

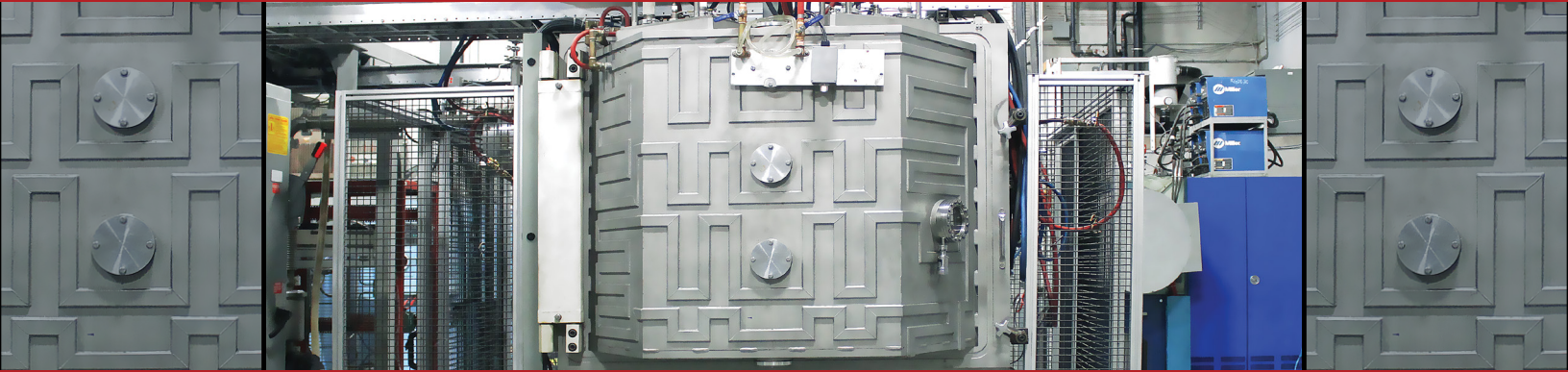
Modular Duplex Universal PVD Coating Centre SPUN 4

High capacity PVD coating systems allows to coat up to 3,000 kg in a single cycle. Table design allows maximum flexibility in weight and shape of loaded parts which is extremely important for coating service companies. Doors and sub doors have a provision to use cathodic arc sources of any shapes and any shape of sputtering sources including cylindrical rotatable sputtering sources.

Plasma managing system of PVD coating machine allows coating deposition in highly concentrated and ionized conditions which leads to deposition of dense coatings having low internal stresses. Duplex modular system allows to deposit different coatings in the same machine and allows maximum loading flexibility.

Description	Parameters
Chamber Volume	4.6 m ³
Chamber Dimensions	3.2 m L x 1.5 m H x 1.7 m D
Effective Coating Area	2 X 1.6 M
Number of Doors / Sub Doors	2/8
Coating Tables	2 Rotating tables with 6 Planetary a sub tables with adjustable angles (0-25 degree)
Table Diameter	1,000 mm (2 tables)
Maximum Weight of the Load per Table / Sub Table	2,500/350 lb
Maximum Load per Machine	5,000 lb
Maximum Part Weight	5,000 lb
Maximum Part Height	700 mm
Chamber / Door Material	Stainless Steel
Maximum Vacuum Level	10-5 torr
Vacuum Recovery Time	60 min from atmosphere to working vacuum degree

Description	Parameters
Heaters	Infrared heaters 60 KW evenly installed inside the chamber around each table
Process Temperature	150-650°C
Shields	2 sets
Gas Distribution System	6 flow meters
Cooling System	SS Water Channels
Vacuum System	Mechanical Pump, Booster Pump, 2 Turbo Pump (3,300 l/c)
Cathodic Arc Sources 180 mm diameter or circular, linear or cylindrical sputtering – Flexible configuration	8-12
Rapid Plasma Heating System	1
Processes	Direct PVD, Ion Nitriding +PVD, PECVD, DLC, Hybrid Processes, Ion Stimulated Diffusion
Maximum Power	250 KVA



Universal PVD Coating Centre SPUN 2

High capacity PVD coating systems allows to coat up to 1,200 kg in a single cycle. Table design allows maximum flexibility in weight and shape of loaded parts which is extremely important for coating service companies. Doors and sub doors have a provision to use cathodic arc sources

of any shapes and any shape of sputtering sources including cylindrical rotatable sputtering sources. Plasma managing system of PVD coating machine allows coating deposition in highly concentrated and ionized conditions which leads to deposition of dense coatings having low internal stresses.

Description	Parameters
Chamber Volume	2.3 m ³
Chamber Dimensions	1.6 m L x 1.5 m H x 1.7 m D
Effective Coating Area	Diameter 1 m x 1.1 m
Number of Doors / Sub Doors	4/4
Coating Tables	1 Rotating table with 6 Planetary tilted sub tables with adjustable angles (0-25 degree)
Table Diameter	1 m
Maximum Weight of the Load per Table / Sub Table	5,000/350 lb
Maximum Part Weight	5,000 lb
Maximum Part Height	1.1 m
Chamber / Door Material	Stainless Steel
Maximum Vacuum Level	10-5 torr
Vacuum Recovery Time	45 min from atmosphere to working vacuum degree

Description	Parameters
Heaters	Infrared heaters 30 KW evenly installed inside the chamber around each table
Process Temperature	150-650°C
Shields	2 sets
Gas Distribution System	6 flow meters
Cooling System	SS Water Channels
Vacuum System	Mechanical Pump, Booster Pump, Turbo Pump (3,300 l/c)
Cathodic Arc Sources 180 mm diameter or circular, linear or cylindrical sputtering system - Flexible configuration	8
Rapid Plasma Heating System	1
Processes	Direct PVD, Ion Nitriding +PVD, PECVD, DLC, Hybrid Processes, Ion Stimulated Diffusion
Maximum Power	150 KVA