	0.500	0.187	0.219	0.047						●	●						○	○	●									

● Always stock available ○ Produce according to order



Applicable tool

CC  (Positive inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	Cermet	Coated cermet	Cemented carbide	
HR  Roughing	CCMT2(1.5)1-HR	0.252	0.250	0.094	0.110	0.016																							
	CCMT2(1.5)2-HR	0.252	0.250	0.094	0.110	0.031			○	○																			
	CCMT3(2.5)1-HR	0.382	0.375	0.156	0.173	0.016								○															
	CCMT3(2.5)2-HR	0.382	0.375	0.156	0.173	0.031			●	●																			
	CCMT432-HR	0.508	0.500	0.187	0.219	0.031			●					○										●	●	●		●	●
	CCMT433-HR	0.508	0.500	0.187	0.219	0.047			○																●	○			
LC  Machining of Aluminum	CCGX2(1.5)0-LC	0.252	0.250	0.094	0.110	0.008																							●
	CCGX2(1.5)1-LC	0.252	0.250	0.094	0.110	0.016																							●
	CCGX3(2.5)0-LC	0.382	0.375	0.156	0.173	0.008																							●
	CCGX3(2.5)1-LC	0.382	0.375	0.156	0.173	0.016																							●
	CCGX3(2.5)2-LC	0.382	0.375	0.156	0.173	0.031																							●
	CCGX431-LC	0.508	0.500	0.187	0.219	0.016																							●
LH  Machining of Aluminum alloy	CCGX2(1.5)0-LH	0.252	0.250	0.094	0.110	0.008																							●
	CCGX2(1.5)1-LH	0.252	0.250	0.094	0.110	0.016																							●
	CCGX2(1.5)2-LH	0.252	0.250	0.094	0.110	0.031																							●
	CCGX3(2.5)0-LH	0.382	0.375	0.156	0.173	0.008																							●
	CCGX3(2.5)1-LH	0.382	0.375	0.156	0.173	0.016																							●
	CCGX3(2.5)2-LH	0.382	0.375	0.156	0.173	0.031																							●
	CCGX430-LH	0.508	0.500	0.187	0.219	0.008																							○
	CCGX431-LH	0.508	0.500	0.187	0.219	0.016																							●
CCGX432-LH	0.508	0.500	0.187	0.219	0.031																							●	

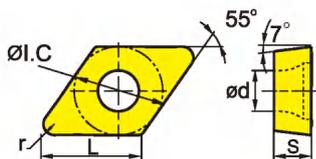
● Always stock available ○ Produce according to order



Applicable tool

DC

(Positive inserts)



😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
M	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
K	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
N	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
S	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊

A

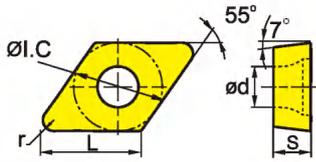
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																							
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	Cermet YNG151	Coated Cermet YNG151C	Cemented carbide YD101	YD201	
SF  Precision machining	DCGT2(1.5)0-SF	0.307	0.250	0.094	0.110	0.008																						○		
	DCGT2(1.5)1-SF	0.307	0.250	0.094	0.110	0.016																						○		
	DCGT2(1.5)2-SF	0.307	0.250	0.094	0.110	0.031																								
	DCGT3(2.5)0-SF	0.457	0.375	0.156	0.173	0.008																					○	○		
	DCGT3(2.5)1-SF	0.457	0.375	0.156	0.173	0.016																						●		
	DCGT3(2.5)2-SF	0.457	0.375	0.156	0.173	0.031																					○	○		
XF  Finishing	DCMT2(1.5)0-XF	0.307	0.250	0.094	0.110	0.008	●	●																						
	DCMT2(1.5)1-XF	0.307	0.250	0.094	0.110	0.016	●	●																						
	DCMT2(1.5)2-XF	0.307	0.250	0.094	0.110	0.031	●	●																						
	DCMT3(2.5)0-XF	0.457	0.375	0.156	0.173	0.008	●	●																						
	DCMT3(2.5)1-XF	0.457	0.375	0.156	0.173	0.016	●	●																						
	DCMT3(2.5)2-XF	0.457	0.375	0.156	0.173	0.031	●	●																						
HF  Finishing	DCMT2(1.5)0-HF	0.307	0.250	0.094	0.110	0.008			●	○				○												○				
	DCMT2(1.5)1-HF	0.307	0.250	0.094	0.110	0.016			●	●				●											○	○		●		
	DCMT2(1.5)2-HF	0.307	0.250	0.094	0.110	0.031			○																	○				
	DCMT3(2.5)0-HF	0.457	0.375	0.156	0.173	0.008			●	○					●												○		○	
	DCMT3(2.5)1-HF	0.457	0.375	0.156	0.173	0.016			●	●					●										○	○	●		○	
	DCMT3(2.5)2-HF	0.457	0.375	0.156	0.173	0.031			●	○					○											○				

● Always stock available ○ Produce according to order



Applicable tool

DC (Positive inserts)



😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P Steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
M Stainless steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
K Cast iron	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
N Ferrite materials	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊
S Heat-resistant steel	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊	😊😊😊😊😊😊😊😊😊😊



Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																							
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated cermet	YD101	YD201	
EF Finishing	DCMT2(1.5)0-EF	0.307	0.250	0.094	0.110	0.008																								
	DCMT2(1.5)1-EF	0.307	0.250	0.094	0.110	0.016																								
	DCMT3(2.5)0-EF	0.457	0.375	0.156	0.173	0.008																								
	DCMT3(2.5)1-EF	0.457	0.375	0.156	0.173	0.016																								
	DCMT3(2.5)2-EF	0.457	0.375	0.156	0.173	0.031																								
XM Semi-finishing	DCMT2(1.5)1-XM	0.307	0.250	0.094	0.110	0.016	●	●																						
	DCMT2(1.5)2-XM	0.307	0.250	0.094	0.110	0.031	●	●																						
	DCMT3(2.5)1-XM	0.457	0.375	0.156	0.173	0.016	●	●																						
	DCMT3(2.5)2-XM	0.457	0.375	0.156	0.173	0.031	●	●																						
	DCMT3(2.5)3-XM	0.457	0.375	0.156	0.173	0.047	●	●																						
HM Semi-finishing	DCMT2(1.5)1-HM	0.307	0.250	0.094	0.110	0.016			●	●			●							●					●					
	DCMT2(1.5)2-HM	0.307	0.250	0.094	0.110	0.031			●	●			○							○				○						
	DCMT3(2.5)1-HM	0.457	0.375	0.156	0.173	0.016			●	●			●							●				●	●	●	●	●	○	
	DCMT3(2.5)2-HM	0.457	0.375	0.156	0.173	0.031			●	●			●							○				●	○	○				○
	DCMT3(2.5)3-HM	0.457	0.375	0.156	0.173	0.047					○													○	○					
EM Semi-finishing	DCMT2(1.5)1-EM	0.307	0.250	0.094	0.110	0.016								●	●					○	●									
	DCMT2(1.5)2-EM	0.307	0.250	0.094	0.110	0.031								●	●					○	●									
	DCMT3(2.5)1-EM	0.457	0.375	0.156	0.173	0.016								●	●					○	●									
	DCMT3(2.5)2-EM	0.457	0.375	0.156	0.173	0.031								●	●					○	●									

● Always stock available ○ Produce according to order

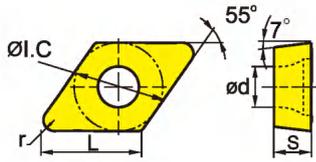


Applicable tool

Turning

General turning inserts

DC (Positive inserts)



😊 Good working conditions 😐 General working conditions ☹ Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron																						😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials																										😊	😊	😊	😊
S Heat-resistant steel				😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

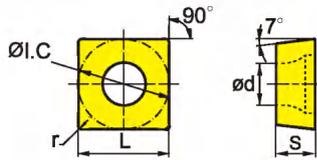
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																Cemented carbide							
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103		YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
 Roughing	DCMT3(2.5)1-HR	0.457	0.375	0.156	0.173	0.016			○	○																				
	DCMT3(2.5)2-HR	0.457	0.375	0.156	0.173	0.031			●	●													○		○	●	●			
	DCMT3(2.5)3-HR	0.457	0.375	0.156	0.173	0.047			○																					
 Machining of Aluminum	DCGX2(1.5)0-LC	0.307	0.250	0.094	0.110	0.008																								●
	DCGX2(1.5)1-LC	0.307	0.250	0.094	0.110	0.016																								●
	DCGX3(2.5)0-LC	0.457	0.375	0.156	0.173	0.008																								●
	DCGX3(2.5)1-LC	0.457	0.375	0.156	0.173	0.016																								●
	DCGX3(2.5)2-LC	0.457	0.375	0.156	0.173	0.031																								●
 Machining of Aluminum alloy	DCGX2(1.5)0-LH	0.307	0.250	0.094	0.110	0.008																							●	
	DCGX2(1.5)1-LH	0.307	0.250	0.094	0.110	0.016																							●	○
	DCGX3(2.5)0-LH	0.457	0.375	0.156	0.173	0.008																							●	○
	DCGX3(2.5)1-LH	0.457	0.375	0.156	0.173	0.016																							●	●
	DCGX3(2.5)2-LH	0.457	0.375	0.156	0.173	0.031																							●	●

● Always stock available ○ Produce according to order



Applicable tool

SC (Positive inserts)



😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

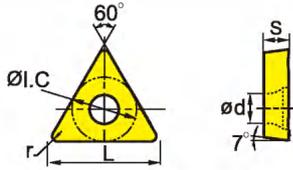
Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
 Finishing	SCMT3(2.5)1-XF	0.375	0.375	0.156	0.173	0.016	●	●																					
	SCMT3(2.5)2-XF	0.375	0.375	0.156	0.173	0.031	●	●																					
 Finishing	SCMT3(2.5)0-HF	0.375	0.375	0.156	0.173	0.008			○				○																
	SCMT3(2.5)1-HF	0.375	0.375	0.156	0.173	0.016			●	○																			
	SCMT3(2.5)2-HF	0.375	0.375	0.156	0.173	0.031			●					○											○				○
 Finishing	SCMT3(2.5)0-EF	0.375	0.375	0.156	0.173	0.008							○	○	●				○										
	SCMT3(2.5)1-EF	0.375	0.375	0.156	0.173	0.016							○	○	●				○										
	SCMT3(2.5)2-EF	0.375	0.375	0.156	0.173	0.031							○	○	●				○										
 Semi-finishing	SCMT3(2.5)1-HM	0.375	0.375	0.156	0.173	0.016			○										●					●	●				
	SCMT3(2.5)2-HM	0.375	0.375	0.156	0.173	0.031			●	○			○						●					●	○				
	SCMT431-HM	0.500	0.500	0.187	0.219	0.016			○																●				
	SCMT432-HM	0.500	0.500	0.187	0.219	0.031			●	○		●	○							●				●					
	SCMT433-HM	0.500	0.500	0.187	0.219	0.047			○											○									
 Semi-finishing	SCMT3(2.5)1-EM	0.375	0.375	0.156	0.173	0.016								●	●				○	●									
	SCMT3(2.5)2-EM	0.375	0.375	0.156	0.173	0.031								●	●				○	●									
	SCMT431-EM	0.500	0.500	0.187	0.219	0.016								●	●				○	●									
	SCMT432-EM	0.500	0.500	0.187	0.219	0.031								●	●				○	●									
	SCMT433-EM	0.500	0.500	0.187	0.219	0.047								●	●				○	●									
 Semi-finishing	SCMT3(2.5)1-XM	0.375	0.375	0.156	0.173	0.016	●	●																					
	SCMT3(2.5)2-XM	0.375	0.375	0.156	0.173	0.031	●	●																					
	SCMT3(2.5)3-XM	0.375	0.375	0.156	0.173	0.047	●	●																					
	SCMT432-XM	0.500	0.500	0.187	0.219	0.031	●	●																					
	SCMT433-XM	0.500	0.500	0.187	0.219	0.047	●	●																					

● Always stock available ○ Produce according to order



TC (Positive inserts)



😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊



Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide														
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103				YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201							
XF Finishing	TCMT1.8(1.5)0-XF	0.378	0.219	0.094	0.098	0.008	●	●																															
	TCMT1.8(1.5)1-XF	0.378	0.219	0.094	0.098	0.016	●	●																															
	TCMT2(1.5)0-XF	0.433	0.250	0.094	0.110	0.008	●	●																															
	TCMT2(1.5)1-XF	0.433	0.250	0.094	0.110	0.016	●	●																															
	TCMT2(1.5)2-XF	0.433	0.250	0.094	0.110	0.031	●	●																															
	TCMT3(2.5)1-XF	0.650	0.375	0.156	0.173	0.016	●	●																															
	TCMT3(2.5)2-XF	0.650	0.375	0.156	0.173	0.031	●	●																															
HF Finishing	TCMT1.8(1.5)0-HF	0.378	0.219	0.094	0.098	0.008			●										○							○													
	TCMT1.8(1.5)1-HF	0.378	0.219	0.094	0.098	0.016			●																	●													
	TCMT1.8(1.5)2-HF	0.378	0.219	0.094	0.098	0.031														○					○														
	TCMT2(1.5)0-HF	0.433	0.250	0.094	0.110	0.008								●						○																			
	TCMT2(1.5)1-HF	0.433	0.250	0.094	0.110	0.016			●	●										●					●	○													
	TCMT2(1.5)2-HF	0.433	0.250	0.094	0.110	0.031				○	○			●						○					○														
	TCMT3(2.5)0-HF	0.650	0.375	0.156	0.173	0.008					○																												
	TCMT3(2.5)1-HF	0.650	0.375	0.156	0.173	0.016			●						○											●	●												
TCMT3(2.5)2-HF	0.650	0.375	0.156	0.173	0.031				○																○														
EF Finishing	TCMT1.8(1.5)0-EF	0.378	0.219	0.094	0.098	0.008							○	●	●				○																				
	TCMT1.8(1.5)1-EF	0.378	0.219	0.094	0.098	0.016							○	●	●				○																				
	TCMT2(1.5)0-EF	0.433	0.250	0.094	0.110	0.008							○	●	●				○																				
	TCMT2(1.5)1-EF	0.433	0.250	0.094	0.110	0.016							○	●	●				○																				
	TCMT2(1.5)2-EF	0.433	0.250	0.094	0.110	0.031							○	●	●				○																				
	TCMT3(2.5)1-EF	0.650	0.375	0.156	0.173	0.016							○	●	●				○																				
TCMT3(2.5)2-EF	0.650	0.375	0.156	0.173	0.031							○	●	●				○																					
XM Semi-finishing	TCMT3(2.5)1-XM	0.650	9.525	0.375	0.173	0.016	●	●																															
	TCMT3(2.5)2-XM	0.650	9.525	0.375	0.173	0.031	●	●																															
	TCMT3(2.5)3-XM	0.650	9.525	0.375	0.173	0.047	●	●																															

● Always stock available ○ Produce according to order



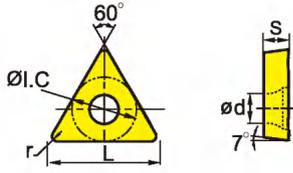
Applicable tool

Turning

General turning inserts

TC

(Positive inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	Coated Cermet	YNG151C	YD101	Cemented carbide	YD201
P	😊	😊	😊	😊	😊																					😊	😊			
M		😊	😊	😊	😊																					😊	😊			
K																						😊	😊	😊				😊		
N																														
S												😊																		

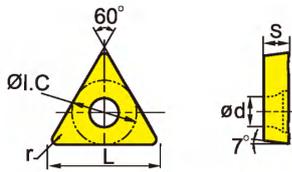
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																	Cermet	Coated Cermet	Cemented carbide			
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052				YBD102	YBD152	YNG151
 Semi-finishing	TCMT1.8(1.5)1-EM	0.378	0.219	0.094	0.098	0.016							●	●															
	TCMT1.8(1.5)2-EM	0.378	0.219	0.094	0.098	0.031							●	●															
	TCMT2(1.5)1-EM	0.433	0.250	0.094	0.110	0.016							●	●															
	TCMT2(1.5)2-EM	0.433	0.250	0.094	0.110	0.031							●	●															
	TCMT2(1.5)3-EM	0.433	0.250	0.094	0.110	0.047							●	●															
	TCMT3(2.5)1-EM	0.650	0.375	0.156	0.173	0.016							●	●															
	TCMT3(2.5)2-EM	0.650	0.375	0.156	0.173	0.031							●	●															
 Semi-finishing	TCMT1.8(1.5)1-HM	0.378	0.219	0.094	0.098	0.016		●											○						●				
	TCMT1.8(1.5)2-HM	0.378	0.219	0.094	0.098	0.031		○																					
	TCMT2(1.5)1-HM	0.433	0.250	0.094	0.110	0.016		●	○			●							●				●	●	○				
	TCMT2(1.5)2-HM	0.433	0.250	0.094	0.110	0.031		●															●	●					
	TCMT3(2.5)1-HM	0.650	0.375	0.156	0.173	0.016		●	●											○				○	●				
	TCMT3(2.5)2-HM	0.650	0.375	0.156	0.173	0.031		●	●											●			●	●				○	
 Roughing	TCMT1.8(1.5)2-HR	0.378	0.219	0.094	0.098	0.031																		○				●	
	TCMT3(2.5)1-HR	0.650	0.375	0.156	0.173	0.016		○																					
	TCMT3(2.5)2-HR	0.650	0.375	0.156	0.173	0.031		●															●	●					
	TCMT3(2.5)3-HR	0.650	0.375	0.156	0.173	0.047		○															●	●				○	
	TCMT432-HR	0.866	0.500	0.187	0.217	0.031		○																					

● Always stock available ○ Produce according to order



Applicable tool

TC (Positive inserts)

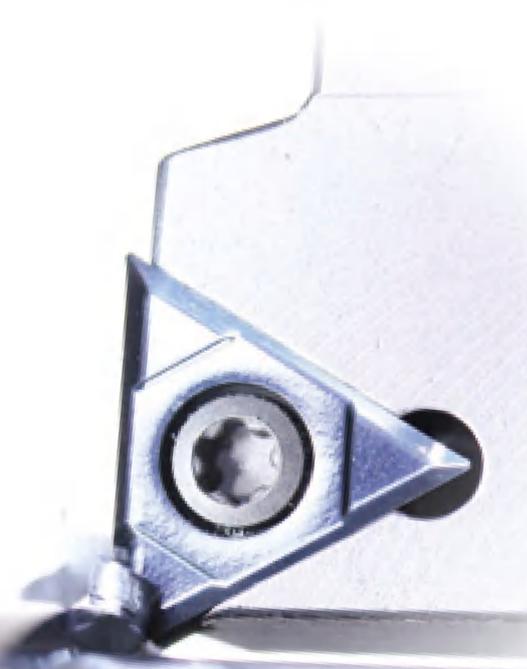


Good working conditions
 General working conditions
 Adverse working conditions

Workpiece material	P	M	K	N	S
P Steel					
M Stainless steel					
K Cast iron					
N Ferrite materials					
S Heat-resistant steel					

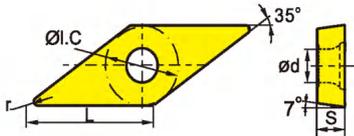
Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																							
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNB151	YNB151C	YD101	YD201	
LC Machining of Aluminum	TCGX1.8(1.5)0-LC	0.378	0.219	0.094	0.098	0.008																								
	TCGX1.8(1.5)1-LC	0.378	0.219	0.094	0.098	0.016																								
	TCGX2(1.5)0-LC	0.433	0.250	0.094	0.110	0.008																								
	TCGX2(1.5)1-LC	0.433	0.250	0.094	0.110	0.016																								
	TCGX2(1.5)2-LC	0.433	0.250	0.094	0.110	0.031																								
	TCGX3(2.5)1-LC	0.650	0.375	0.156	0.173	0.016																								
LH Machining of Aluminum alloy	TCGX1.8(1.5)0-LH	0.378	0.219	0.094	0.098	0.008																								
	TCGX1.8(1.5)1-LH	0.378	0.219	0.094	0.098	0.016																								
	TCGX2(1.5)0-LH	0.433	0.250	0.094	0.110	0.008																								
	TCGX2(1.5)1-LH	0.433	0.250	0.094	0.110	0.016																								
	TCGX2(1.5)2-LH	0.433	0.250	0.094	0.110	0.031																								
	TCGX3(2.5)0-LH	0.650	0.375	0.156	0.173	0.008																								
		TCGX3(2.5)1-LH	0.650	0.375	0.156	0.173	0.016																							
		TCGX3(2.5)2-LH	0.650	0.375	0.156	0.173	0.031																							

Always stock available
 Produce according to order



Applicable tool

VC (Positive inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
K Cast iron	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
N Ferrite materials	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
S Heat-resistant steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																	Cemented carbide						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052		YBD102	YBD152	YNG151	YNG151C	YD101	YD201
 Finishing	VCMT220-XF	0.433	0.250	0.125	0.110	0.008	●	●																						
	VCMT221-XF	0.433	0.250	0.125	0.110	0.016	●	●																						
	VCMT222-XF	0.433	0.250	0.125	0.110	0.031	●	●																						
	VCMT331-XF	0.654	0.375	0.187	0.173	0.016	●	●																						
	VCMT332-XF	0.654	0.375	0.187	0.173	0.031	●	●																						
 Finishing	VCGT332-NGF	0.654	0.375	0.187	0.173	0.031						○	●			○														
 Semi-finishing	VCMT331-XM	0.654	0.375	0.187	0.173	0.016	●	●																						
	VCMT332-XM	0.654	0.375	0.187	0.173	0.031	●	●																						
	VCMT333-XM	0.654	0.375	0.187	0.173	0.047	●	●																						
 Precision machining	VCGT220-SF	0.433	0.250	0.125	0.110	0.008																				○	●			
	VCGT221-SF	0.433	0.250	0.125	0.110	0.016																				○	●			

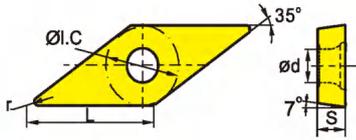
● Always stock available ○ Produce according to order



Applicable tool

VC

(Positive inserts)



Good working conditions General working conditions Adverse working conditions

Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P					
M					
K					
N					
S					

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide									
		L	øI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052				YBD102	YBD152	YNG151	YNG151C	YD101	YD201			
 Machining of Aluminum	VCGX22(03)-LC	0.433	0.250	0.125	0.110	0.004																												●	
	VCGX220-LC	0.433	0.250	0.125	0.110	0.008																													●
	VCGX221-LC	0.433	0.250	0.125	0.110	0.016																													●
	VCGX222-LC	0.433	0.250	0.125	0.110	0.031																													●
	VCGX330-LC	0.654	0.375	0.187	0.173	0.008																													●
	VCGX331-LC	0.654	0.375	0.187	0.173	0.016																													●
	VCGX332-LC	0.654	0.375	0.187	0.173	0.031																													●
	VCGX333-LC	0.654	0.375	0.187	0.173	0.047																													●
	VCGX4(3.7)(7.5)-LC	0.866	0.500	0.219	0.217	0.118																													●
 Machining of Aluminum alloy	VCGX2(1.5)1-LH	0.433	0.250	0.094	0.110	0.016																											●	●	
	VCGX220-LH	0.433	0.250	0.125	0.110	0.004																												●	●
	VCGX220-LH	0.433	0.250	0.125	0.110	0.008																												●	●
	VCGX221-LH	0.433	0.250	0.125	0.110	0.016																												○	
	VCGX222-LH	0.433	0.250	0.125	0.110	0.031																												●	
	VCGX330-LH	0.654	0.375	0.187	0.173	0.008																												●	○
	VCGX331-LH	0.654	0.375	0.187	0.173	0.016																												●	○
	VCGX332-LH	0.654	0.375	0.187	0.173	0.031																												●	●
	VCGX333-LH	0.654	0.375	0.187	0.173	0.047																												●	●

● Always stock available ○ Produce according to order

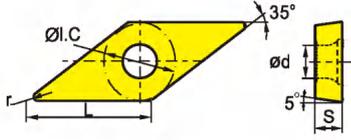


Applicable tool

VB

(Positive inserts)

😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

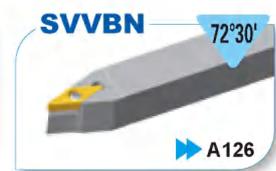


Workpiece material	Steel	Stainless steel	Cast iron	Ferrite materials	Heat-resistant steel
P	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
M	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
K	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
N	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
S	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊

A

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide															Cermet	Coated cermet	Cemented carbide						
		L	Ø1.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253				YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C
Finishing 	VBMT220-EF	0.433	0.250	0.125	0.110	0.008								○	●	●														
	VBMT221-EF	0.433	0.250	0.125	0.110	0.016								○	●	●														
	VBMT222-EF	0.433	0.250	0.125	0.110	0.031								○	●	●														
	VBMT331-EF	0.654	0.375	0.187	0.173	0.016									○	●	●													
	VBMT332-EF	0.654	0.375	0.187	0.173	0.031									○	●	●													
Finishing 	VBMT2(1.5)0-XF	0.433	0.250	0.094	0.110	0.008	●	●																						
	VBMT2(1.5)1-XF	0.433	0.250	0.094	0.110	0.016	●	●																						
	VBMT220-XF	0.433	0.250	0.125	0.110	0.008	●	●																						
	VBMT221-XF	0.433	0.250	0.125	0.110	0.016	●	●																						
	VBMT331-XF	0.650	0.375	0.187	0.173	0.016	●	●																						
Finishing 	VBMT2(1.5)0-HF	0.433	0.250	0.094	0.110	0.008								●																
	VBMT2(1.5)1-HF	0.433	0.250	0.094	0.110	0.016																				○				
	VBMT2(1.5)2-HF	0.433	0.250	0.094	0.110	0.031																								
Finishing 	VBET331-NGF	0.654	0.375	0.187	0.173	0.016								○	●															
	VBET332-NGF	0.654	0.375	0.187	0.173	0.031								○	●															
	VBET333-NGF	0.654	0.375	0.187	0.173	0.047								○	●															
Semi-finishing 	VBMT221-EM	0.433	0.250	0.125	0.110	0.016									●	●					○	●								
	VBMT222-EM	0.433	0.250	0.125	0.110	0.031									●	●					○	●								
	VBMT223-EM	0.433	0.250	0.125	0.110	0.047									●						○									
	VBMT331-EM	0.654	0.375	0.187	0.173	0.016																○								
	VBMT332-EM	0.654	0.375	0.187	0.173	0.031																○								

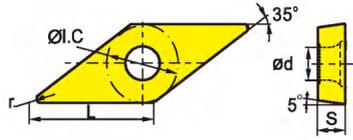
● Always stock available ○ Produce according to order



Applicable tool

VB

(Positive inserts)

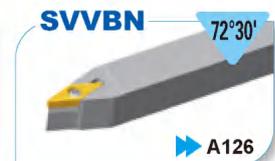


☺ Good working conditions ☹ General working conditions ☹ Adverse working conditions

Workpiece material	P Steel	M Stainless steel	K Cast iron	N Ferrite materials	S Heat-resistant steel
P	☺☺☺☺☺☺☺☺☺				
M		☺☺☺☺☺☺☺☺☺			
K			☺☺☺☺☺☺☺☺☺		
N				☺☺☺☺☺☺☺☺☺	
S					☺☺☺☺☺☺☺☺☺

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide					
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103				YBD052	YBD102	YBD152	YNG151	YNG151C
 Semi-finishing	VBMT331-XM	0.650	0.375	0.187	0.173	0.016	●	●																						
	VBMT332-XM	0.650	0.375	0.187	0.173	0.031	●	●																						
	VBMT333-XM	0.650	0.375	0.187	0.173	0.047	●	●																						
 Semi-finishing	VBMT331-HM	0.654	0.375	0.187	0.173	0.016			●					●																
	VBMT332-HM	0.654	0.375	0.187	0.173	0.031			●					●						●				●	●					
	VBMT333-HM	0.654	0.375	0.187	0.173	0.047																○					○			
 Roughing	VBMT331-HR	0.654	0.375	0.187	0.173	0.016			●	○																				
	VBMT332-HR	0.654	0.375	0.187	0.173	0.031			○	○															○					
	VBMT333-HR	0.654	0.375	0.187	0.173	0.047					○																			
	VBMT332-HR	0.654	0.375	0.187	0.173	0.031			○	●																				
 Roughing	VBMT332-SNR	0.654	0.375	0.187	0.173	0.031												○	●											
	VBMT333-SNR	0.654	0.375	0.187	0.173	0.047																								

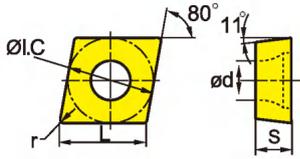
● Always stock available ○ Produce according to order



Applicable tool

CP

(Positive inserts)



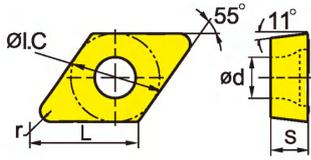
😊 Good working conditions 😐 General working conditions ☹️ Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊	😊
M Stainless steel						😊					😊	😊	😊	😊	😊	😊	😊									😊	😊		
K Cast iron																								😊	😊	😊			
N Ferrite materials																										😊	😊		
S Heat-resistant steel											😊	😊															😊		

Inserts shape	Type	Dimensions (inch)					Coated cemented carbide																	Cermet	Coated cermet	Cemented carbide				
		L	ØI.C	S	Ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052				YBD102	YBD152	YNG151	YNG151C
SF Precision machining	CPGT2(1.5)0-SF	0.252	0.250	0.094	0.110	0.008																								
	CPGT2(1.5)1-SF	0.252	0.250	0.094	0.110	0.016																								
	CPGT3(2.5)1-SF	0.382	0.375	0.156	0.173	0.016																								

● Always stock available ○ Produce according to order

DP (Positive inserts)

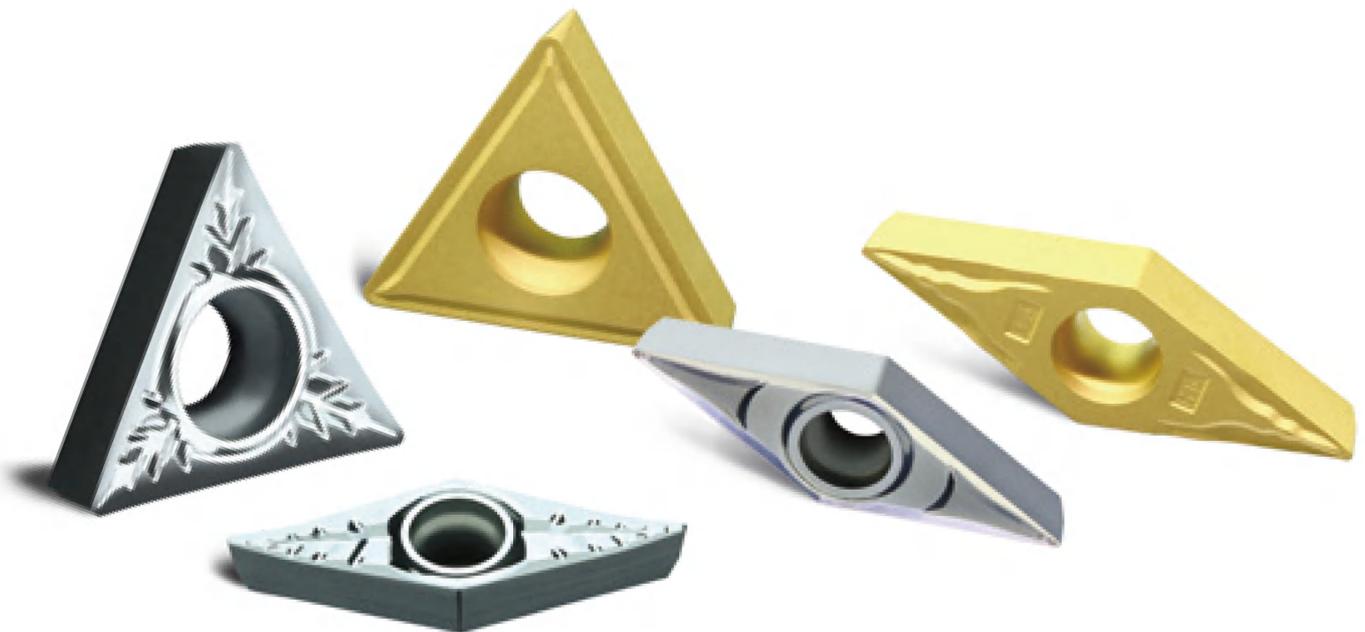


☺ Good working conditions ☹ General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S
P Steel	☺	☺	☺	☺	☺
M Stainless steel	☺	☺	☺	☺	☺
K Cast iron	☺	☺	☺	☺	☺
N Ferrite materials	☺	☺	☺	☺	☺
S Heat-resistant steel	☺	☺	☺	☺	☺

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201
SF  Precision machining	DPGT2(1.5)0-SF	0.307	0.250	0.094	0.110	0.008																							
	DPGT2(1.5)1-SF	0.307	0.250	0.094	0.110	0.016																							
	DPGT2(1.5)2-SF	0.307	0.250	0.094	0.110	0.031																							
	DPGT3(2.5)1-SF	0.457	0.375	0.156	0.173	0.016																							
	DPGT3(2.5)2-SF	0.457	0.375	0.156	0.173	0.031																							

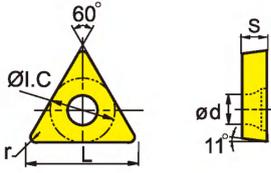
● Always stock available ○ Produce according to order



TP



(Positive inserts)



😊 Good working conditions 😐 General working conditions 😞 Adverse working conditions

Workpiece material	P	M	K	N	S	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103	YBD052	YBD102	YBD152	YNG151	YNG151C	YD101	YD201	
P Steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
M Stainless steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
K Cast iron	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
N Ferrite materials	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊
S Heat-resistant steel	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊	😊😊😊😊😊

Inserts shape	Type	Dimensions(inch)					Coated cemented carbide																Cermet	Coated cermet	Cemented carbide						
		L	ØI.C	S	ød	r	YBC103	YBC203	YBC152	YBC252	YBC352	YBG102	YBG105	YBG202	YBG205	YBG212	YBG302	YBM153	YBM215	YBM251	YBM253	YBS103				YBD052	YBD102	YBD152	YNG151	YNG151C	YD101
 Precision machining	TPGT1.8(1.5)0-SF	0.378	0.219	0.094	0.098	0.008						○														○					
	TPGT1.8(1.5)1-SF	0.378	0.219	0.094	0.098	0.016						○														○	●				
	TPGT1.8(1.5)2-SF	0.378	0.219	0.094	0.098	0.031						○														○					
	TPGT220-SF	0.433	0.250	0.125	0.110	0.008						○															○				
	TPGT221-SF	0.433	0.250	0.125	0.110	0.016						○															○	○			
	TPGT222-SF	0.433	0.250	0.125	0.110	0.031						○															○				
 Super-finishing machining	TPGH1.8(1.5)0L	0.378	0.219	0.094	0.098	0.008						●														○					
	TPGH1.8(1.5)1L	0.378	0.219	0.094	0.098	0.016						●														●					
	TPGH220L	0.433	0.250	0.125	0.110	0.008						○														●					
	TPGH221L	0.433	0.250	0.125	0.110	0.016						●														●					

● Always stock available ○ Produce according to order

A

