

# PCD & PCBN New Grades

The best solutions for machining Non-ferrous and Hardened materials

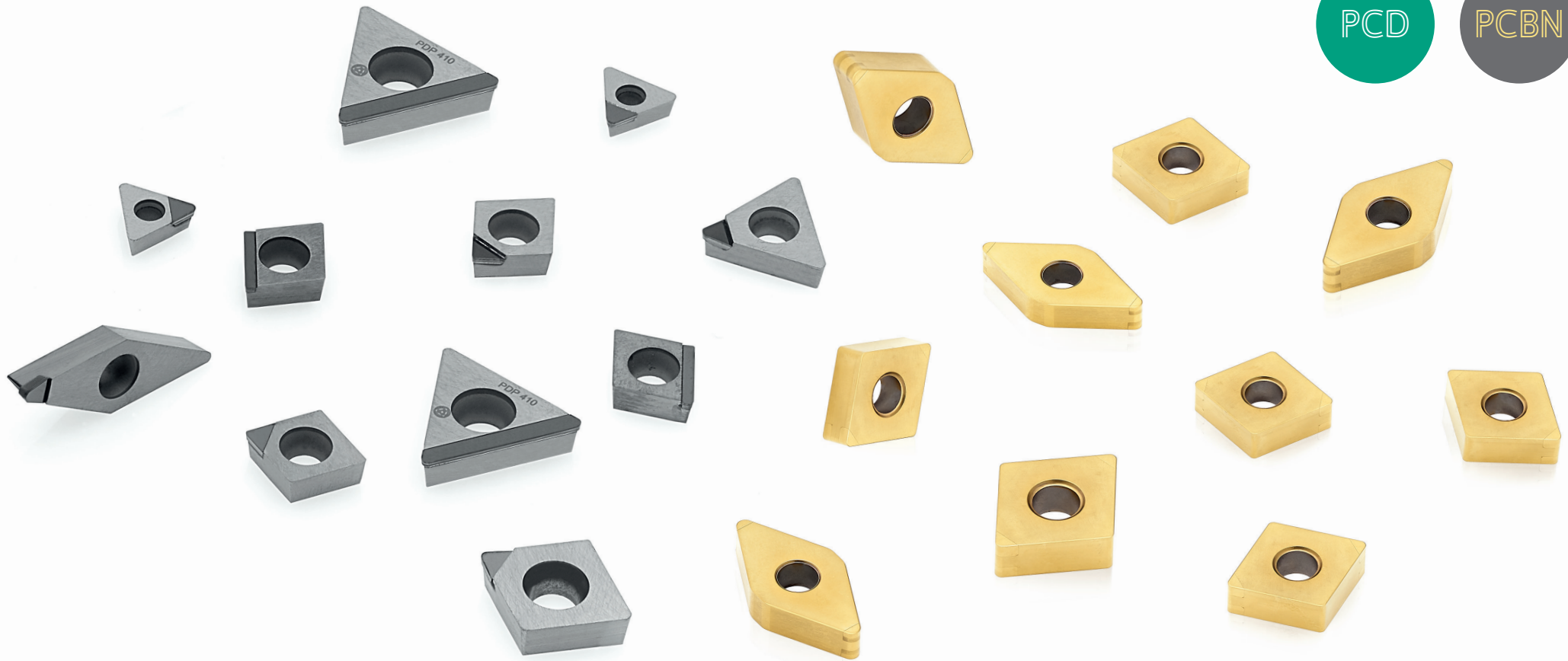


PCD & PCBN

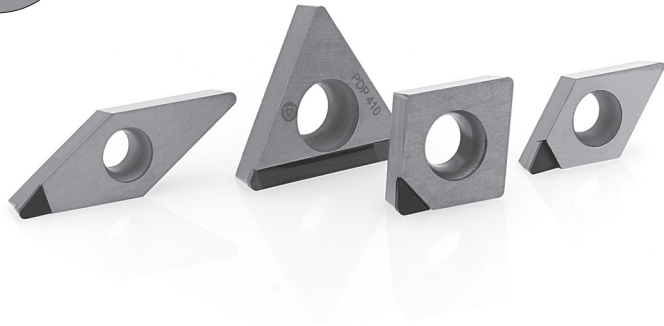
NEW

PCD

PCBN

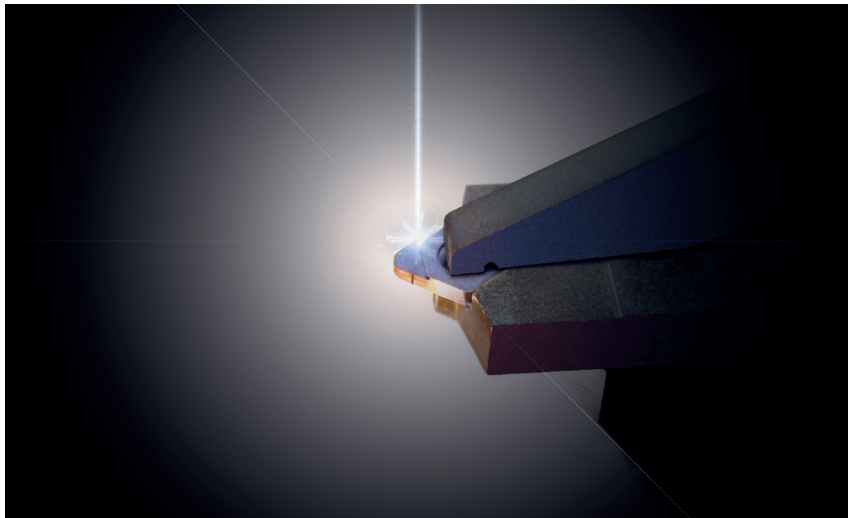


Higher performance achieved by laser machining



## LASER MACHINING TECHNOLOGY

- **High cutting edge quality**
- **Customized chip-breaker according to our customers' needs**



**PDP403**  
 >14% silicon  
 aluminium  
 alloy

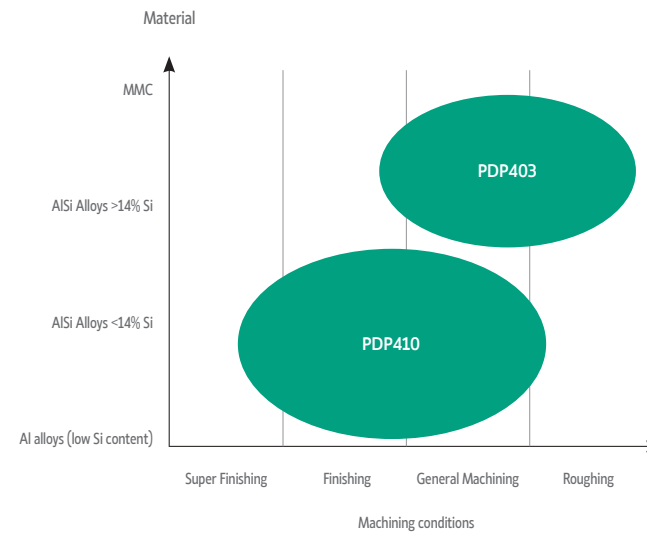
**Machining of Al/Si alloys  
 with high Si content  
 ( Si ≥ 12% )**

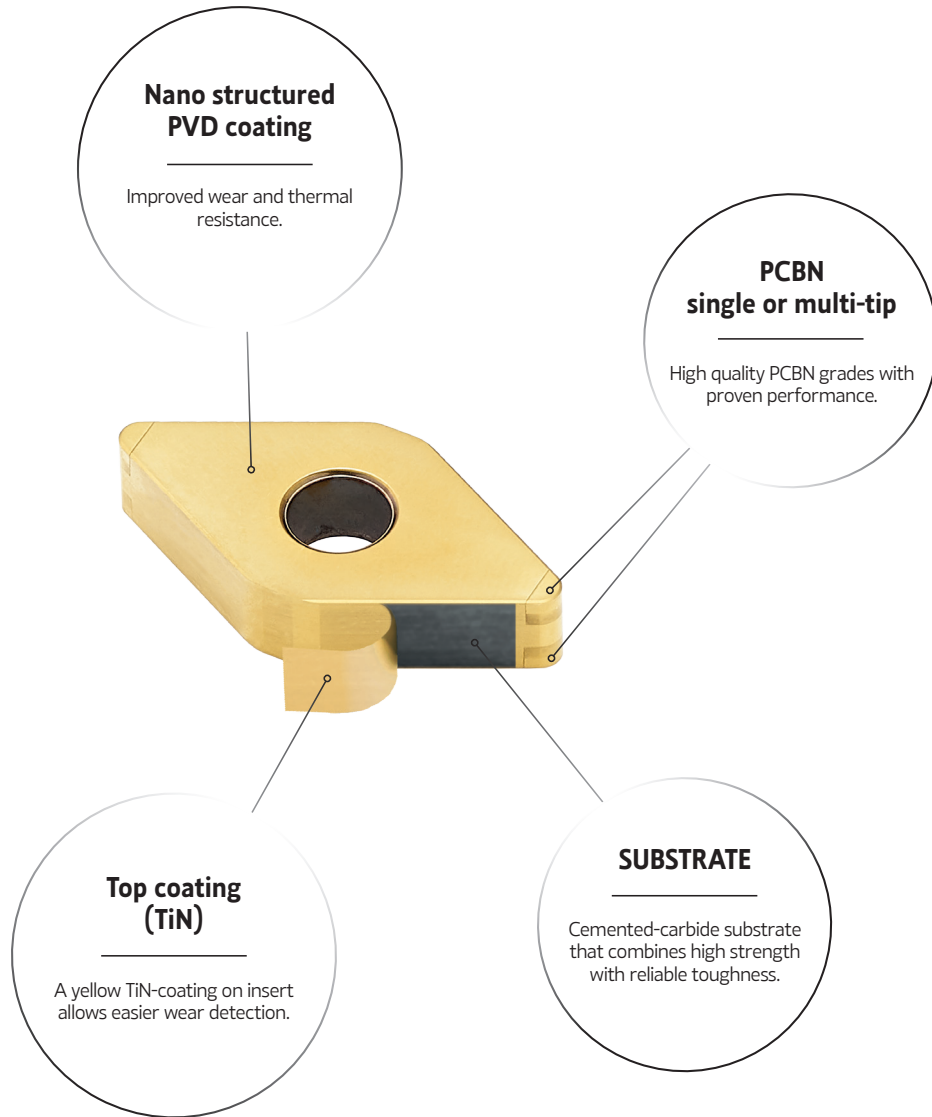
Excellent abrasion resistance  
 and good thermal stability.

**PDP410**  
 <14% silicon  
 aluminium  
 alloy

**Used in 90% of all  
 applications in  
 non-ferrous materials.  
 Ideal for aluminium alloys  
 ( Si ≤ 12% ), graphite and  
 graphite composites**

Extreme edge  
 sharpness/retention  
 achieving a  
 fine surface finishing.





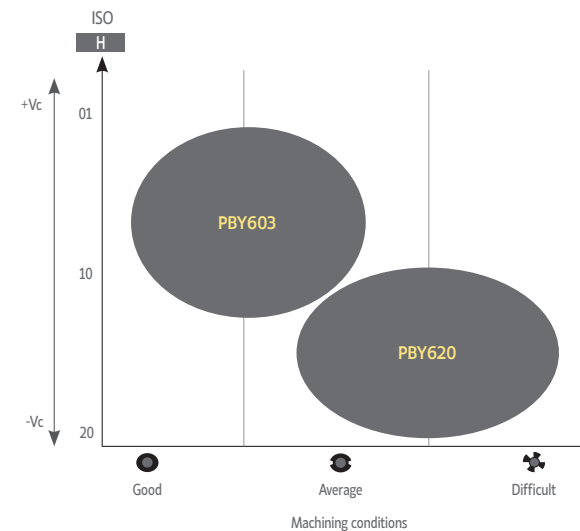
**Machining of hardened materials in high continuous cut up to 180m/min cutting speed.**

Can be used on high resistance alloys.  
(New PVD coating for PCBN inserts with improved wear resistance.)



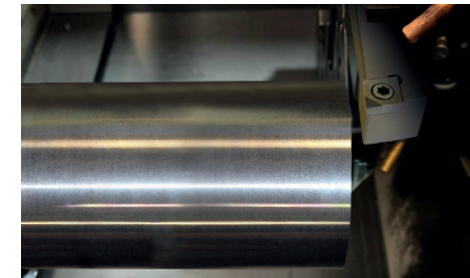
**Machining of hardened materials in light to heavy interrupted cuts.**

Enhanced crater and flank wear resistance with an excellent balance of toughness.





<p><b>Toolholder</b> SCAC L 1616 H09</p> <p><b>Insert</b> CCGT 09T308 Z1 (ISO) CCGT 32.25 Z1 (ANSI)</p> <p><b>Grade</b> PDP410</p> <p><b>87%</b> tool life improvement</p> <p><b>Machining pieces</b> 316 (pieces)</p> <p><b>palbit</b> TOOLING SOLUTIONS EXPERTS</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><b>Machining pieces</b> 169 (pieces)</p> <p><b>COMPETITOR</b></p>
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Workpiece material: Aw2007-T4 (95HBS)

Cutting speed: Vc	800 m/min	2 624 sfm
Feed per rev: fn	0,15 rev/r	0.15 rev/r
Depth of cut: ap	0,35 mm	0.014 in
Operation	External turning	
Coolant	Emulsion	



<p><b>Toolholder</b> DCLN L 2525 M12</p> <p><b>Insert</b> CNGA 120408-S2515 Z4 (ISO) CNGA 432-S2513 Z4 (ANSI)</p> <p><b>Grade</b> PBY603</p> <p><b>54%</b> tool life improvement</p> <p><b>Machining pieces</b> 43 (pieces)</p> <p><b>palbit</b> TOOLING SOLUTIONS EXPERTS</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><b>Machining pieces</b> 28 (pieces)</p> <p><b>COMPETITOR</b></p>
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Workpiece material: 34CrNiMo4 (60HRC)

Cutting speed: Vc	100 m/min	328 sfm
Feed per rev: fn	0,12 rev/r	0.12 rev/r
Depth of cut: ap	0,2 mm	0.008 in
Operation	External turning	
Coolant	Dry	