



PM  
NEW  
CHIP-BREAKER

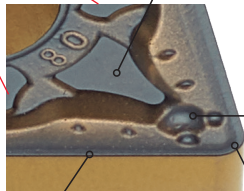
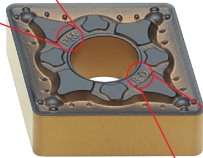
PHG  
NEW  
GRADE



SCAN  
ME!

A small step for Palbit, a big step for productivity





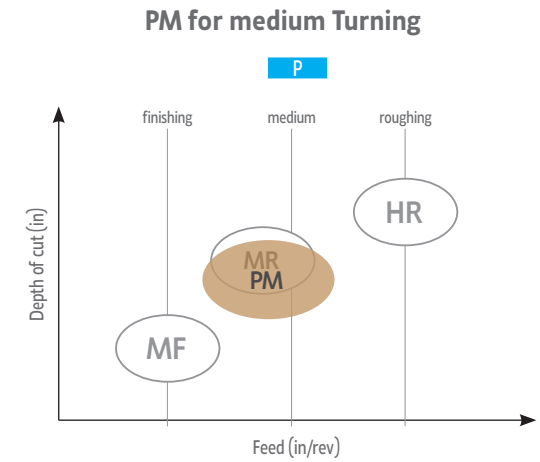
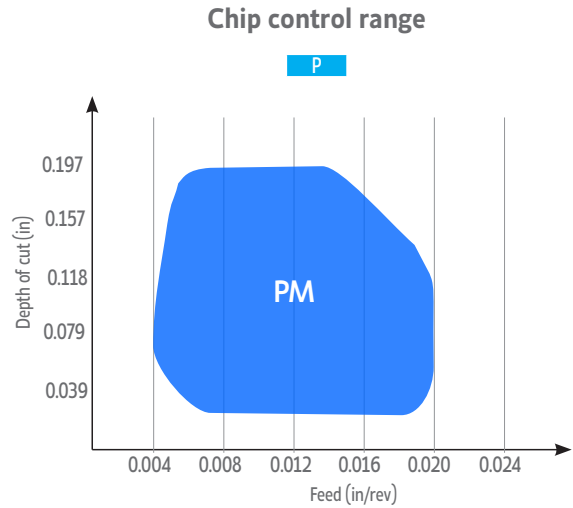
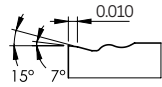
Chip-breaker Indication

**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**

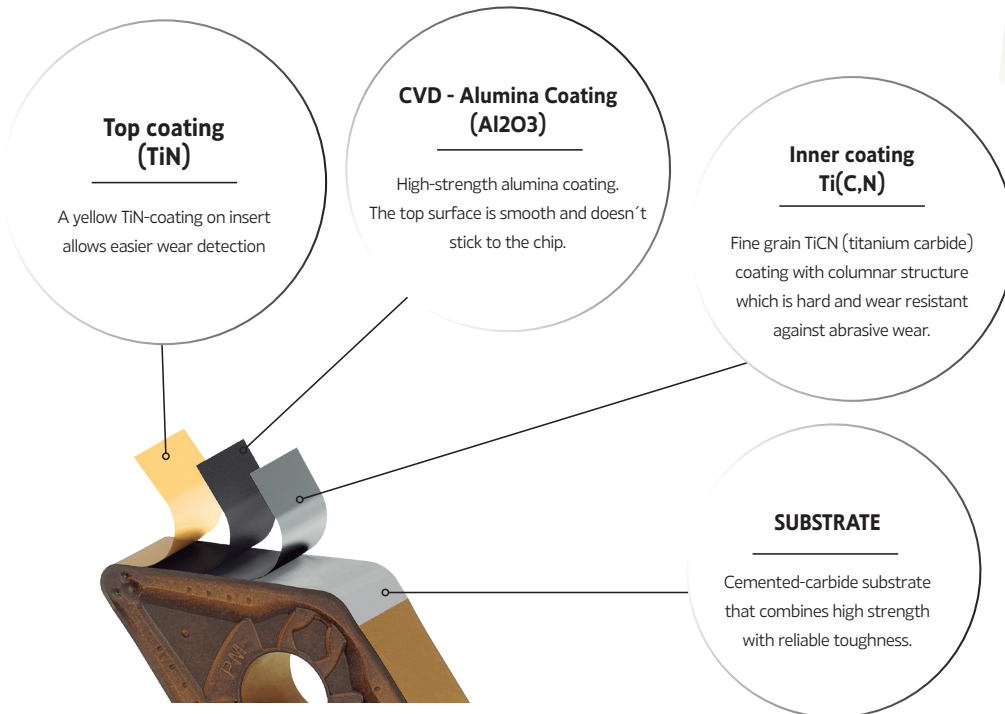
New grade (PHG...) for high wear resistance and long tool life.  
 The new grade create a strong barrier towards the cutting zone and the chip.

**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**

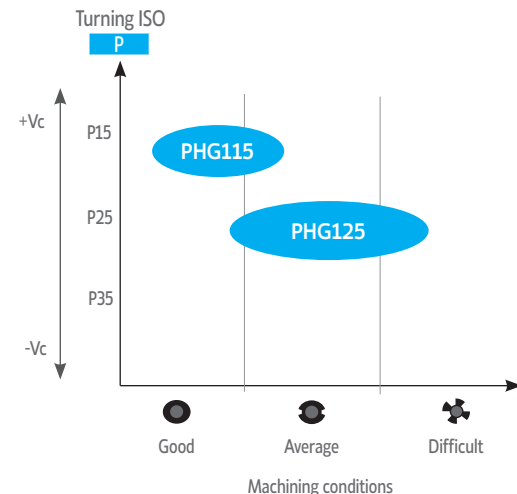
- External and internal turning
- Roughing to finishing
- Wet and dry machining

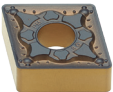
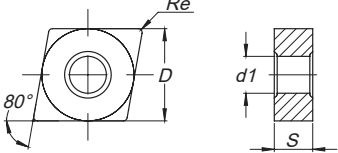

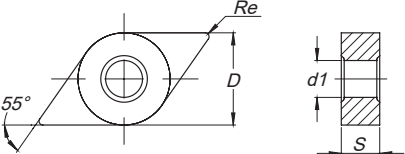

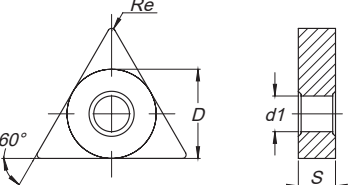
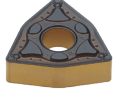
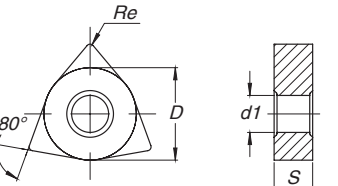
**PHG125**

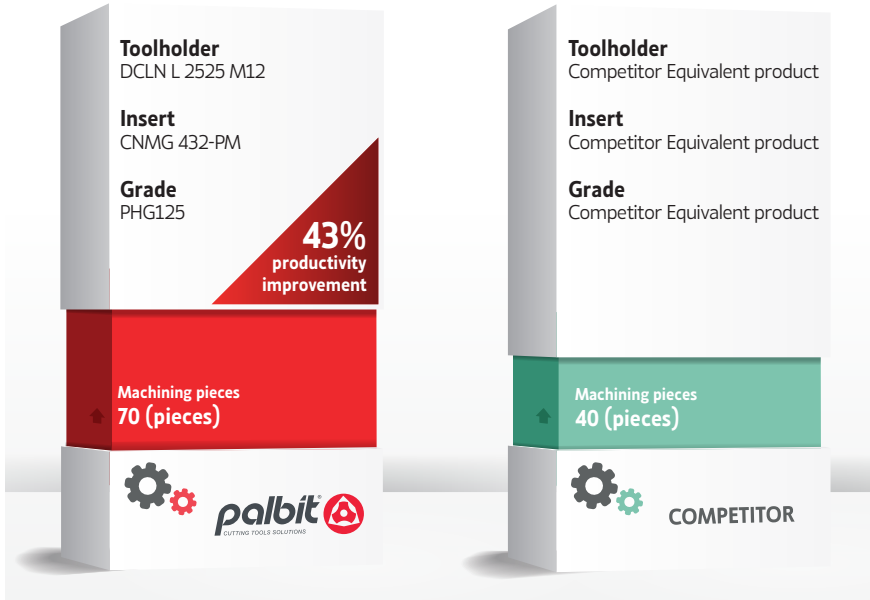
- First choice for a vast majority of steel turning applications
- Continuous to interrupted cuts

**PHG115**

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

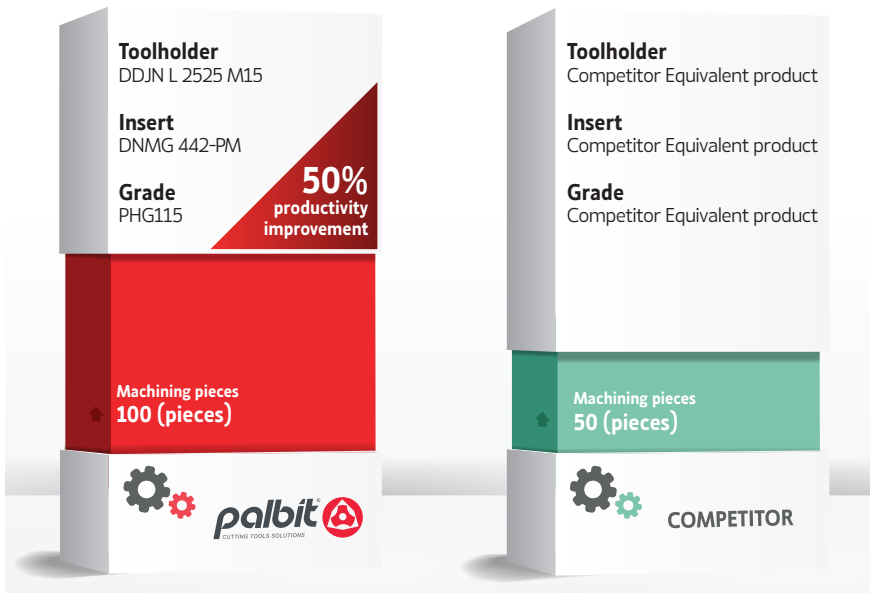


Inserts Pastilhas Plaquitas	(1) Geometry code	(2) Grade code		P		Dimensions (in) Dimensões (in) Dimensiones (in)				Cutting Conditions Condições de Corte Condiciones de Corte					Technical drawing Desenho técnico Dibujo técnico	
				CVD-MT						ap (in)	Min	Max	fn (in/rev)	Min		Max
				R2	R3	PHG115	PHG125	D	S							
 CNMG-PM Medium	1123919	CNMG 120404-PM	CNMG 431-PM	☑	☑	1/2	3/16	1/64	0.203	0.118	0.016	0.217	0.008	0.004	0.012	
	1123790	CNMG 120408-PM	CNMG 432-PM	☑	☑	1/2	3/16	1/32	0.203	0.118	0.020	0.217	0.012	0.006	0.020	
	1123920	CNMG 120412-PM	CNMG 433-PM	☑	☑	1/2	3/16	3/64	0.203	0.118	0.031	0.217	0.014	0.007	0.024	
	1123921	CNMG 120416-PM	CNMG 434-PM	☑	☑	1/2	3/16	1/16	0.203	0.118	0.039	0.217	0.016	0.009	0.026	
 DNMG-PM Medium	1123924	DNMG 150404-PM	DNMG 431-PM	☑	☑	1/2	3/16	1/64	0.203	0.118	0.016	0.236	0.008	0.004	0.012	
	1123916	DNMG 150408-PM	DNMG 432-PM	☑	☑	1/2	3/16	1/32	0.203	0.118	0.020	0.236	0.012	0.006	0.020	
	1123925	DNMG 150412-PM	DNMG 433-PM	☑	☑	1/2	3/16	3/64	0.203	0.118	0.031	0.236	0.014	0.007	0.024	
	1123926	DNMG 150416-PM	DNMG 434-PM	☑	☑	1/2	3/16	1/16	0.203	0.118	0.039	0.236	0.016	0.009	0.026	
	1124065	DNMG 150604-PM	DNMG 441-PM	☑	☑	1/2	1/4	1/64	0.203	0.098	0.020	0.197	0.010	0.006	0.016	
	1123777	DNMG 150608-PM	DNMG 442-PM	☑	☑	1/2	1/4	1/32	0.203	0.118	0.020	0.236	0.012	0.006	0.020	
	1124066	DNMG 150612-PM	DNMG 443-PM	☑	☑	1/2	1/4	3/64	0.203	0.138	0.020	0.276	0.014	0.008	0.024	
1124082	DNMG 150616-PM	DNMG 444-PM	☑	☑	1/2	1/4	1/16	0.203	0.118	0.039	0.236	0.016	0.009	0.026		
 TNMG-PM Medium	1123991	TNMG 160404-PM	TNMG 331-PM	☑	☑	3/8	3/16	1/64	0.150	0.118	0.016	0.197	0.008	0.004	0.012	
	1123917	TNMG 160408-PM	TNMG 332-PM	☑	☑	3/8	3/16	1/32	0.150	0.118	0.020	0.197	0.012	0.006	0.020	
	1123992	TNMG 160412-PM	TNMG 333-PM	☑	☑	3/8	3/16	3/64	0.150	0.118	0.031	0.197	0.014	0.007	0.024	
	1123993	TNMG 160416-PM	TNMG 334-PM	☑	☑	3/8	3/16	1/16	0.150	0.118	0.039	0.197	0.016	0.009	0.026	
	1123922	TNMG 220404-PM	TNMG 431-PM	☑	☑	1/2	3/16	1/64	0.203	0.157	0.016	0.260	0.008	0.004	0.012	
	1123923	TNMG 220408-PM	TNMG 432-PM	☑	☑	1/2	3/16	1/32	0.203	0.157	0.020	0.260	0.012	0.006	0.020	
	1123994	TNMG 220412-PM	TNMG 433-PM	☑	☑	1/2	3/16	3/64	0.203	0.157	0.031	0.260	0.014	0.007	0.024	
	1123995	TNMG 220416-PM	TNMG 434-PM	☑	☑	1/2	3/16	1/16	0.203	0.157	0.039	0.260	0.016	0.009	0.024	
 WNMG-PM Medium	1124088	WNMG 060404-PM	WNMG 331-PM	☑	☑	3/8	3/16	1/64	0.150	0.079	0.020	0.118	0.009	0.004	0.012	
	1124089	WNMG 060408-PM	WNMG 332-PM	☑	☑	3/8	3/16	1/32	0.150	0.079	0.020	0.118	0.012	0.006	0.020	
	1123988	WNMG 080404-PM	WNMG 431-PM	☑	☑	1/2	3/16	1/64	0.203	0.098	0.020	0.157	0.009	0.004	0.012	
	1123918	WNMG 080408-PM	WNMG 432-PM	☑	☑	1/2	3/16	1/32	0.203	0.098	0.020	0.157	0.012	0.006	0.020	
	1123989	WNMG 080412-PM	WNMG 433-PM	☑	☑	1/2	3/16	3/64	0.203	0.098	0.031	0.157	0.014	0.007	0.024	
	1123990	WNMG 080416-PM	WNMG 434-PM	☑	☑	1/2	3/16	1/16	0.203	0.118	0.039	0.177	0.014	0.008	0.026	



Workpiece material: Low-alloy steel, Ck45 (200 HB)

Cutting speed: Vc (sfm)	656
Feed per tooth: fn (in/rev)	0.012
Depth of cut: ap (in)	0.118
Operation	External, axial and face turning
Coolant	Emulsion



Workpiece material: Low-alloy steel, 40Mn4 (255 HB)

Cutting speed: Vc (sfm)	820
Feed per tooth: fn (in/rev)	0.010
Depth of cut: ap (in)	0.098
Operation	External turning
Coolant	Emulsion



HEADQUARTERS

PALBIT, S.A.

P.O.Box 4 - Palhal

3854-908 - Branca ALB - Portugal

palbit@palbit.pt

www.palbit.pt

Branch office:

PALBIT México

Emerson 150, Int.803-804, Colonia Chapultepec

Morales Delagación Miguel Hidalgo

C.P. 11570 México DF

T (+52) 5555454543 | F (+52) 5552509190

info@palbit.com.mx | www.palbit.com.mx

Branch office:

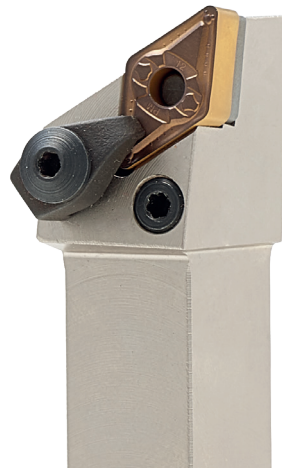
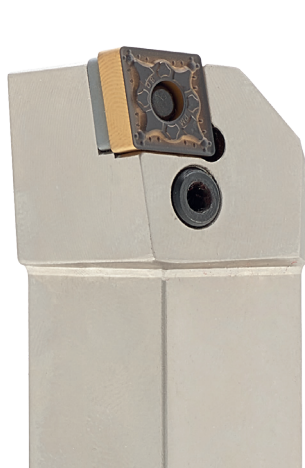
Palbit Brasil

Av. João XXIII, nº20, SI 41 - Vila Gilda

Stº André, SP, CEP 09190-500 SP Brasil

T (+55) 1125343648 | F (+55) 1125343648

palbit@palbit.com.br | www.palbit.com.br



A small step for Palbit, a big step for productivity