

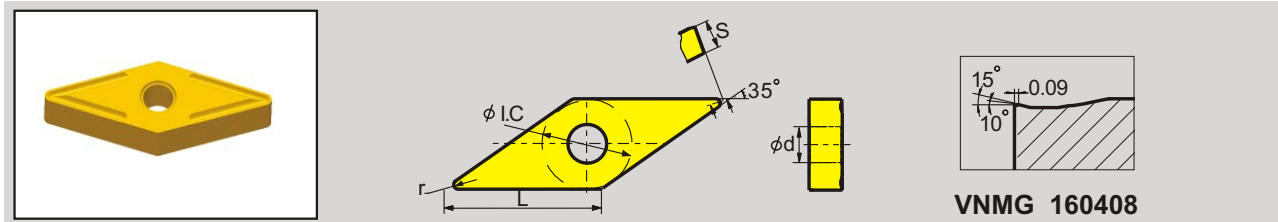


# Turning inserts

## Insertos para torneamento

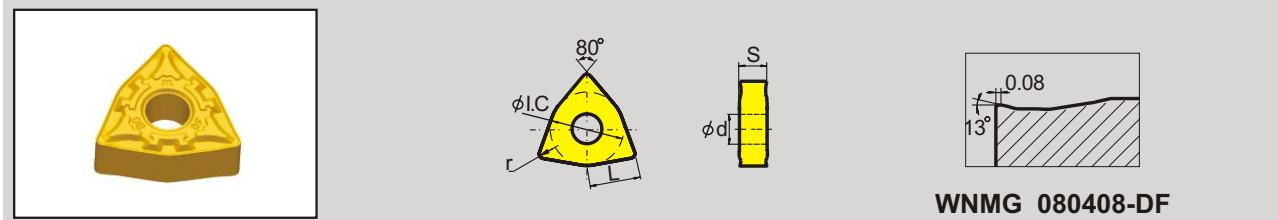
### Plaquitas para torneado

- Insertos ISO para torneamento
- Plaquitas ISO para torneado
- ISO Turning inserts



VNMG 160408

Código	(ISO)	(inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura							
			L	φI.C	S	φd	r	CVD				PVD				YC10	YC40	YD101	YD201				
								YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151					YB235	YBM252		
VNMG	160404	331	16.6	9.525	4.76	3.81	0.4	○	●	○									○				
	160408	332	16.6	9.525	4.76	3.81	0.8	○	●	○									○				



WNMG 080408-DF

Código	(ISO)	(inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura							
			L	φI.C	S	φd	r	CVD				PVD				YC10	YC40	YD101	YD201				
								YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151					YB235	YBM252		
WNMG	060404-DF	331-DF	6.5	9.525	4.76	3.81	0.4	●	○														
	060408-DF	332-DF	6.5	9.525	4.76	3.81	0.8	●	○														
	060412-DF	333-DF	6.5	9.525	4.76	3.81	1.2	●	○														
	080404-DF	431-DF	8.7	12.7	4.76	5.16	0.4	●	○														
	080408-DF	432-DF	8.7	12.7	4.76	5.16	0.8	●	○														
	080412-DF	433-DF	8.7	12.7	4.76	5.16	1.2	●	○														

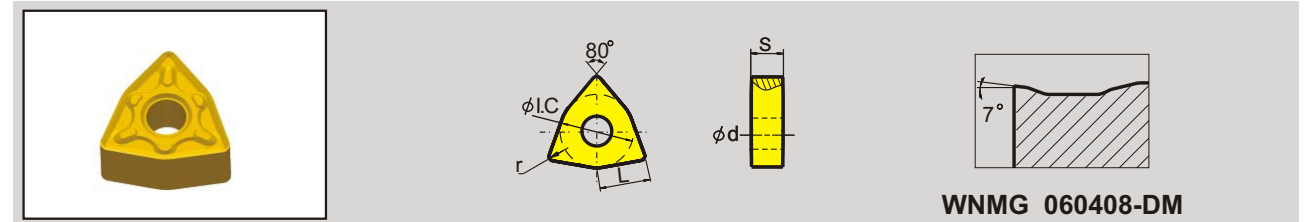


# Turning inserts

## Insertos para torneamento

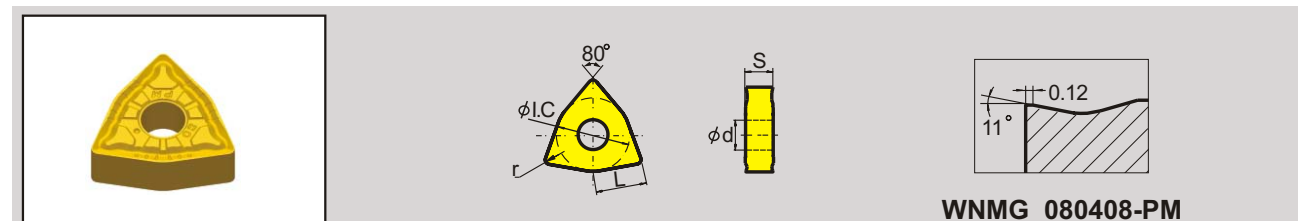
### Plaquitas para torneado

- Insertos ISO para torneamento
- Plaquitas ISO para torneado
- ISO Turning inserts



WNMG 060408-DM

Código	(ISO)	(inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura							
			L	φI.C	S	φd	r	CVD				PVD				YC10	YC40	YD101	YD201				
								YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151					YB235	YBM252		
WNMG	060408-DM	332-DM	6.5	9.525	4.76	3.81	0.8	○	●	○													
	060412-DM	333-DM	6.5	9.525	4.76	3.81	1.2	○	●	○													
	080404-DM	431-DM	8.7	12.7	4.76	5.16	0.4	○	●	○													
	080408-DM	432-DM	8.7	12.7	4.76	5.16	0.8	○	●	○													
	080412-DM	433-DM	8.7	12.7	4.76	5.16	1.2	○	●	○													



WNMG 080408-PM

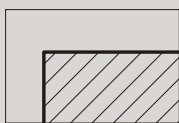
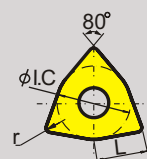
Código	(ISO)	(inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura							
			L	φI.C	S	φd	r	CVD				PVD				YC10	YC40	YD101	YD201				
								YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151					YB235	YBM252		
WNMG	060408-PM	332-PM	6.5	9.525	4.76	3.81	0.8	○	●	○			●										
	060412-PM	333-PM	6.5	9.525	4.76	3.81	1.2	○	●	○			●										
	080404-PM	431-PM	8.7	12.7	4.76	5.16	0.4	○	●	○			●										
	080408-PM	432-PM	8.7	12.7	4.76	5.16	0.8	○	●	○			●										
	080412-PM	433-PM	8.7	12.7	4.76	5.16	1.2	○	●	○			●							○			
	080608-PM	442-PM	8.7	12.7	6.35	5.16	0.8	○	●	○			●							○			

# Turning inserts

## Insertos para torneamento

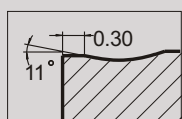
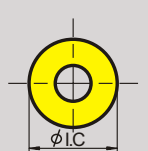
### Plaquitas para torneado

- Insertos ISO para torneamento
- Plaquitas ISO para torneado
- ISO Turning inserts



WNMA 080404

WNMA	Código (ISO)	Codigo (inch)	Dimensão (mm) Dimensión (mm) Dimension (mm)					Classes com Cobertura Grados con Cobertura Coated Grade								Classe sem Cobertura Grado sin Cobertura Uncoated Grade													
			L	φ.L.C	S	φd	r	CVD				PVD				YC10	YC40	YD101	YD201										
	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201															
06T308	3(2.5)2	6.5	9.525	3.97	3.81	0.8										●													
060408	332	6.5	9.535	4.76	3.81	0.8										●													
080404	431	8.7	12.7	4.76	5.16	0.4										●													
080412	433	8.7	12.7	4.76	5.16	1.2										●													
080416	434	8.7	12.7	4.76	5.16	1.6										●													



RNMG 1204MO

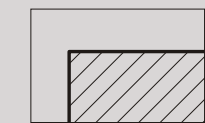
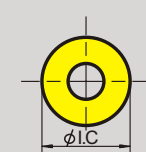
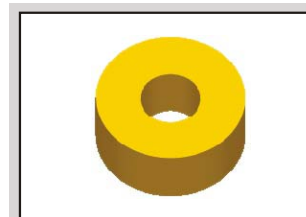
RNMG	Código (ISO)	Codigo (inch)	Dimensão (mm) Dimensión (mm) Dimension (mm)			Classes com Cobertura Grados con Cobertura Coated Grade								Classe sem Cobertura Grado sin Cobertura Uncoated Grade															
			φ.L.C(L)	S	φd	CVD				PVD				YC10	YC40	YD101	YD201												
	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201															
1204MO	43	12.7	4.76	5.16												○	●	○											

# Turning inserts

## Insertos para torneamento

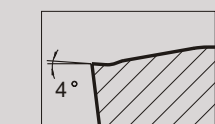
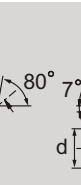
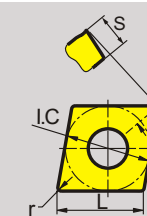
### Plaquitas para torneado

- Insertos ISO para torneamento
- Plaquitas ISO para torneado
- ISO Turning inserts



RNMA 0903MO

RNMA	Código (ISO)	Codigo (inch)	Dimensão (mm) Dimensión (mm) Dimension (mm)			Classes com Cobertura Grados con Cobertura Coated Grade								Classe sem Cobertura Grado sin Cobertura Uncoated Grade															
			φ.L.C(L)	S	φd	CVD				PVD				YC10	YC40	YD101	YD201												
	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201															
0903MO	32	9.525	3.18	3.81												○													
0903MO	32	9.525	3.18	3.81												○													



CCMT 09T308-HF

CCMT	Código (ISO)	Codigo (inch)	Dimensão (mm) Dimensión (mm) Dimension (mm)					Classes com Cobertura Grados con Cobertura Coated Grade								Classe sem Cobertura Grado sin Cobertura Uncoated Grade													
			L	φ.L.C	S	φd	r	CVD				PVD				YC10	YC40	YD101	YD201										
	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201															
060202-HF	2(1.5)0-HF	6.4	6.35	2.38	2.8	0.2	●	○								○													
060204-HF	2(1.5)1-HF	6.4	6.35	2.38	2.8	0.4	●	○								○													
060208-HF	2(1.5)2-HF	6.4	6.35	2.38	2.8	0.8	●	○								○													
09T308-HF	3(2.5)2-HF	9.7	9.525	3.97	4.4	0.8	●									○													
120404-HF	431-HF	12.9	12.7	4.76	5.5	0.4	●									○													

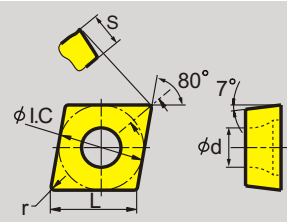


# Turning inserts

## Insertos para torneamento

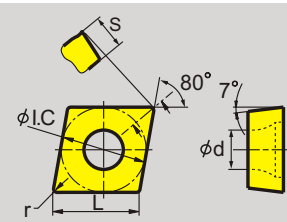
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



CCMT 09T308-HM

Código	Codigo	Type	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura								Grado sin Cobertura						
			Dimension (mm)					Coated Grade								Uncoated Grade						
(ISO)	(inch)	L	phi.L.C	S	phi.d	r	CVD								PVD							
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
CCMT	060204-HM	2(1.5)1-HM	6.4	6.35	2.38	2.8	0.4	○	●	○	○					○						○
	060208-HM	2(1.5)2-HM	6.4	6.35	2.38	2.8	0.8	○	●	○	○					○						○
	09T304-HM	3(2.5)1-HM	9.7	9.525	3.97	4.4	0.4	○	●	○						○						○
	09T308-HM	3(2.5)2-HM	9.7	9.525	3.97	4.4	0.8	○	●	○						○						○
	120404-HM	431-HM	12.9	12.7	4.76	5.6	0.4	○	●	○						○						○
	120408-HM	432-HM	12.9	12.7	4.76	5.6	0.8	○	●	○						○						○
	120412-HM	433-HM	12.9	12.7	4.76	5.6	1.2	○	●	○						○						○



CCMT 120408-HR

Código	Codigo	Type	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura								Grado sin Cobertura						
			Dimension (mm)					Coated Grade								Uncoated Grade						
(ISO)	(inch)	L	phi.L.C	S	phi.d	r	CVD								PVD							
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
CCMT	060204-HR	2(1.5)1-HR	6.4	6.35	2.38	2.8	0.4	○	●	○												○
	060208-HR	2(1.5)2-HR	6.4	6.35	2.38	2.8	0.8	○	●	○												○
	09T304-HR	3(2.5)1-HR	9.7	9.525	3.97	4.4	0.4	○	●	○												○
	09T308-HR	3(2.5)2-HR	9.7	9.525	3.97	4.4	0.8	○	●	○												○
	120408-HR	432-HR	12.9	12.7	4.76	5.5	0.8	○	●	○												○
	120412-HR	433-HR	12.9	12.7	4.76	5.5	1.2	○	●	○												○

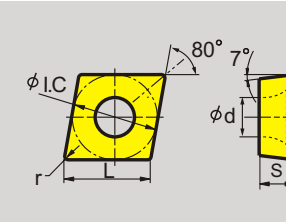
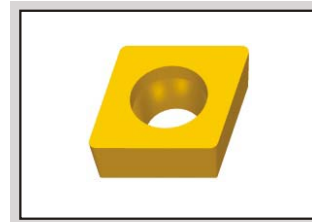


# Turning inserts

## Insertos para torneamento

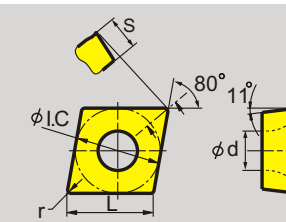
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



CCMW 060204

Código	Codigo	Type	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura								Grado sin Cobertura						
			Dimension (mm)					Coated Grade								Uncoated Grade						
(ISO)	(inch)	L	phi.L.C	S	phi.d	r	CVD								PVD							
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
CCMW	060204	2(1.5)1	6.4	6.35	2.38	2.8	0.4	○														
	090304	321	9.7	9.525	3.18	4.4	0.4	○						●								
	09T304	3(2.5)1	9.7	9.525	3.97	4.4	0.4	○						●								○
	09T308	3(2.5)2	9.7	9.525	3.97	4.4	0.8	○						●								○
	120404	431	12.9	12.7	4.76	5.5	0.4	○						●								○
	120408	432	12.9	12.7	4.76	5.5	0.8	○						●								○
CCGW	060204	2(1.5)1	6.4	6.35	2.38	2.8	0.4	○														
	09T304	3(2.5)1	9.7	9.525	3.97	4.4	0.4	○														



CPGT 050204

Código	Codigo	Type	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura								Grado sin Cobertura						
			Dimension (mm)					Coated Grade								Uncoated Grade						
(ISO)	(inch)	L	phi.L.C	S	phi.d	r	CVD								PVD							
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
CPGT	050204	1.8(1.5)1	5.6	5.56	2.38	2.8	0.4	●														○

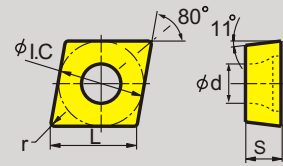


# Turning inserts

## Insertos para torneamento

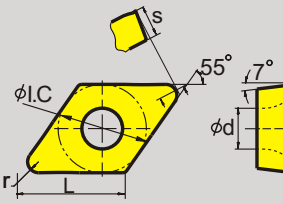
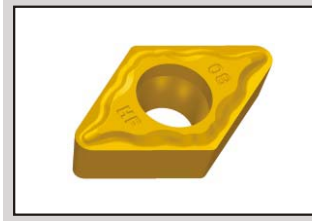
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



CPGW 060204

Código	Dimensão (mm)	Classes com Cobertura	Classe sem Cobertura																		
				CVD														PVD			
				L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101
<b>CPGW</b>	(ISO) 050204 (inch) 1.8(1.5)1	5.6 5.56 2.38 2.5 0.4																			
	(ISO) 060204 (inch) 2(1.5)1	6.4 6.35 2.38 2.8 0.4																			



DCMT 070208-HF

Código	Dimensão (mm)	Classes com Cobertura	Classe sem Cobertura																		
				CVD														PVD			
				L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101
<b>DCMT</b>	(ISO) 070202-HF (inch) 2(1.5)0-HF	7.8 6.35 2.38 2.8 0.2																			
	(ISO) 070204-HF (inch) 2(1.5)1-HF	7.8 6.35 2.38 2.8 0.4																			
	(ISO) 070208-HF (inch) 2(1.5)2-HF	7.8 6.35 2.38 2.8 0.8																			
	(ISO) 11T302-HF (inch) 3(2.5)0-HF	11.6 9.525 3.97 4.4 0.2																			
	(ISO) 11T304-HF (inch) 3(2.5)1-HF	11.6 9.525 3.97 4.4 0.4																			
	(ISO) 11T308-HF (inch) 3(2.5)2-HF	11.6 9.525 3.97 4.4 0.8																			

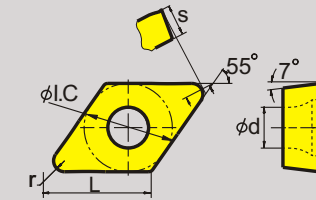
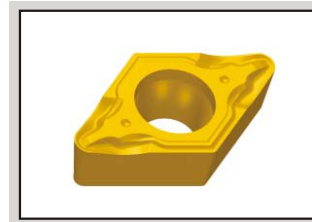


# Turning inserts

## Insertos para torneamento

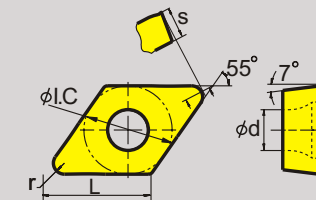
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



DCMT 11T312-HM

Código	Dimensão (mm)	Classes com Cobertura	Classe sem Cobertura																		
				CVD														PVD			
				L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101
<b>DCMT</b>	(ISO) 070204-HM (inch) 2(1.5)1-HM	7.8 6.35 2.38 2.8 0.4																			
	(ISO) 070208-HM (inch) 2(1.5)2-HM	7.8 6.35 2.38 2.8 0.8																			
	(ISO) 11T304-HM (inch) 3(2.5)1-HM	11.6 9.525 3.97 4.4 0.4																			
	(ISO) 11T308-HM (inch) 3(2.5)2-HM	11.6 9.525 3.97 4.4 0.8																			
	(ISO) 11T312-HM (inch) 3(2.5)3-HM	11.6 9.525 3.97 4.4 1.2																			



DCMT 11T308-HR

Código	Dimensão (mm)	Classes com Cobertura	Classe sem Cobertura																		
				CVD														PVD			
				L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101
<b>DCMT</b>	(ISO) 11T304-HR (inch) 3(2.5)1-HR	11.6 9.525 3.97 4.4 0.4																			
	(ISO) 11T308-HR (inch) 3(2.5)2-HR	11.6 9.525 3.97 4.4 0.8																			
	(ISO) 11T312-HR (inch) 3(2.5)3-HR	11.6 9.525 3.97 4.4 1.2																			



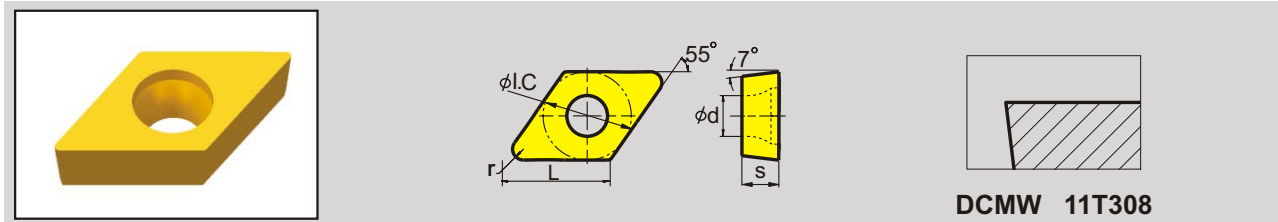


# Turning inserts

## Insertos para torneamento

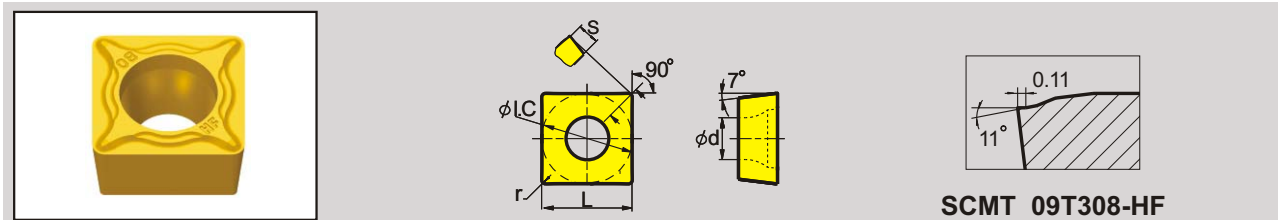
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



DCMW 11T308

Código	Codigo	Type	Dimensão (mm)						Classes com Cobertura								Classe sem Cobertura					
			Dimensión (mm)						Grados con Cobertura								Grado sin Cobertura					
			Dimension (mm)						Coated Grade								Uncoated Grade					
(ISO)	(inch)	L	phi.L.C	S	phi.d	a	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201	
DCMW	11T304	3(2.5)1	11.6	9.525	3.97	4.4	7°	0.4													○	○
	11T308	3(2.5)2	11.6	9.525	3.97	4.4	7°	0.8													○	
DPMW	11T304	3(2.5)1	11.6	9.525	3.97	4.4	11°	0.4													○	
	11T308	3(2.5)2	11.6	9.525	3.97	4.4	11°	0.8													○	
DCGW	11T304	3(2.5)1	11.6	9.525	3.97	4.4	7°	0.4													○	
	11T308	3(2.5)2	11.6	9.525	3.97	4.4	7°	0.8													○	



SCMT 09T308-HF

Código	Codigo	Type	Dimensão (mm)						Classes com Cobertura								Classe sem Cobertura					
			Dimensión (mm)						Grados con Cobertura								Grado sin Cobertura					
			Dimension (mm)						Coated Grade								Uncoated Grade					
(ISO)	(inch)	L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201		
SCMT	09T302-HF	3(2.5)0-HF	9.525	9.525	3.97	4.4	0.2	●	○													
	09T304-HF	3(2.5)1-HF	9.525	9.525	3.97	4.4	0.4	●	○													
	09T308-HF	3(2.5)2-HF	9.525	9.525	3.97	4.4	0.8	●	○													

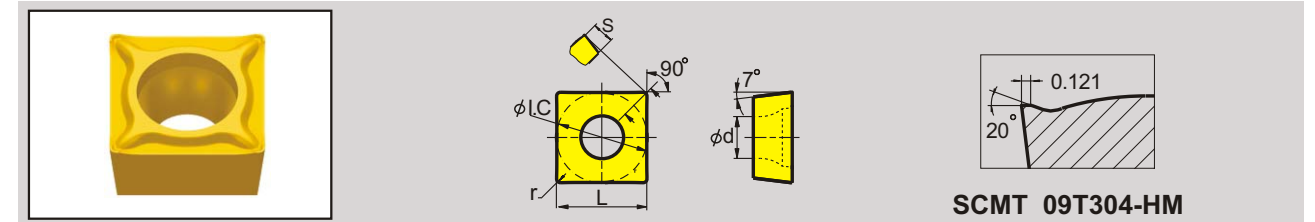


# Turning inserts

## Insertos para torneamento

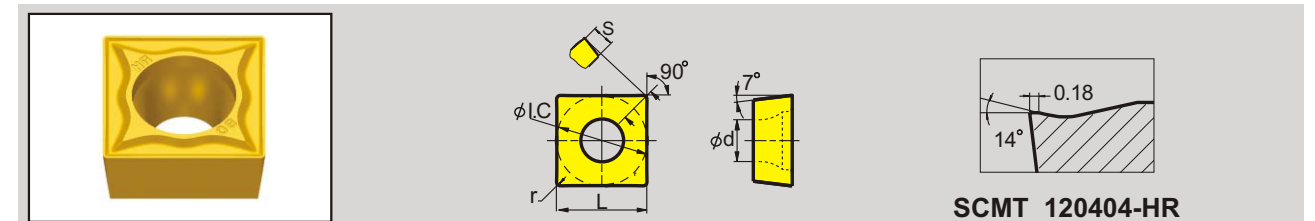
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



SCMT 09T304-HM

Código	Codigo	Type	Dimensão (mm)						Classes com Cobertura								Classe sem Cobertura					
			Dimensión (mm)						Grados con Cobertura								Grado sin Cobertura					
			Dimension (mm)						Coated Grade								Uncoated Grade					
(ISO)	(inch)	L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201		
SCMT	09T304-HM	3(2.5)1-HM	9.525	9.525	3.97	4.4	0.4	○	●													
	09T308-HM	3(2.5)2-HM	9.525	9.525	3.97	4.4	0.8	○	●													
	120404-HM	431-HM	12.7	12.7	4.76	5.56	0.4	○	●													
	120408-HM	432-HM	12.7	12.7	4.76	5.56	0.8	○	●													
	120412-HM	433-HM	12.7	12.7	4.76	5.56	1.2	○	●													



SCMT 120404-HR

Código	Codigo	Type	Dimensão (mm)						Classes com Cobertura								Classe sem Cobertura					
			Dimensión (mm)						Grados con Cobertura								Grado sin Cobertura					
			Dimension (mm)						Coated Grade								Uncoated Grade					
(ISO)	(inch)	L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201		
SCMT	09T304-HR	3(2.5)1-HR	9.525	9.525	3.97	4.4	0.4	○	●	○												
	09T308-HR	3(2.5)2-HR	9.525	9.525	3.97	4.4	0.8	○	●	○												
	120404-HR	431-HR	12.7	12.7	4.76	5.56	0.4	○	●	○												
	120408-HR	432-HR	12.7	12.7	4.76	5.56	0.8	○	●	○												
	120412-HR	433-HR	12.7	12.7	4.76	5.56	1.2	○	●	○												

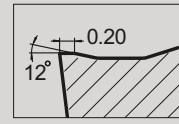
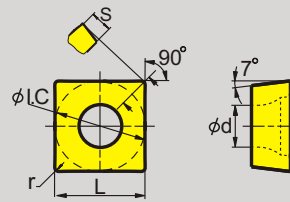


# Turning inserts

## Insertos para torneamento

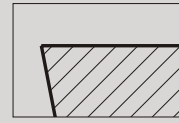
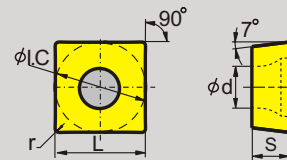
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



SCMT 120408

Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)		Classes com Cobertura Grados con Cobertura Coated Grade												Classe sem Cobertura Grado sin Cobertura Uncoated Grade								
	L	φLC	CVD						PVD						YC10	YC40	YD101	YD201					
			YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252											
<b>SCMT</b>	<b>(ISO)</b>	<b>(inch)</b>																					
	<b>09T304</b>	<b>3(2.5)1</b>	9.525	9.525	3.97	4.4	0.4	○	●									○			○		
	<b>120404</b>	<b>431</b>	12.7	12.7	4.76	5.5	0.4	○	●												○		
	<b>120408</b>	<b>432</b>	12.7	12.7	4.76	5.5	0.8	○	●												○		



SCMW 09T304

Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)		Classes com Cobertura Grados con Cobertura Coated Grade												Classe sem Cobertura Grado sin Cobertura Uncoated Grade									
	L	φLC	S	φd	r	CVD						PVD						YC10	YC40	YD101	YD201			
						YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252									
<b>SCMW</b>	<b>(ISO)</b>	<b>(inch)</b>																						
	<b>060204</b>	<b>2(1.5)1</b>	6.35	6.35	2.38	2.8	0.4															○		
	<b>09T304</b>	<b>3(2.5)1</b>	9.525	9.525	3.97	4.4	0.4																○	
	<b>09T308</b>	<b>3(2.5)2</b>	9.525	9.525	3.97	4.4	0.8																○	

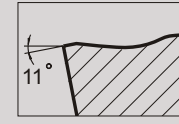
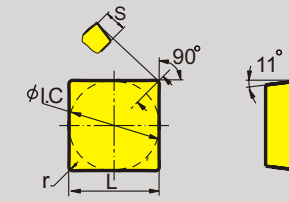
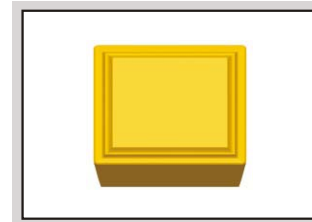


# Turning inserts

## Insertos para torneamento

### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



SPMR 120304

Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)		Classes com Cobertura Grados con Cobertura Coated Grade												Classe sem Cobertura Grado sin Cobertura Uncoated Grade								
	L	φLC	S	r	CVD						PVD						YC10	YC40	YD101	YD201			
					YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252									
<b>SPMR</b>	<b>(ISO)</b>	<b>(inch)</b>																					
	<b>090304</b>	<b>321</b>	9.525	9.525	3.18	0.4							○										
	<b>090308</b>	<b>322</b>	9.525	9.525	3.18	0.8							○										
	<b>09T304</b>	<b>3(2.5)1</b>	9.525	9.525	3.97	0.4							○										
	<b>09T308</b>	<b>3(2.5)2</b>	9.525	9.525	3.97	0.8							○										
	<b>120304</b>	<b>421</b>	12.7	12.7	3.18	0.4							○										
	<b>120308</b>	<b>422</b>	12.7	12.7	3.18	0.8							○										
<b>120312</b>	<b>423</b>	12.7	12.7	3.18	1.2							○											

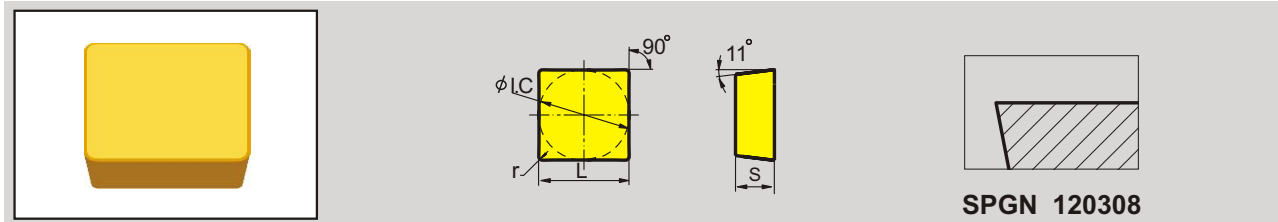


# Turning inserts

## Insertos para torneamento

### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



SPGN 120308

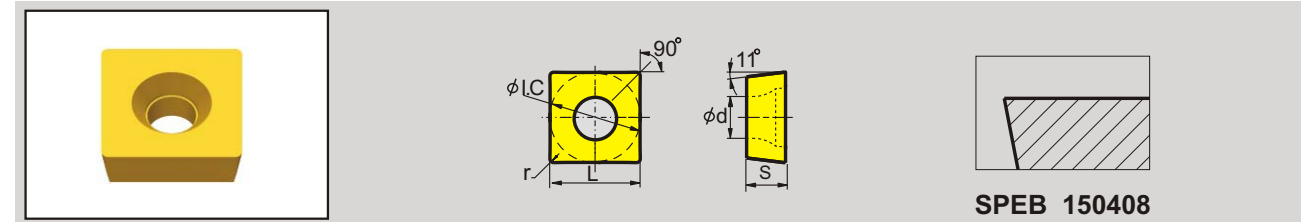
Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)	Classes com Cobertura Grados con Cobertura Coated Grade										Classe sem Cobertura Grado sin Cobertura Uncoated Grade						
		CVD					PVD					YC10	YC40	YD101	YD201			
		YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252							
L	phi.L.C	S	r															
<b>SPUN</b>																		
(ISO)	(inch)																	
090304	321	9.525	9.525	3.18	0.4													
090308	322	9.525	9.525	3.18	0.8													
120304	421	12.7	12.7	3.18	0.4													
120308	422	12.7	12.7	3.18	0.8													
120312	423	12.7	12.7	3.18	1.2													
120408	432	12.7	12.7	4.76	0.8													
150408	532	15.875	15.875	4.76	0.8													
150412	533	15.875	15.875	4.76	1.2													
190408	632	19.05	19.05	4.76	0.8													
190412	633	19.05	19.05	4.76	1.2													
190416	634	19.05	19.05	4.76	1.6													
<b>SPGN</b>																		
(ISO)	(inch)																	
090304	321	9.525	9.525	3.18	0.4													
090308	322	9.525	9.525	3.18	0.8													
120308	422	12.7	12.7	3.18	0.8													
120404	431	12.7	12.7	4.76	0.4													
120408	432	12.7	12.7	4.76	0.8													
120412	433	12.7	12.7	4.76	1.2													
150404	531	15.875	15.875	4.76	0.4													
150408	532	15.875	15.875	4.76	0.8													
190408	632	19.05	19.05	4.76	0.8													
190416	633	19.05	19.05	4.76	1.6													

# Turning inserts

## Insertos para torneamento

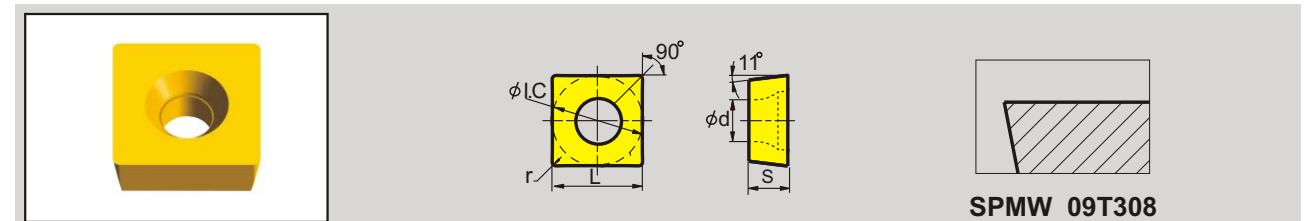
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



SPEB 150408

Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)	Classes com Cobertura Grados con Cobertura Coated Grade										Classe sem Cobertura Grado sin Cobertura Uncoated Grade						
		CVD					PVD					YC10	YC40	YD101	YD201			
		YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252							
L	phi.L.C	S	phi.d	r														
<b>SPEB</b>																		
(ISO)	(inch)																	
150408	532	15.875	15.875	4.76	5.5	0.8												



SPMW 09T308

Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)	Classes com Cobertura Grados con Cobertura Coated Grade										Classe sem Cobertura Grado sin Cobertura Uncoated Grade						
		CVD					PVD					YC10	YC40	YD101	YD201			
		YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252							
L	phi.L.C	S	phi.d	r														
<b>SPMW</b>																		
(ISO)	(inch)																	
09T304	3(2.5)1	9.525	9.525	3.97	4.4	0.4												
09T308	3(2.5)2	9.525	9.525	3.97	4.4	0.8												

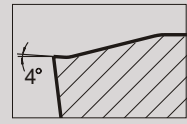
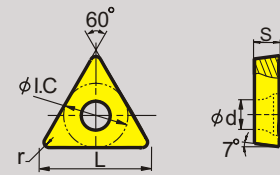
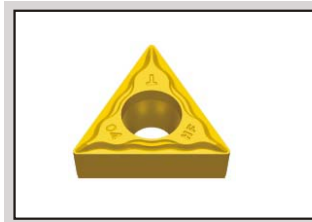


# Turning inserts

## Insertos para torneamento

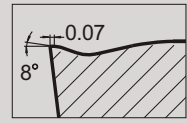
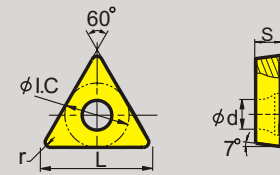
### Plaquitas para torneado

- Insertos ISO para torneamento
- Plaquitas ISO para torneado
- ISO Turning inserts



TCMT 16T304-HF

TCMT	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura										Classe sem Cobertura				
			L	phi.L.C	S	phi.d	r	Grados con Cobertura										Grado sin Cobertura				
								CVD										PVD				Uncoated Grade
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
	06T102-HF	1.2(1.2)0-HF	6.4	3.97	1.98	2.2	0.2	●								○						
	06T104-HF	1.2(1.2)1-HF	6.4	3.97	1.98	2.2	0.4	●	○							○						
	06T108-HF	1.2(1.2)2-HF	6.4	3.97	1.98	2.2	0.8	●	○							○						
	090202-HF	1.8(1.5)0-HF	9.6	5.56	2.38	2.5	0.2	●	○							○						
	090204-HF	1.8(1.5)1-HF	9.6	5.56	2.38	2.5	0.4	●	○							○						
	090208-HF	1.8(1.5)2-HF	9.6	5.56	2.38	2.5	0.8	●	○							○						
	110202-HF	2(1.5)0-HF	11	6.35	2.38	2.8	0.2	●	○							○						
	110204-HF	2(1.5)1-HF	11	6.35	2.38	2.8	0.4	●	○							○						
	110208-HF	2(1.5)2-HF	11	6.35	2.38	2.8	0.8	●	○							○						
	16T302-HF	3(2.5)0-HF	16.5	9.525	3.97	4.4	0.2	●	○							○						
	16T304-HF	3(2.5)1-HF	16.5	9.525	3.97	4.4	0.4	●	○							○						
	16T308-HF	3(2.5)2-HF	16.5	9.525	3.97	4.4	0.8	●	○							○						



TCMT 16T308-HM

TCMT	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura										Classe sem Cobertura				
			L	phi.L.C	S	phi.d	r	Grados con Cobertura										Grado sin Cobertura				
								CVD										PVD				Uncoated Grade
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
	090204-HM	1.8(1.5)1-HM	9.6	5.56	2.38	2.5	0.4	○	●	○							○					
	090208-HM	1.8(1.5)2-HM	9.6	5.56	2.38	2.5	0.8	○	●	○							○					
	110204-HM	2(1.5)1-HM	11	6.35	2.38	2.8	0.4	○	●	○							○					
	110208-HM	2(1.5)2-HM	11	6.35	2.38	2.8	0.8	○	●	○							○					
	16T304-HM	3(2.5)1-HM	16.5	9.525	3.97	4.4	0.4	○	●	○							○					
	16T308-HM	3(2.5)2-HM	16.5	9.525	3.97	4.4	0.8	○	●	○							○					
	16T312-HM	3(2.5)3-HM	16.5	9.525	3.97	4.4	1.2	○	●	○							○					

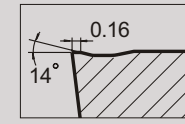
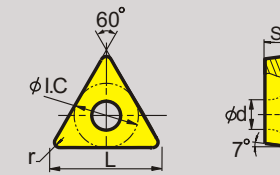


# Turning inserts

## Insertos para torneamento

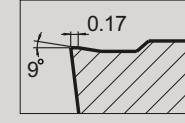
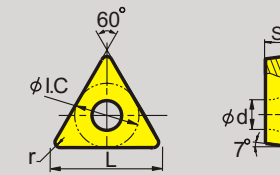
### Plaquitas para torneado

- Insertos ISO para torneamento
- Plaquitas ISO para torneado
- ISO Turning inserts



TCMT 090204-HR

TCMT	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura										Classe sem Cobertura				
			L	phi.L.C	S	phi.d	r	Grados con Cobertura										Grado sin Cobertura				
								CVD										PVD				Uncoated Grade
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
	090204-HR	1.8(1.5)1-HR	9.6	5.56	2.38	2.5	0.4	○	●								○					
	090208-HR	1.8(1.5)2-HR	9.6	5.56	2.38	2.5	0.8	○	●								○					
	16T304-HR	3(2.5)1-HR	16.5	9.525	3.97	4.4	0.4	○	●								○					
	16T308-HR	3(2.5)2-HR	16.5	9.525	3.97	4.4	0.8	○	●								○					
	16T312-HR	3(2.5)3-HR	16.5	9.525	3.97	4.4	1.2	○	●								○					
	220408-HR	432-HR	22	12.7	4.76	5.5	0.8	○									○					



TCMT 220408

TCMT	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura										Classe sem Cobertura				
			L	phi.L.C	S	phi.d	r	Grados con Cobertura										Grado sin Cobertura				
								CVD										PVD				Uncoated Grade
							YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252		YC10	YC40	YD101	YD201	
	090202	1.8(1.5)0	9.6	5.56	2.38	2.5	0.2	○	●								○					
	220408	432	22	12.7	4.76	5.5	0.8	○									○					



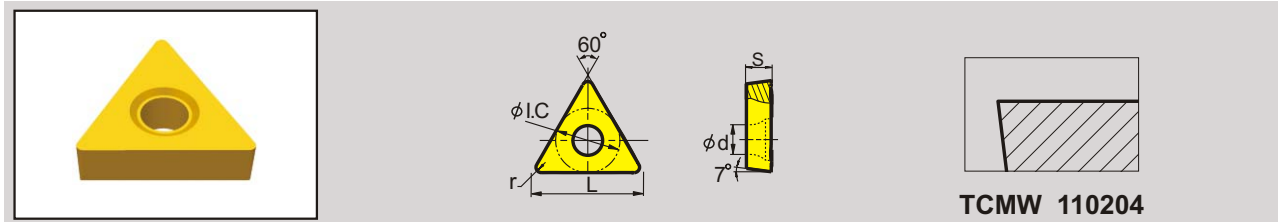


# Turning inserts

## Insertos para torneamento

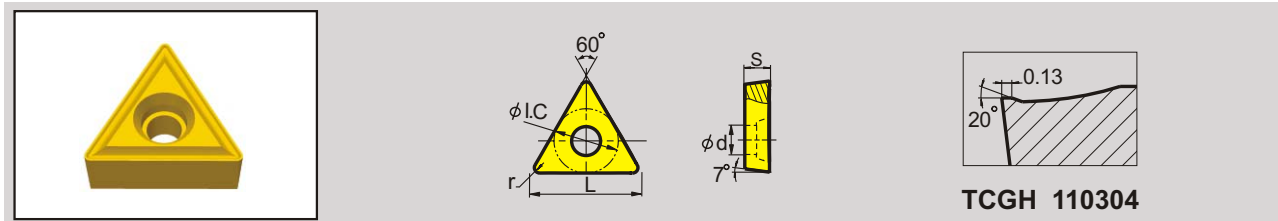
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



TCMW 110204

TCMW	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura				Grado sin Cobertura				Uncoated Grade						
			Dimension (mm)					CVD				PVD				Uncoated Grade						
			L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201	
	110204	2(1.5)1	11	6.35	2.38	2.8	0.4	●	○						○						○	
	16T304	3(2.5)1	16.5	9.525	3.97	4.4	0.4	●	○						○							
	16T308	3(2.5)2	16.5	9.525	3.97	4.4	0.8	●	○					○							○	
	16T312	3(2.5)3	16.5	9.525	3.97	4.4	1.2	●	○													○
	220408	432	22	12.7	4.76	5.5	0.8	●	○													
TCGW	16T304	3(2.5)1	16.5	9.525	3.97	4.4	0.4	●	○													
	16T308	3(2.5)2	16.5	9.525	3.97	4.4	0.8	●	○													
	16T312	3(2.5)3	16.5	9.525	3.97	4.4	1.2	●	○													



TCGH 110304

TCGH	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura				Grado sin Cobertura				Uncoated Grade						
			Dimension (mm)					CVD				PVD				Uncoated Grade						
			L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201	
	110304	221	11	6.35	3.18	2.26	0.4	●							○							
	110308	222	11	6.35	3.18	2.26	0.8	●							○							
	160304	321	16.5	9.525	3.18	3.81	0.4	●							○							
	160308	322	16.5	9.525	3.18	3.81	0.8	●							○							

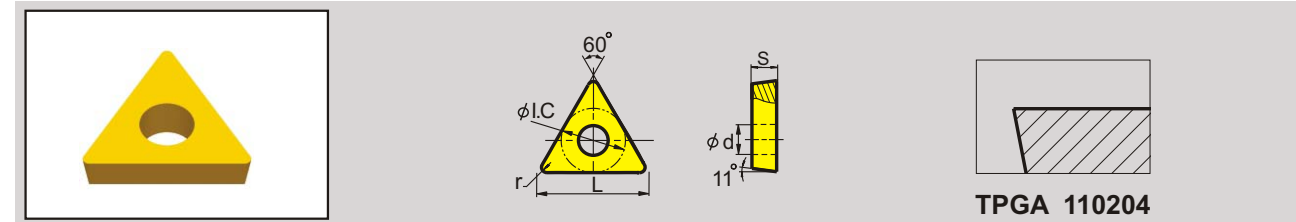


# Turning inserts

## Insertos para torneamento

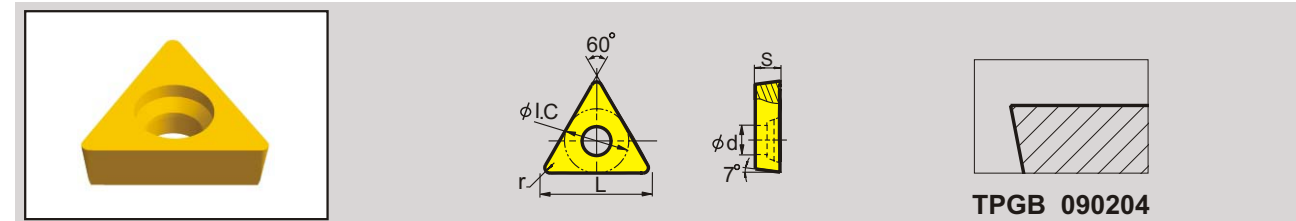
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



TPGA 110204

TPGA	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura				Grado sin Cobertura				Uncoated Grade						
			Dimension (mm)					CVD				PVD				Uncoated Grade						
			L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201	
	090204	1.8(1.5)1	9.6	5.56	2.38	3.2	0.4								●							○
	090208	1.8(1.5)2	9.6	5.56	2.38	3.2	0.8								●							○
	110204	2(1.5)1	11	6.35	2.38	3.4	0.4								●							○
	110212	2(1.5)2	11	6.35	2.38	3.5	1.2								●							○
	160304	321	16.5	9.525	3.18	3.81	0.4								●							○
	160308	322	16.5	9.525	3.18	4.2	0.8								●							○



TPGB 090204

TPGB	Código (ISO)	Codigo (inch)	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura						
			Dimensión (mm)					Grados con Cobertura				Grado sin Cobertura				Uncoated Grade						
			Dimension (mm)					CVD				PVD				Uncoated Grade						
			L	phi.L.C	S	phi.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201	
	090204	1.8(1.5)1	9.6	5.56	2.38	2.8	0.4															○
	090208	1.8(1.5)2	9.6	5.56	2.38	2.8	0.8															○
	270416	534	27.5	15.875	4.76	5.16	1.6															○

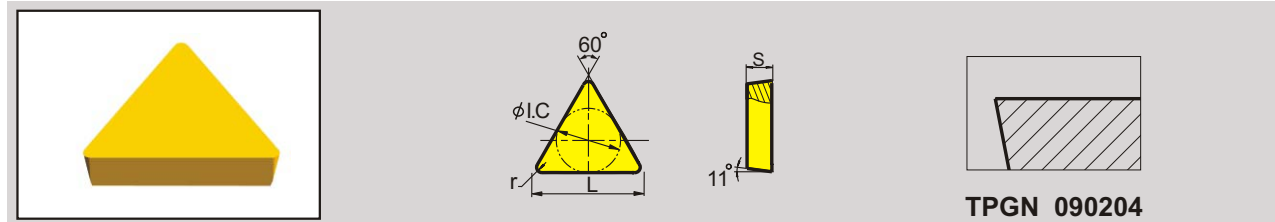


# Turning inserts

## Insertos para torneamento

### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



TPGN 090204

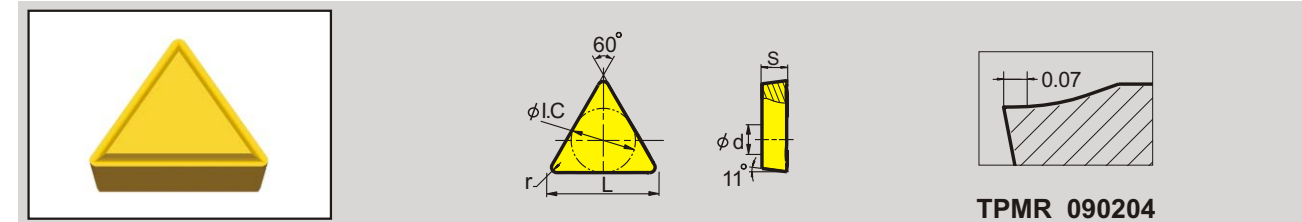
Código	Codigo	Type	Dimensão (mm)				Classes com Cobertura								Classe sem Cobertura				
			Dimensión (mm)				Grados con Cobertura								Grado sin Cobertura				
			Dimension (mm)				CVD				PVD				Uncoated Grade				
(ISO)	(inch)	L	φ.L.C	S	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201
TPGN 090204	1.8(1.5)1	9.6	5.56	2.38	0.4	●													
TPGN 090208	1.8(1.5)2	9.6	5.56	2.38	0.8														
TPGN 110204	2(1.5)1	11	6.35	2.38	0.4														
TPGN 110208	2(1.5)2	11	6.35	2.38	0.8														
TPGN 110304	221	11	6.35	3.18	0.4	●													
TPGN 110308	222	11	6.35	3.18	0.8	●							●					○	●
TPGN 110316	224	11	6.35	3.18	1.6													○	●
TPGN 160300	320	16.5	9.525	3.18	0														
TPGN 160304	321	16.5	9.525	3.18	0.4														
TPGN 160308	322	16.5	9.525	3.18	0.8													○	●
TPGN 160312	323	16.5	9.525	3.18	1.2														
TPGN 160316	324	16.5	9.525	3.18	1.6														
TPGN 160408	332	16.5	9.525	4.76	0.8	●													
TPGN 160412	333	16.5	9.525	4.76	1.2	●													
TPGN 220308	422	22	12.7	3.18	0.8														
TPGN 220400	430	22	12.7	4.76	0														
TPGN 220404	431	22	12.7	4.76	0.4														
TPGN 220408	432	22	12.7	4.76	0.8														
TPGN 220412	433	22	12.7	4.76	1.2														
TPGN 220416	434	22	12.7	4.76	1.6														
TPGN 270408	532	27.5	15.875	4.76	0.8								●						
TPGN 270412	533	27.5	15.875	4.76	1.2														
TPGN 330612	643	33	19.05	6.35	1.2														
TPGN 330616	644	33	19.05	6.35	1.6														

# Turning inserts

## Insertos para torneamento

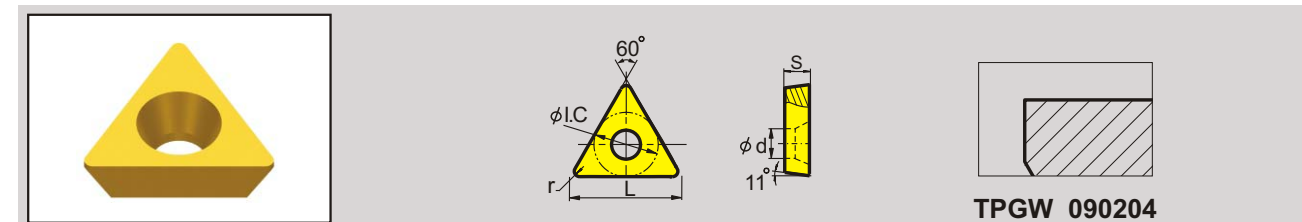
### Plaquetas para torneado

- Insertos ISO para torneamento
- Plaquetas ISO para torneado
- ISO Turning inserts



TPMR 090204

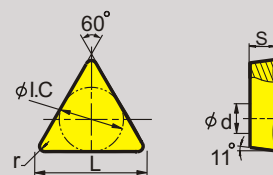
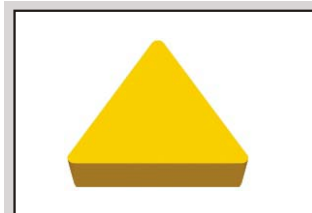
Código	Codigo	Type	Dimensão (mm)				Classes com Cobertura								Classe sem Cobertura				
			Dimensión (mm)				Grados con Cobertura								Grado sin Cobertura				
			Dimension (mm)				CVD				PVD				Uncoated Grade				
(ISO)	(inch)	L	φ.L.C	S	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201
TPMR 090204	1.8(1.5)1	9.6	5.56	2.38	0.4		●												
TPMR 110304	221	11	6.35	3.18	0.4		●												
TPMR 110308	222	11	6.35	3.18	0.8		●												
TPMR 160304	321	16.5	9.525	3.18	0.4		●												
TPMR 160308	322	16.5	9.525	3.18	0.8		●												
TPMR 160312	323	16.5	9.525	3.18	1.2		●												
TPMR 220412	433	22	12.7	4.76	1.2		●												



TPGW 090204

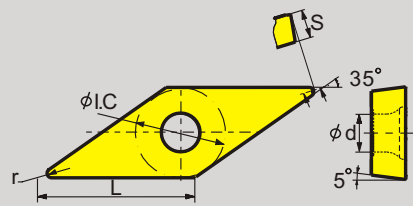
Código	Codigo	Type	Dimensão (mm)					Classes com Cobertura								Classe sem Cobertura				
			Dimensión (mm)					Grados con Cobertura								Grado sin Cobertura				
			Dimension (mm)					CVD				PVD				Uncoated Grade				
(ISO)	(inch)	L	φ.L.C	S	φ.d	r	YBC151	YBC251	YBC351	YBM151	YBM251	YBM351	YBD051	YBD151	YB235	YBM252	YC10	YC40	YD101	YD201
TPGW 090204	1.8(1.5)1	9.6	5.56	2.38	2.8	0.4	●													○
TPGW 090208	1.8(1.5)2	9.6	5.56	2.38	2.8	0.8	●													○
TPGW 110304	221	11	6.35	3.18	2.8	0.4	●													○
TPGW 110308	222	11	6.35	3.18	2.9	0.8	●													○
TPGW 160308	322	16.5	9.525	3.18	4.4	0.8	●													○
TPGW 16T302	3(2.5)0	16.5	9.525	3.97	4.4	0.2	●													○
TPGW 160400	330	16.5	9.525	4.76	4.4	0	●													○
TPGW 220408	432	22	12.7	4.76	5.5	0.8	●													○

■ Insertos ISO para torneamento  
■ Plaquitas ISO para torneado  
■ ISO Turning inserts



TPUN 160308

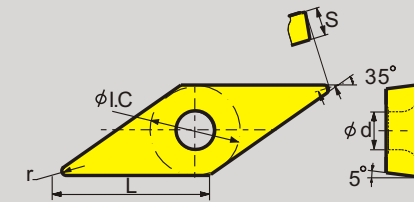
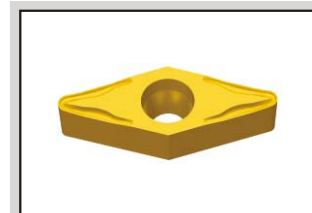
Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)	Classes com Cobertura Grados con Cobertura Coated Grade										Classe sem Cobertura Grado sin Cobertura Uncoated Grade																					
		CVD					PVD					YC10	YC40	YD101	YD201																		
		L	φLC	S	r		YBC151	YBC251	YBC351	YBM151	YBM251					YBM351	YBD051	YBD151	YB235	YBM252													
<b>TPUN</b>																																	
<b>(ISO)</b>	<b>(inch)</b>	L	φLC	S	r																												
110208	2(1.5)2	11	6.35	2.38	0.8																												
110304	221	11	6.35	3.18	0.4																												
110308	222	11	6.35	3.18	0.8																												
160304	321	16.5	9.525	3.18	0.4																												
160308	322	16.5	9.525	3.18	0.8																												
160312	323	16.5	9.525	3.18	1.2																												
160408	332	16.5	9.525	4.76	0.8																												
160412	333	16.5	9.525	4.76	1.2																												
220404	431	22	12.7	4.76	0.4																												
220408	432	22	12.7	4.76	0.8																												
220412	433	22	12.7	4.76	1.2																												
220416	434	22	12.7	4.76	1.6																												



VBMT 110204-HF

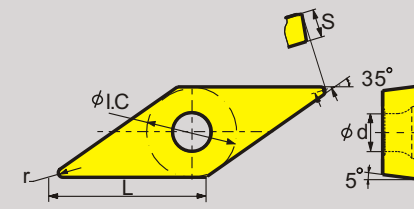
Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)	Classes com Cobertura Grados con Cobertura Coated Grade										Classe sem Cobertura Grado sin Cobertura Uncoated Grade																						
		CVD					PVD					YC10	YC40	YD101	YD201																			
		L	φLC	S	φd	r	YBC151	YBC251	YBC351	YBM151	YBM251					YBM351	YBD051	YBD151	YB235	YBM252														
<b>VBMT</b>																																		
<b>(ISO)</b>	<b>(inch)</b>	L <td>φLC <td>S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td></td></td>	φLC <td>S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td></td>	S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td>	φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td>	r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																												
110202-HF	2(1.5)0-HF	11	6.35	2.38	2.8	0.2	●	○																										
110204-HF	2(1.5)1-HF	11	6.35	2.38	2.8	0.4	●	○																										
110208-HF	2(1.5)2-HF	11	6.35	2.38	2.8	0.8	●	○																										

■ Insertos ISO para torneamento  
■ Plaquitas ISO para torneado  
■ ISO Turning inserts



VBMT 160404-HM

Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)	Classes com Cobertura Grados con Cobertura Coated Grade										Classe sem Cobertura Grado sin Cobertura Uncoated Grade																					
		CVD					PVD					YC10	YC40	YD101	YD201																		
		L	φLC	S	φd	r	YBC151	YBC251	YBC351	YBM151	YBM251					YBM351	YBD051	YBD151	YB235	YBM252													
<b>VBMT</b>																																	
<b>(ISO)</b>	<b>(inch)</b>	L <td>φLC <td>S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td></td></td>	φLC <td>S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td></td>	S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td>	φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td>	r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																											
160404-HM	331-HM	16.6	9.525	4.76	4.4	0.4	○	●	○																								
160408-HM	332-HM	16.6	9.525	4.76	4.4	0.8	○	●	○																								
160412-HM	333-HM	16.6	9.525	4.76	4.4	1.2	○	●	○																								



VBMT 160408-HR

Código Codigo Type	Dimensão (mm) Dimensión (mm) Dimension (mm)	Classes com Cobertura Grados con Cobertura Coated Grade										Classe sem Cobertura Grado sin Cobertura Uncoated Grade																						
		CVD					PVD					YC10	YC40	YD101	YD201																			
		L	φLC	S	φd	r	YBC151	YBC251	YBC351	YBM151	YBM251					YBM351	YBD051	YBD151	YB235	YBM252														
<b>VBMT</b>																																		
<b>(ISO)</b>	<b>(inch)</b>	L <td>φLC <td>S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td></td></td>	φLC <td>S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td></td>	S <td>φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td></td>	φd <td>r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </td>	r <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																												
160404-HR	331-HR	16.6	9.525	4.76	4.4	0.4	○	●	○																									
160408-HR	332-HR	16.6	9.525	4.76	4.4	0.8	○	●	○																									
160412-HR	333-HR	16.6	9.525	4.76	4.4	1.2	○	●	○																									