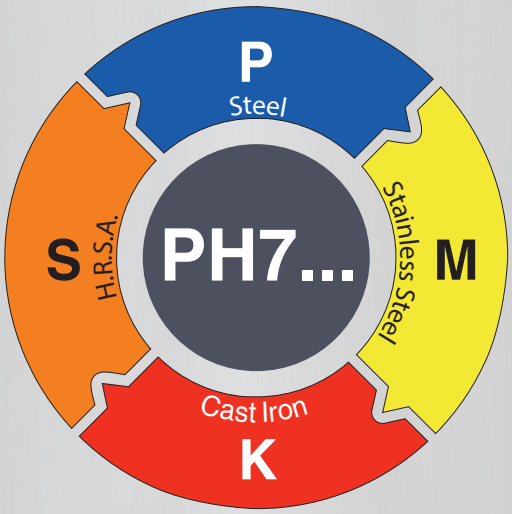
palbit®
CUTTING TOOLS SOLUTIONS

New PalTech Grades

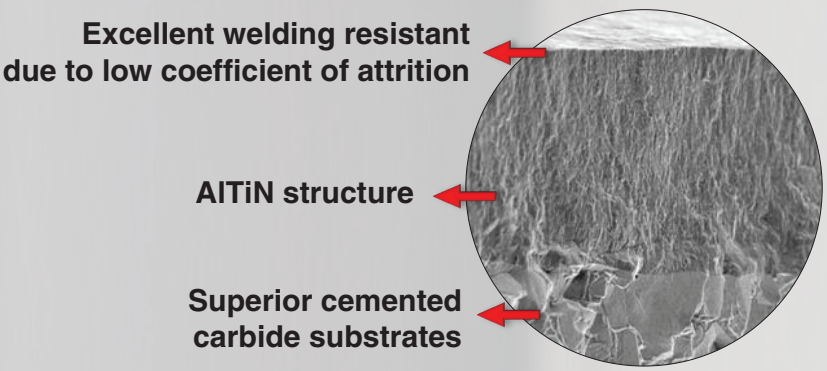
PH7... series

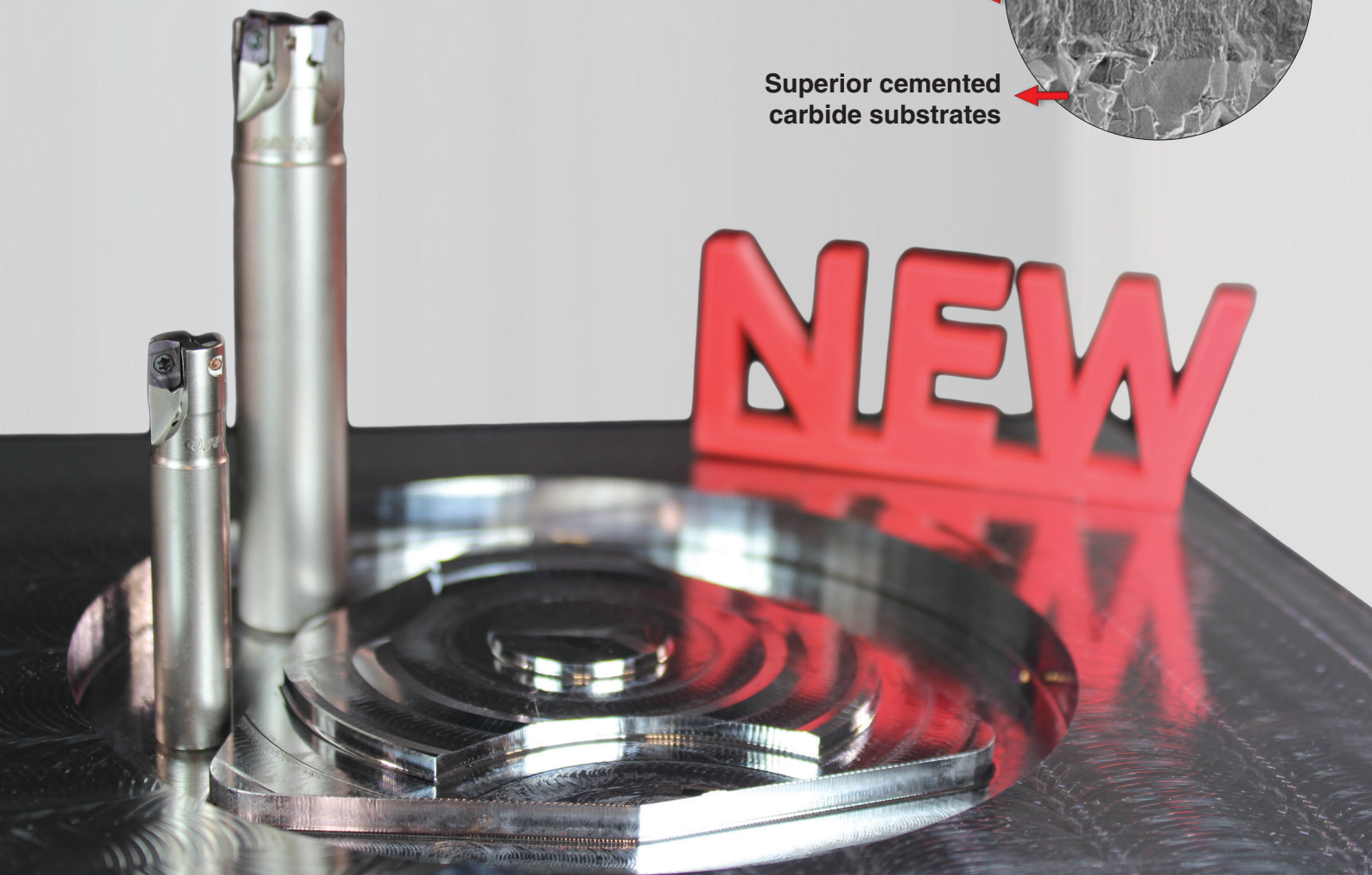
New PVD coated grades for efficient milling of steels, stainless steels and high resistant temperature alloys.

- **Longer tool life - up to 30%, more than PH6...**
- **Higher cutting speeds**
- **Wide application range**



Superior coating layer **AlTiN** with high hardness and oxidation resistance at high temperature combined with special designed substrates ensures high wear resistance and longer tool life.





New PH7... series

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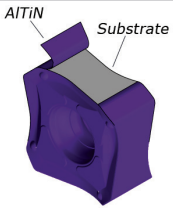
New PVD coated grades for efficient milling of steels, stainless steels and high resistant temp-alloys.

Grades Description

PH7910

New

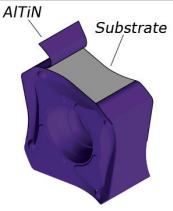


(P05-P10)
(K05-K10)

A highly wear-resistant AlTiN-PVD coated grade primarily for light machining and semi-finishing in steels and hardened steels.

PH7920

New

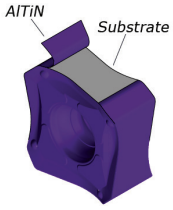


(P10-P35) (K10-K30)
(M10-M25) (S10-S30)

Advanced AlTiN-PVD coated carbide over a tough wear resistance submicro susbtrate for general puporse machining of steels and cast irons at high cutting speeds.

PH7930

New

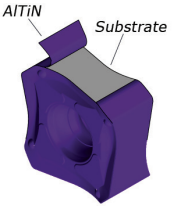


(P20-P40) (K20-K40)
(M20-M30) (S25-S35)

AlTiN-PVD coated carbide developed to provide better performance in general machining of stainless-steels and high-temp alloys. Resistant to breakage and offer improved wear resistance and increased strength.

PH7740

New

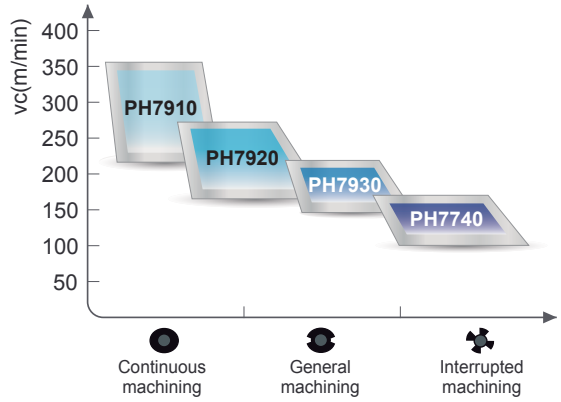


(P30-P50) (K30-K40)
(M30-M50) (S30-S40)

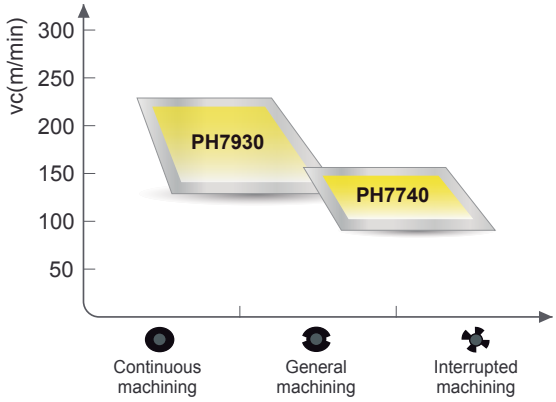
Very tough, general-purpose AlTin-PVD coated carbide grade for medium to heavy milling applications and on instable conditions. Recommended for high-temp alloys, all steels and cast irons. Can be used either wet or dry.

Milling Grades Line Up

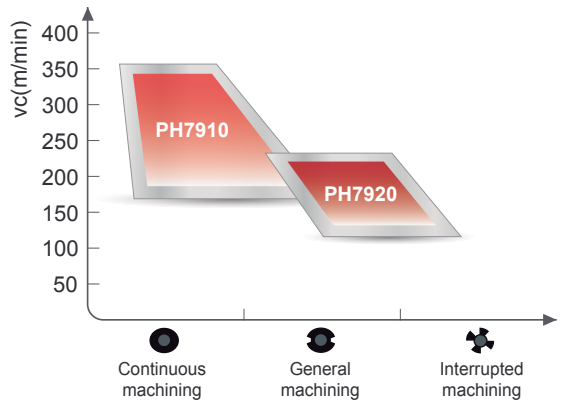
P Steel



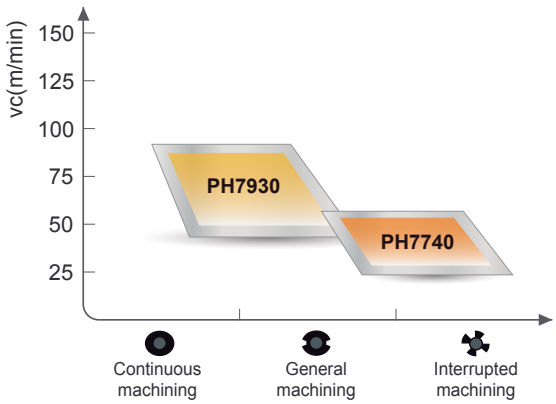
M Stainless steel



K Cast Iron (Alternative choice)



S Heat-resistant alloy



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Case Studies

P Mould Steel (40CrMnNiMo8-6-4)

- **Tool**
  ØDc = 80 | 6 teeth's
  Cutter: 080A06690-06-05-027050
  Insert: SOEW 13M510 S PH7920
- **Cutting conditions**
  Vc = 150 m/min (n = 597 min-1)
  Fz = 1,7 mm/t (Vf = 6100mm/min)
  Ap x Ae = 1,0 x 56 mm
  Dry
  Tool Overhang: L = 350 mm

- **Tool life result (min)**

P Mould Steel (40CrMnNiMo8-6-4)

- **Tool**
  ØDc = 63 | 6 teeth's
  Cutter: 063A90945-06-06-022040
  Insert: SNHX 1206 ANEN-LP PH7920
- **Cutting conditions**
  Vc = 180 m/min (n = 910 min-1)
  Fz = 0,25 mm/t (Vf = 1365mm/min)
  Ap x Ae = 2,0 x 47 mm
  Dry

- **Tool life result (min)**

M Stainless Steel (SUS 316-L)

- **Tool**
  ØDc = 12 | 2 teeth's
  Cutter: 012E20090-02-04-012080
  Insert: XPET 060210 ZER-HF PH7930
- **Cutting conditions**
  Vc = 240 m/min (n = 6366 min-1)
  Fz = 0,5 mm/t (Vf = 6366mm/min)
  Ap x Ae = 0,3 x 8,4 mm
  Dry

- **Tool life result (min)**

M Stainless Steel (SUS 316-L)

- **Tool**
  ØDc = 63 | 6 teeth's
  Cutter: 063A90945-06-06-022040
  Insert: SNHX 1206 ANEN-LP PH7930
- **Cutting conditions**
  Vc = 190 m/min (n = 960 min-1)
  Fz = 0,25 mm/t (Vf = 1440mm/min)
  Ap x Ae = 3,0 x 47 mm
  Dry

- **Tool life result (min)**

S Heat-resistant alloy (Ti 5Al-5Mo-5V-3Cr)

- **Tool**
  ØDc = 12 | 2 teeth's
  Cutter: 032W06410-04-02-032150
  Insert: SOET 080315-MS PH7740
- **Cutting conditions**
  Vc = 35 m/min (n = 348 min-1)
  Fz = 0,8 mm/t (Vf = 1113mm/min)
  Ap x Ae = 0,5 x 22,4 mm
  Wet

- **Tool life result (min)**