Cathodic Arc Coating Equipment

Cathodic arc deposition is well known to be one of the most versatile and COST EFFECTIVE vacuum deposition techniques. The Kenosistec KA systems have been designed and manufactured in order to enhance these advantages at their best and to ensure lifetime RELIABLE OPERATION in the most demanding conditions.

Kenosistec supplies also KEY-IN-HANDS production facilities, including cleaning systems, quality control instruments and integrated KNOW-HOW for all production aspects.

Applications in the DECORATIVE sector include handles, faucets, watchbands, spectacle frames, fashion accessories, PLASTIC parts. A wide range of brilliant colors is available, all with superior hardness and excellent resistance to scratch and corrosion. Switching production from one color to another is easy and quick, thanks to a user friendly software and to purposely designed technical solutions.

Applications in the FUNCTIONAL field range from cutting tools, to moulds, to machinery components. All metals can be effectively coated, including stainless steels, Al, Ti and Cu alloys, Zn-Al alloys and temperature sensitive materials like 100Cr6.
LARGE VOLUME
deposition chambers allow
cost effective coating even
of parts having considerable
dimensions.
The addition of cryotrap
allows faster pumping times
and higher quality coating of
plastic parts.

GENERAL FEATURES
Deposition chamber: AISI 304 stainless steel with double wall structure for heating-
cooling by forced water circulation. Internal removable shields for easier and faster
periodic maintenance. Three temperature closed circuit water circulation unit included
in the supply.
Gas inlet: up to 5 independent mass flow controllers with individual shut off valve.
Constant pressure, constant flow and mixed operation modes.
Process controller: PC-PLC system. Fully automatic and manual operations with
safety interlocks. Three level password system. Advanced editing functions for writing
modifications of process recipes. Highly flexible recipe structure.
Remote assistance and operation. Full process parameters recording. Auto shut off
and turn on functions.

TECHNICAL SPECIFICATIONS
Chamber dimensions, mm
Overall footprint, mm
Primary pumping, mch
High vacuum pumping
Axial load max
Substrate bias
Arc sources (proprietary design)
Heaters
Options
KA 750
Ø 750, h 900
2970 x 2000 x 2200 h
Rotary 90 + roots 500
Diffusion DN320
500 kg
15 kW @ 1000 V DC
6
3 x 6 kW
Pulsed bias with variable duty cycle and frequency
DC and RF magnetron sources
LN2 or closed circuit cryogenic traps
KA 1000
Ø 1000, h 1150
3700 x 3300 x 2300 h
Rotary 250 + roots 500
Diffusion DN400
800 kg
30 kW @ 1000 V DC
9
3 x 10 kW
KA 1000 2H
Ø 1000, h 1900
3700 x 3300 x 2900 h
Rotary 250 + roots 1000
2 x turbo 2000 l/sec
800 kg
30 kW @ 1000 V DC
15
4 x 10 kW

process technology
cutting tools
moulds and forming tools
machinery components
handles
faucets
fashion accessories (spectacle frames, watch bands, jewellery)
steels
non ferrous alloys
temperature sensitive metals
plastic materials