

ZY-0805 Hollow Cathode Multi-Arc Coating Machine



Introduction

ZY-0805 hollow cathode multi-arc coating machine integrates hollow cathode technology and multi arc ion plating technology, and equipped with the latest ceramic cathode electron gun and the self-developed small arc source. The machine can be short-distance controlled by button and it also realizes remote control through PLC and computer. ZY-0805 has features of both hollow cathode and arc ion plating, so users can switch on the electron gun during arc source coating process to refine the large particles produced by the multi arc ion plating.

ZY-0805 hollow cathode multi-arc coating machine can be widely used for the surface strengthening of moulds, mechanical parts and other products to extend their service life. And it is especially suitable for teaching and scientific research in colleges, laboratories and research institutes.

Features

- Hollow cathode ion plating has large plasma concentration and high ionization rate, so the deposited film is characterized by strong adhesion, fine microstructure and bright color.
- Compact structure, diverse performance, simple operation, low power consumption.
- With flexible operation, the system can be controlled manually, semi-automatically or fully-automatic to meet the various experimental requirements.

Specification

Vacuum Chamber	φ 800xH500	Effective Coating Space	φ 450xH350
Max Diameter of Work-Piece × Quality	φ 150x8PCS	Sputtering cathode	1HCD+4ARC
Voltage/Hz	380v 50Hz	Actual Power	30KW
Technology	HCD+ARC	Target	4PCS
Ultimate Pressure	5x10 ⁻⁴ Pa	Leak Rate	0.5Pa/h

Characters of Functional Coatings

Coating Material	Coating Color	Microhardness (HV 0.05)	Coefficient of Friction	Thickness (um)	Max service temperature℃	Structure	Features
TiN	Gold	2400	0.40	1-4	500	Monolayer	Excellent hardness and anti-adhesion
CrN	Silver Gray	2000	0.40	1-4	700	Monolayer	Excellent anti-corrosion and anti-adhesion
TiCN	Blue Gray	3000	0.20	1-4	400	Gradient composite membrane	Low friction coefficient and Excellent hardness
TiAlN	Aubergine	3500	0.40	1-4	850	Monolayer composite membrane	Excellent hardness and anti-oxidation
AlTiN	Purple Black	3800	0.45	1-4	900	multilayer composite membrane	Excellent superhardness and anti-oxidation

Sample Pictures

