



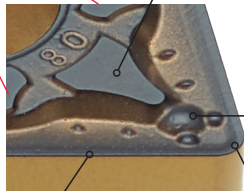
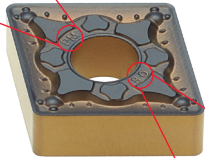
PM  
NEW  
CHIP-BREAKER

PHG  
NEW  
GRADE



SCAN  
ME!

A small step for Palbit, a big step for productivity



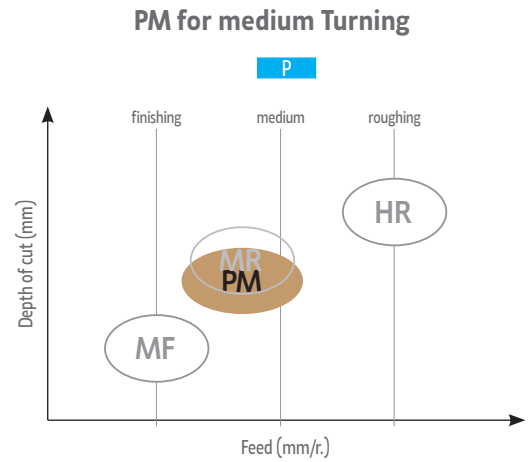
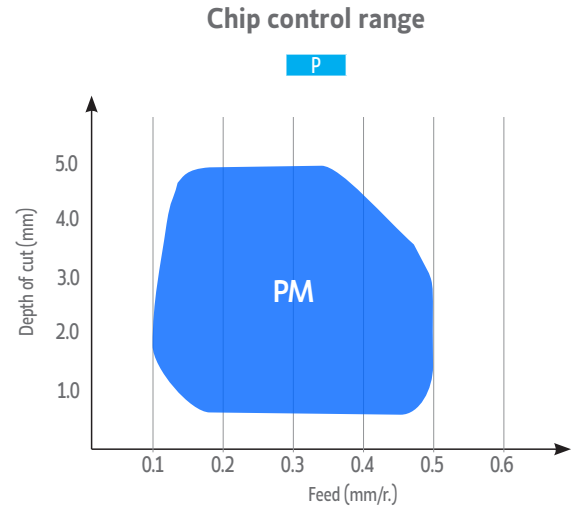
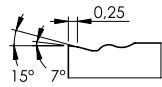
Chip-breaker Indication

**Wide contact area**  
of insert with holder  
prevents chipping due  
to stable basis.

**Newly developed chip-breaker for turning**  
Excellent chip control even when machining with a small depth of cut.  
Suitable for machining with a variable depth of cut

**Optimized and tough cutting edge Improvement**  
Fracture resistance provides high strength and reduced cutting forces

**Proper rake angle**  
of cutting edge ensures better surface finish and low cutting resistance.



**New medium temperature CVD coating with  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>+TiN.**  
**Suitable for high to medium cutting speeds on steels & cast steels.**

First choice for a majority of steel turning applications, roughing to finishing, continuous and interrupted cuts.

**Technical features**

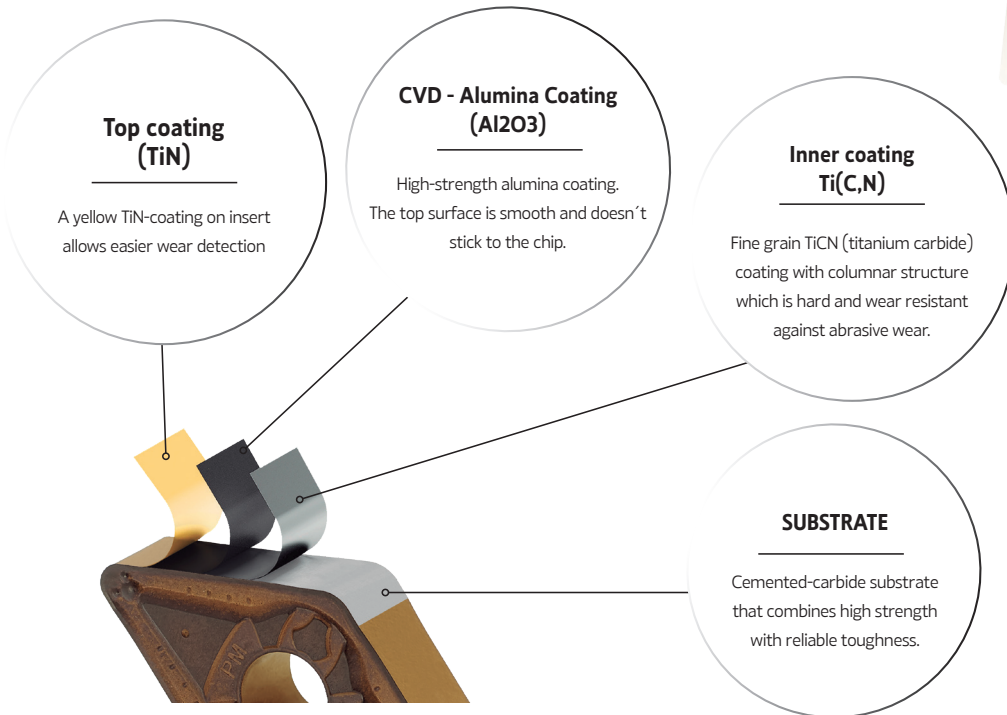
New grade (PHG...) for high wear resistance and long tool life.  
 The new grade create a strong barrier towards the cutting zone and the chip.

**Heat-resistant substrate**

The cemented-carbide substrate adds high strength and reliable toughness.  
 Optimized to withstand heat, it is suitable for applications with focus on high material removal rate.

**Other insert details**

The MT-TiCN inner coating is hard and wear-resistant against abrasive wear.  
 The yellow top TiN coating on the insert flank allows for easy wear detection.



**Application**

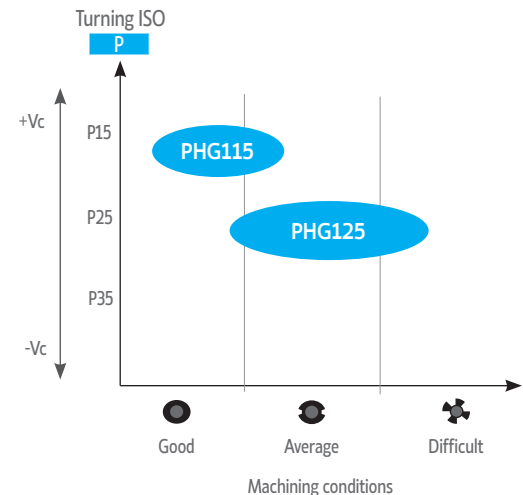
- External and internal turning
- Roughing to finishing
- Wet and dry machining

**PHG125**

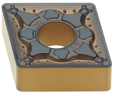


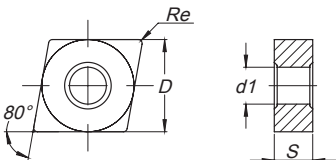






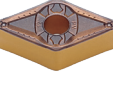


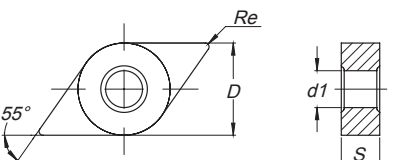

















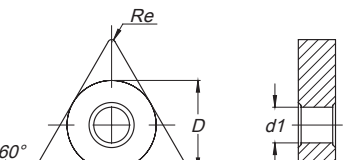














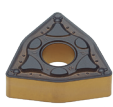


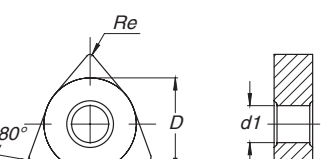










- First choice for a vast majority of steel turning applications
- Continuous to interrupted cuts



**PHG115**

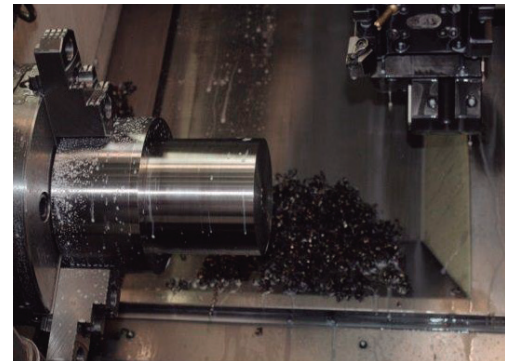
- Continuous to light-interrupted cuts
- High cutting speed
- Enables long time machining
- Hard workpiece materials



# INSERTS | Pastilhas | Plaquitas



Inserts Pastilhas Plaquitas	(1) Geometry code	ISO Reference	ANSI Reference	P		Dimensions (mm) Dimensões (mm) Dimensiones (mm)				Cutting Conditions Condições de Corte Condiciones de Corte					Technical drawing Desenho técnico Dibujo técnico		
				(2) Grade code		D	S	Re	d1	ap (mm)	Min	Max	fn (mm/rev)	Min		Max	
				R2	R3												
	CNMG-PM	1123919	CNMG 120404-PM	CNMG 431-PM			12,700	4,76	0,40	5,16	3,00	0,40	5,50	0,20	0,10	0,30	
		1123790	CNMG 120408-PM	CNMG 432-PM			12,700	4,76	0,80	5,16	3,00	0,50	5,50	0,30	0,15	0,50	
		1123920	CNMG 120412-PM	CNMG 433-PM			12,700	4,76	1,20	5,16	3,00	0,80	5,50	0,35	0,18	0,60	
	Medium	1123921	CNMG 120416-PM	CNMG 434-PM			12,700	4,76	1,60	5,16	3,00	1,00	5,50	0,40	0,23	0,65	
	DNMG-PM	1123924	DNMG 150404-PM	DNMG 431-PM			12,700	4,76	0,40	5,16	3,00	0,40	6,00	0,20	0,10	0,30	
		1123916	DNMG 150408-PM	DNMG 432-PM			12,700	4,76	0,80	5,16	3,00	0,50	6,00	0,30	0,15	0,50	
		1123925	DNMG 150412-PM	DNMG 433-PM			12,700	4,76	1,20	5,16	3,00	0,80	6,00	0,35	0,18	0,60	
		1123926	DNMG 150416-PM	DNMG 434-PM			12,700	4,76	1,60	5,16	3,00	1,00	6,00	0,40	0,23	0,65	
	Medium	1124065	DNMG 150604-PM	DNMG 441-PM			12,700	6,35	0,40	5,16	2,50	0,50	5,00	0,25	0,15	0,40	
		1123777	DNMG 150608-PM	DNMG 442-PM			12,700	6,35	0,80	5,16	3,00	0,50	6,00	0,30	0,15	0,50	
		1124066	DNMG 150612-PM	DNMG 443-PM			12,700	6,35	1,20	5,16	3,50	0,50	7,00	0,35	0,20	0,60	
	1124082	DNMG 150616-PM	DNMG 444-PM			12,700	6,35	1,60	5,16	3,00	1,00	6,00	0,40	0,23	0,65		
	TNMG-PM	1123991	TNMG 160404-PM	TNMG 331-PM			9,525	4,76	0,40	3,81	3,00	0,40	5,00	0,20	0,10	0,30	
		1123917	TNMG 160408-PM	TNMG 332-PM			9,525	4,76	0,80	3,81	3,00	0,50	5,00	0,30	0,15	0,50	
		1123992	TNMG 160412-PM	TNMG 333-PM			9,525	4,76	1,20	3,81	3,00	0,80	5,00	0,35	0,18	0,60	
		1123993	TNMG 160416-PM	TNMG 334-PM			9,525	4,76	1,60	3,81	3,00	1,00	5,00	0,40	0,23	0,65	
	Medium	1123922	TNMG 220404-PM	TNMG 431-PM			12,700	4,76	0,40	5,16	4,00	0,40	6,60	0,20	0,10	0,30	
		1123923	TNMG 220408-PM	TNMG 432-PM			12,700	4,76	0,80	5,16	4,00	0,50	6,60	0,30	0,15	0,50	
		1123994	TNMG 220412-PM	TNMG 433-PM			12,700	4,76	1,20	5,16	4,00	0,80	6,60	0,35	0,18	0,60	
	1123995	TNMG 220416-PM	TNMG 434-PM			12,700	4,76	1,60	5,16	4,00	1,00	6,60	0,40	0,23	0,60		
	WNMG-PM	1124088	WNMG 060404-PM	WNMG 331-PM			9,525	4,76	0,40	3,81	2,00	0,50	3,00	0,22	0,10	0,30	
		1124089	WNMG 060408-PM	WNMG 332-PM			9,525	4,76	0,80	3,81	2,00	0,50	3,00	0,30	0,15	0,50	
		1123988	WNMG 080404-PM	WNMG 431-PM			12,700	4,76	0,40	5,16	2,50	0,50	4,00	0,22	0,10	0,30	
		1123918	WNMG 080408-PM	WNMG 432-PM			12,700	4,76	0,80	5,16	2,50	0,50	4,00	0,30	0,15	0,50	
	Medium	1123989	WNMG 080412-PM	WNMG 433-PM			12,700	4,76	1,20	5,16	2,50	0,80	4,00	0,35	0,18	0,60	
		1123990	WNMG 080416-PM	WNMG 434-PM			12,700	4,76	1,60	5,16	3,00	1,00	4,50	0,35	0,20	0,65	

<p><b>Toolholder</b> DCLN L 2525 M12</p> <p><b>Insert</b> CNMG 120408-PM</p> <p><b>Grade</b> PHG125</p> <p><b>43%</b> productivity improvement</p> <p>Machining pieces <b>70 (pieces)</b></p> 	<p><b>Toolholder</b> Competitor Equivalent product</p> <p><b>Insert</b> Competitor Equivalent product</p> <p><b>Grade</b> Competitor Equivalent product</p> <p>Machining pieces <b>40 (pieces)</b></p> 
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Workpiece material: Low-alloy steel, Ck45 (200 HB)

Cutting speed: Vc (m/min)	200
Feed per tooth: fn (mm/r)	0,30
Depth of cut: ap (mm)	3,00
Operation	External, axial and face turning
Coolant	Emulsion

<p><b>Toolholder</b> DDJN L 2525 M15</p> <p><b>Insert</b> DNMG 150608-PM</p> <p><b>Grade</b> PHG115</p> <p><b>50%</b> productivity improvement</p> <p>Machining pieces <b>100 (pieces)</b></p> 	<p><b>Toolholder</b> Competitor Equivalent product</p> <p><b>Insert</b> Competitor Equivalent product</p> <p><b>Grade</b> Competitor Equivalent product</p> <p>Machining pieces <b>50 (pieces)</b></p> 
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Workpiece material: Low-alloy steel, 40Mn4 (255 HB)

Cutting speed: Vc (m/min)	250
Feed per tooth: fn (mm/r)	0,25
Depth of cut: ap (mm)	2,50
Operation	External turning
Coolant	Emulsion



**HEADQUARTERS**

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