Naxau

DLC Coating Equipments

DLC Coating Equipment for Industrial Parts

P

P-Series Advantage

- Various combinations of deposition technologies
- H450-2100mm; flexible design of furnace capacity
- One-piece nitriding technology; hardened substrate support
- 3-fold reinforced design: anti-substrate fatigue + high load + low wear volume
- Turnkey project

Composite Deposition Process

- Ion Source Composite PeCVD
- a-C:H:X (elemental doping)
- Integrated nitriding DLC (optional)
- HIPIMS power supply (optional)
- WC/C
- CrN

The world's leading innovative nanomaterials surface technology service platform

Founded in 2002, Naxau New Materials is a world-class PVD technology provider. We have 1 equipment manufacturing plant and 16 coating centres in China. Our coating products are widely used in new energy, semiconductor, automotive, aerospace, CNC Cutters, medical, 3C, rail transit and many other industries.

Naxau Coating, Partner in the Industry
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P Series DLC Vacuum Coating Equipment

The configuration of SET plasma enhancement technology facilitates the dissociation of carbon source gases such as C2H2, CH4, etc., and the preparation of low friction coefficient, higher hardness, low a-C:H, a-C:Si DLC coatings and WCC coatings.

Features

- 4 sets of magnetron sputtering cathodes for the preparation of nitride and carbide films.
- Non-equilibrium closed magnetic field, high density, low energy bombardment ions for deposition coating, good coating density, low columnar crystal structure, low internal stress.
- Wide slit ion source assisted PECVD technology, suitable for rapid coating of complex parts.
- Vertical loading, more convenient product loading.

Configuration

- High Performance UBM Sputtering Sources
- Filament argon ion etching source
- Turbomolecular pumps*2

Softwares

- Intelligent systems in Germany (PC or PLC systems)
- Touch screen control system
- Data logging and real-time display of process parameters and flows
- Automatic process control
- Remote diagnostics and maintenance

P1200

Loadings and production

- Maximum coating area:2D680xH1200[mm
- Maximum coating height to obtain specified coating thickness: 1200 mm
- Maximum load:800kg
- Coating time:10-12H
- Coating hardness [hv]:1200-2500 adjustable

P850

Loadings and production

- Load and run-in cycle.
- Maximum coating area:øD680xH850[mm
- Maximum coating height to obtain specified coating thickness:850mm
- Maximum load:500kg
- Coating time:10-12H
  Coating hardness [hv]:1200-2500 adjustable

Carbon Film Coating

Model	Type	Hardness (HV)	Thick-ness (μm)	Max. Tempe-rature (°C)	Friction coefficient	Colour	Appliances
CH	a-C:H	1500-2500	1-5	300	0.1-0.2	Black	Universal solid lubricant coating for petrol engine valve trains, pistons, etc.
CHM	a-C:H:Me	1500-2000	1-5	350	0.1-0.2	Black	Low-stress solid lubrication coating for better corrosion and high temperature resistance.
CHS	a-C:H:Si	1500-2500	1-5	350	0.05-0.2	Black	Excellent corrosion and adhesion resistance, especially for plastic sliding parts in wet environments.
CRH	CrN+a-C:H	1500-2500	2-5	350	0.1-0.2	Black	Solid lubricant coating under high loads for diesel engine parts, etc.
CHW	WC/C	1000-1500	1-4	300	0.1-0.2	Grey	Solid lubricant coatings for use in cryogenic environments, suitable for gears and ball bearings, etc.
CTA	ta-C	5000-6000	0.2-2	500	0.1-0.2	Rainbow	Highly hard, solid lubricant coatings for machining Cutters for non-ferrous metals, synthetic materials, organic materials, etc.
CA	a-C	3000-3500	1-20	400	0.1-0.2	Dark grey	Thick solid lubricant coating for piston rings, trimming of aluminium plates, etc.