

Super Coating Series SNC805 / SPC810

Purpose

 To promote premium Turning grade for machining of HRSA including Inconel, Hastelloy, Titanium alloy, Precipitation hardened Stainless steel, and etc.

Detailed Information

1 Subject item

SNC805 (CVD)	SPC810 (PVD)

② Features

SNC805: Ultra-fine substrate and CVD coatings are applied to enhance the performance at the high speed machining and wear resistance

→ Higher speed machining can be applied compared to UNC805 while it has the equal toughness

SPC810: Ultra-fine substrate and PVD coatings are applied to enhance the performance at the high speed machining and chipping resistance

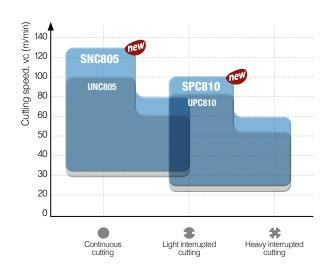
→ Higher speed machining can be applied compared to UPC810 while it has the equal toughness

The price is 20% lower than the existing UN(P)C grade.

UNC805 will be changed to SNC805 when UNC805 stock is run out.
UNC 805 will be changed ● or ○ in stock.

3 Application range

Improve productivity via high speed processing of Inconel, Hastelloy, Titanium alloy, Precipitation hardening Stainless steel, and etc.



Effective Date

From April 2024



Performance evaluation

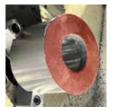
Precipitation hardening Stainless steel (KS: STS630, ISO: 17-4PH, AISI: AM350)

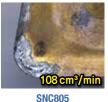
Workpiece Stainless steel Turning (Customer test) **Cutting** $vc = 40 \text{ m/min} \cdot \text{fn} = 0,12 \text{ mm/rev}$ **condition** $ap = 2.0 - 3.0 \text{ mm} \cdot \text{wet}$

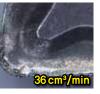
condition ap = $2.0 - 3.0 \text{ mm} \cdot \text{wet}$ **Cutting time** After 2-6 pass of machining

Tool Insert WNMG080412-VP4 (SNC805)

Holder PWLNR3232-M12







Competitor

Material removal rate Q = 18,0 cm³/min

Tianium alloy (KS: Ti - 6AI - 4V, ISO: 5832-11, AISI: Ti - 6AI - 4V)

Workpiece Tianium alloy Facing Turning (Customer test)

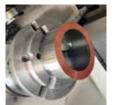
Cutting $vc = 65 \text{ m/min} \cdot fn = 0,20 \text{ mm/rev}$

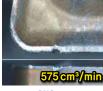
 $\textbf{condition} \qquad ap = 1,8 \text{ mm} \cdot wet$

Cutting time After 25 min of machining

Tool Insert CNMG120408-VP4 (SNC805)

Holder PCLNR3232-M12







Competitor

• Material removal rate Q = 23,0 cm³/min

Inconel (KS: IN718, ISO: 9723, AISI: Inconel718)

Workpiece Inconel External/Facing Turning (Customer test)

Cutting $vc = 45 \text{ m/min} \cdot fn = 0,20 \text{ mm/rev}$

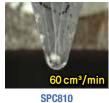
condition ap = $0.5 \text{ mm} \cdot \text{wet}$

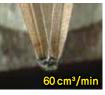
Cutting time After 12 min of machining

Tool Insert VBGT160408-MU (SPC810)

Holder SVJNR2525-M12N







Competitor

Material removal rate Q = 5,0 cm³/min

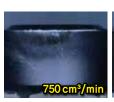
Inconel (KS: IN718, ISO: 9723, AISI: Inconel718)

Workpiece Inconel External/Facing Turning (Customer test)

Cutting $vc = 50 \text{ m/min} \cdot fn = 0,25 \text{ mm/rev}$

condition ap = 0.5- 3.0 mm · wet **Cutting time** After 20 min of machining

Tool Insert RCMT1204M0-RSA (SPC810)
Holder C6-SRSCR-45065-12H





SPC810

Competitor

• Material removal rate Q = 37,5 cm³/min

For any further information, please contact our customer support team!

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