

Table - Deposition Techniques

Coating Process (1)*	Substrate	Resultant Coating	
A. Chemical Vapour Deposition (CVD)	"Superalloys"	Aluminides for internal passages	
	Ceramics and Low-expansion glasses (14)	Silicides Carbides Dielectric layers (15)	
	Carbon-carbon, Ceramic and Metal "matrix"composites"	Silicides Carbides Refractory metals Mixtures thereof (4) Dielectric layers (15) Aluminides Alloyed aluminides (2)	
	Cemented tungsten carbide (16), Silicon carbide	Carbides Tungsten Mixtures thereof (4) Dielectric layers (15)	
	Molybdenum and Molybdenum alloys Beryllium and Beryllium alloys Sensor window materials (9)	Dielectric layers (15) Dielectric layers (15) Dielectric layers (15)	
B. Thermal-Evaporation Physical Vapour Deposition (TE-PVD)	1. Physical Vapour Deposition (PVD): Electron-Beam (EB-PVD)	"Superalloys"	Alloyed silicides Alloyed aluminides (2) MCrAlX (5) Modified zirconia (12) Silicides Aluminides Mixtures thereof (4)
		Ceramics and Low-expansion glasses (14)	Dielectric layers (15)
		Corrosion resistant steel (7)	MCrAlX (5) Modified zirconia (12) Mixtures thereof (4)
		Carbon-carbon, Ceramic and Metal "matrix"composites"	Silicides Carbides Refractory metals Mixtures thereof (4) Dielectric layers (15)
		Cemented tungsten carbide (16), Silicon carbide	Carbides Tungsten Mixtures thereof (4) Dielectric layers (15)
		Molybdenum and Molybdenum alloys Beryllium and Beryllium alloys Sensor window materials (9) Titanium alloys (13)	Dielectric layers (15) Dielectric layers (15) Borides Dielectric layers (15) Borides Nitrides
		2. Ion assisted resistive heating Physical Vapour Deposition (Ion Plating)	Ceramics and Low-expansion glasses (14)
	Carbon-carbon, Ceramic and Metal "matrix"composites"		Dielectric layers (15)
	Cemented tungsten carbide (16), Silicon carbide		Dielectric layers (15)
	Molybdenum and Molybdenum alloys		Dielectric layers (15)
	Beryllium and Beryllium alloys		Dielectric layers (15)
	Sensor window materials (9)		Dielectric layers (15)

* The numbers in parenthesis refer to the Notes following this Table