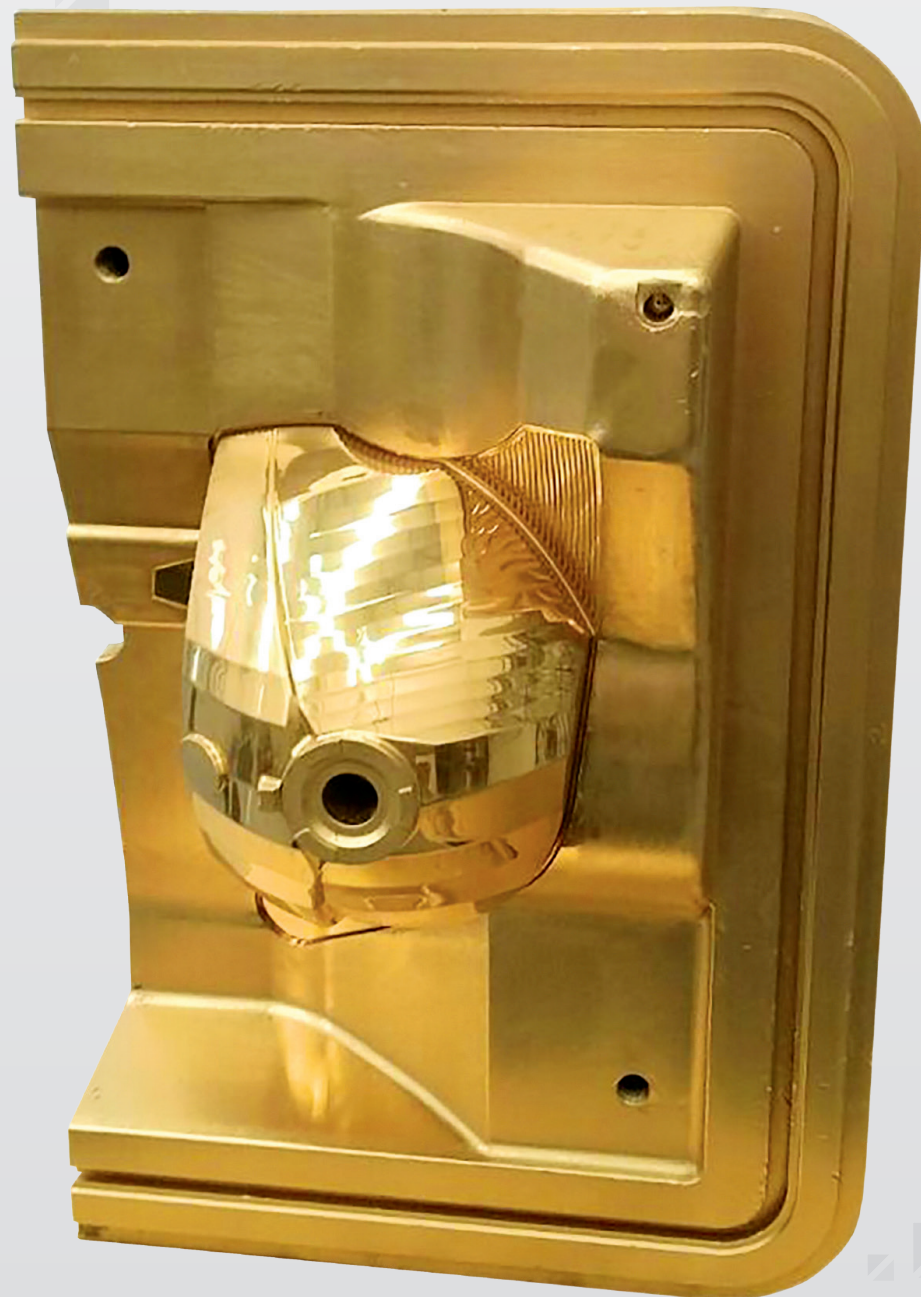


PVD Coatings for Plastic Injection Molds



PVD Coatings for Plastic Injection Molds

Our PVD coatings were specially developed to reduce friction, increase surface hardness, and reduce wear on all plastic injection molds, dies, inserts and extractors. Besides increased tool life, the coatings allow longer maintenance cycles and faster tool changes.

With over 30 years of experience of coating molds and dies, our R&D center has been developing high performance coatings dedicated to Plastic Injection.

SPECIFICATIONS AND APPLICATIONS OF PRIMUS COATING FOR PLASTIC INJECTION MOLDS AND DIES

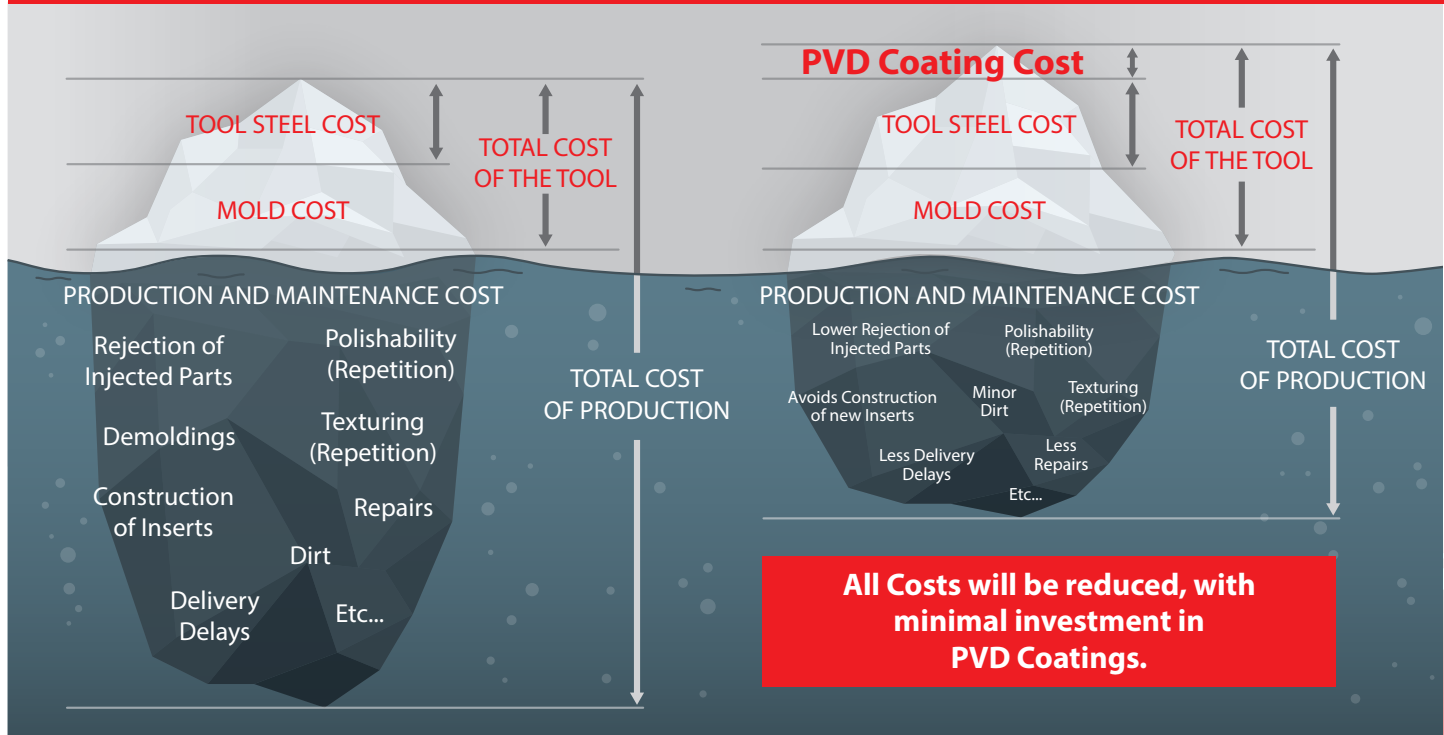
Coatings		TiN*	HP Form**	HP Dura**	HP Cera*	
		Features				
CHARACTERISTICS	Composition	TiN	TiAlN Based	AlCr Based	Cr Based	
	Hardness (GPa)	30 GPa	37 GPa	38 GPa	30 GPa	
	Coefficient of friction (dry against steel)	0.25	0.4	0.33	0.1	
	Coating thickness (µm)	3.5 ~ 4.5 µm	4 ~ 6 µm	4 ~ 6 µm	2.5 ~ 3.5 µm	
	Maximum oxidation temperature (°C)	500°C	800°C	1,100°C	550°C	
	Coating deposition temperature (°C)	200° C 450° C	450° C	450° C	200° C 450° C	
	Coating Color	Gold	Violet	Dark Grey	Dark Grey	
	Coating structure	Monolayer	Multilayer	Multilayer	Multilayer	
	RECOMMENDED APPLICATIONS	Thermoplastics	PE, PP, PB	⊙	-	○
PS, SB, SAN, ABS, ASA			⊙	○	○	⊙
PVC			-	-	⊙	⊙
PTFE, SPTFE, PVDF			⊙	-	⊙	○
POM			○	⊙	⊙	-
PA			○	⊙	○	⊙
PC, PBT (B), PET (P)			⊙	-	-	⊙
PPE, PEEK, PAEK / PPS, PSU, PES			○	⊙	-	-
PI			○	⊙	○	⊙
CA, CP, CAP			-	⊙	-	⊙
PMMA			-	⊙	-	⊙
TPU			-	⊙	○	⊙
Thermosets			PF	⊙	-	○
		EP	○	-	⊙	⊙
		UP	○	-	⊙	○
		MF, UF, MP	○	-	⊙	⊙
Elastomers		PUR	⊙	-	○	-
		NBR, EPDM, SI	⊙	-	○	-
		Multipolymer TPE, FPM	⊙	-	○	-

* Available in Low Temperature.

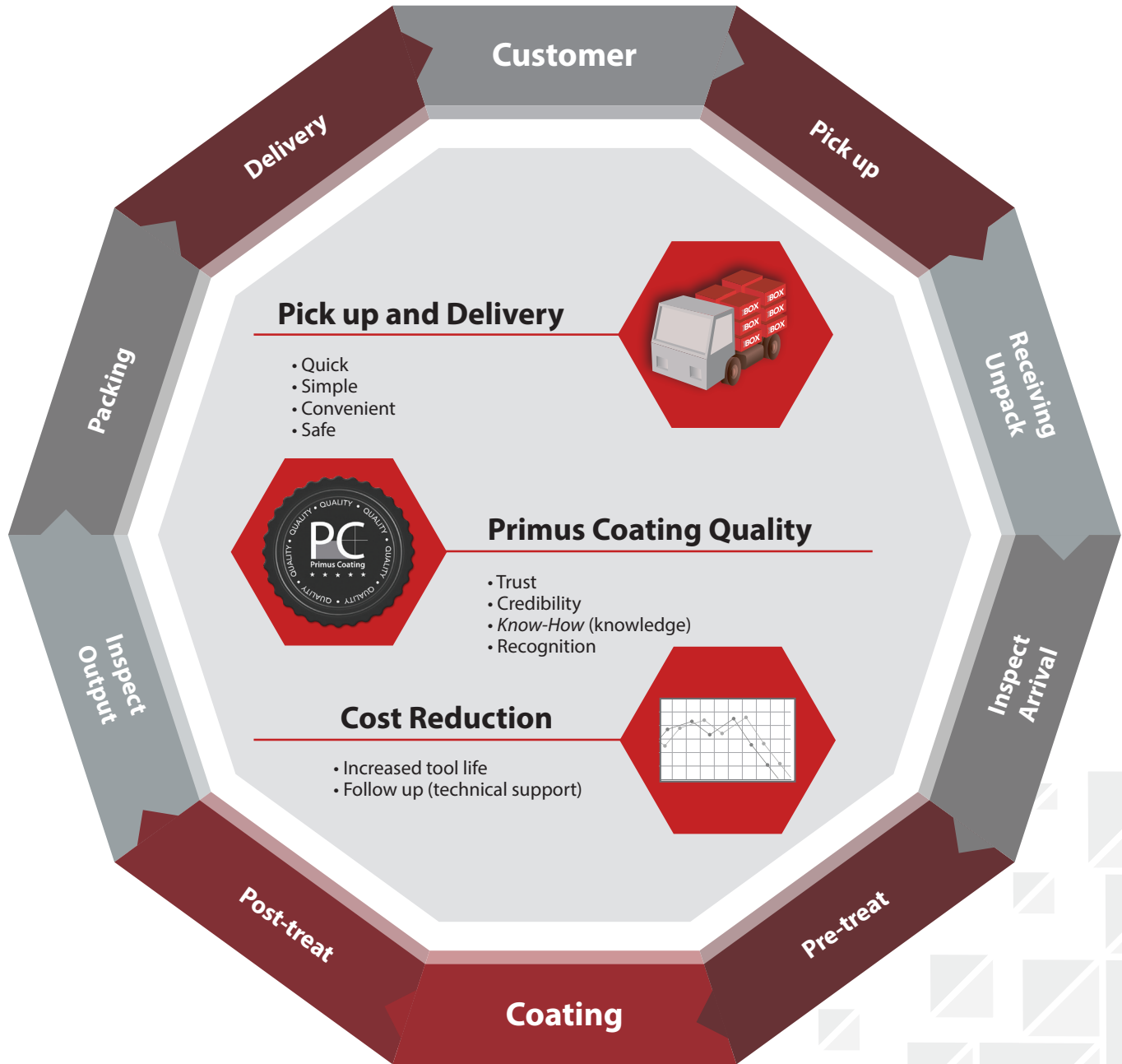
** Duplex coating available (Nitride + Coating), for more information, please contact our sales department. The depth of nitriding will depend on the material of the mold.

⊙ Excellent ○ Good

Hidden cost of Plastic Injection process (iceberg)



■ PRIMUS COATING QUALITY ASSURANCE



PrimusCoating

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We listen
 understand
 deliver

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