-SC Coating- Technical Data

*Two **PATENTED** processes allow extra hard, lubricious, pore-free, vacuum deposited coating at tempuratures far below all known coating temperatures!*

Coating Process	Temperature
CVD	1200* - 1500*F
PVD	About 700*F
SC - PVD	Below 200*F

*Because of this **ULTRA-LOW** coating temperature, there is no change of material hardness or toughnes and sharp edges can be coated easily.*
*With our patented **Nano-Structure**, we can deposit multiple layers of Boron and Boron Carbide hardness, or Molybdenum Disulfide for lubricity, as well as several other elements for additional properties. All these layers add up to no more than **3 microns thick!** The revolutionary technology behind these patents is why we see superior abrasion resistance and high lubricity.*

Type of Coating	Nano-Structured, Multi-layered, very low temp PVD
Thickness of Coating	1 -3 Microns
Hardness of Coating	3000 - 4500 Knoops
Coefficient fo Sliding Friction	Less than 0.1

*At minimal cost, you can significantly **INCREASE** your customers **TOOL LIFE** and significantly **DECREASE** their tooling **COSTS!***
Yes, we can even put the SC Coating over a Coated tool!

WIN BACK THE BUSINESS YOU LOST DUE TO A COMPETITOR'S LOWER PRICE OR SUPERIOR PERFORMANCE!

Show your customer you're on the cutting edge of innovation / technology by introducing them to the SC Coating!

ROMAY CORP
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-SC Coating- Test Results

Operation:	Milling - Roughing	
Material:	Nodular Cast Iron	
Insert:	3212796-T3-D2 Carbide (A 'Gold-Coated Insert)	3212796-T3-D2 Carbide W/ SC Coating
Parts Machined:	2,100pcs	4,200pcs
Results:	Romay's SC coating increased the tool life of this carbide grade by **100%** in rough milling of Noduolar Iron!	

*More Results

Operation:	Drilling and Boring Pistons	
Material:	4140 Steel & 3500 Cast Iron	
Insert:	P27477-1 Walter WAP-1 (Gold-Coated Insert)	P27477-1 Walter WAP-1 W/ SC Coating
Tool Life 4140 Steel:	20pcs	85pcs
Tool Life 3500 Cast:	20pcs	78pcs
Results:	Romay's SC coating increased the tool life of this carbide grade by **400%** in both Steel & Iron!	

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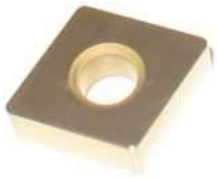

wear-resistant

- Ceramic Grades -

CC-10 Our **White** alumina ceramic grade mainly applicable for roughing and finishing cast iron and steel in higher surface speed operations.

CC-20 Our standard **Black** ceramic grade is a composite with Alumina Matrix containing Titanium Carbide with excellent wear, crater and strength characteristics.

CC-22 Our **Dark Grey** Ceramic that is great for machining ductile iron.

CC-30 Our **Black** ceramic grade for cutting high hardness metals with Rc 55 and above, chilled cast iron and powdered metals. This insert has replaced some grinding operations in hardened steel (Rc 60-62). Available with hole for pinlock.

CC-33 Our best **Black** ceramic suitable for ALL hardness of irons or steel. It is tougher and more wear-resistant.

- Silicon Nitride Grades -

CC-510 A high-speed, low-cost silicon nitride grade with excellent wear resistance.

CC-513 Our **Toughest** silicon nitride grade. Great for high-speed iron cutting with very heavy interruptions in milling, turning, boring facing.

CC-514 Our medium silicon nitride grade. Great for general purpose machining of irons.

CC-515 Our silicon nitride grade for all irons, especially ductile and nodular irons. Extremely hard, wear-resistant silicon nitride for roughing and finishing at elevated speeds. Works in continuous and interrupted cuts.

CC-516 Our **Best** overall grade with very good wear-resistance & excellent shock resistance. Excellent for hard materials & interrupted cuts at high speeds.

CC-5477 Our silicon nitride grade for cutting **Exotic** aerospace metals such as Inconel, Waspaloy, Hastelloy, Renee, etc. For roughing and finishing. A cost-effective alternative to the “whiskered” ceramic.

*SC Coating can be applied to all grades above!