

Next-Generation Surface Modification Treatment

Three Main Features

Excellent Lubrication

Due to the synergy effects of the hardened coating slippage properties and machining oil retentive capabilities, outstanding lubrication is achieved.

Long Life

By using a strong base material, separation resistance is improved.

Minimal Regrinding Volume

When re-producing punches, the degree of damage to the coating is minimized, which means that the amount of regrinding is very small. This extends the total life of the die.



SX Types and Features

Hardened Coating		TiN Gold Seizing resistance Heat resistance		Coating formation	TiCN Silver High hardness Wear resistance	
				Color		
				Features		
Die		Base Material Strengthening Treatment				
SX-T			SX-C			

SX Serac Use Examples



●Drawing and Ironing

Machined part	Automobile suspension component
Die material	DC53 62HRC
Machined material	SPCC 1.2t

Die

No coating: several thousand shots

CVD (three-layer) coating: 270,000 shots ➡ 820,000 shots (wear)



●Blanking

Machined part	Automobile exhaust component
Die material	Powdered high-speed tool steel 63HRC
Machined material	SUS304 8.0t

Punch (ø9)

VD (TiC): 4,000 shots

TD: 3,000 shots ➡ 30,000 shots (breakage)