

INUBIA B6 & B12

DURABLE COLOUR

PVD COATINGS



INUBIA B6 & B12

VERSATILE COLOUR COATINGS FOR DESIGN PARTS

Oerlikon Balzers INUBIA B6 and B12 coating systems provide unmatched versatility of reproducible colour coatings on a large variety of base materials.

INUBIA B6 and B12 PVD coating machines are ideal for high-end surface treatment operations that wish to combine decorativeness, durability, operational efficiency and reproducibility - and all of this with a high level of flexibility in terms of base materials and geometries.

Reproducibility

... through precise parameter control, automated process control software, and retrievable coating processes

Decorativeness

... through smooth and glossy surfaces in a large variety of colours

INUBIA B12



Efficiency

... through a large usable recipient space, short process steps, user-friendly process software and the option for remote control

Coating adhesion and durability

... through reactive and non-reactive magnetron sputtering technology with high degree of ionisation and plasma density

Substrate material versatility

... on base materials such as metals, plastics, ceramics, glass, lacquer painted parts and more

COATING SYSTEMS

GOOD TO KNOW!

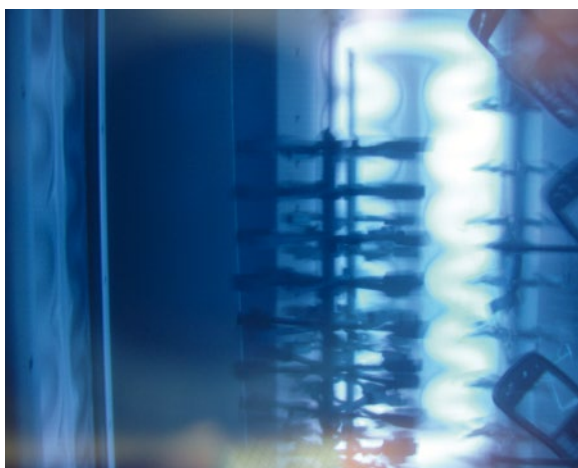
Enhance your operations to plastics metallisation: INUBIA B6 and B12 machines can be utilised for the ePD™ plastics metallising process when used in combination with an INUBIA P6 or P12 painting line.



Easy access to the recipient through two or three recipient doors



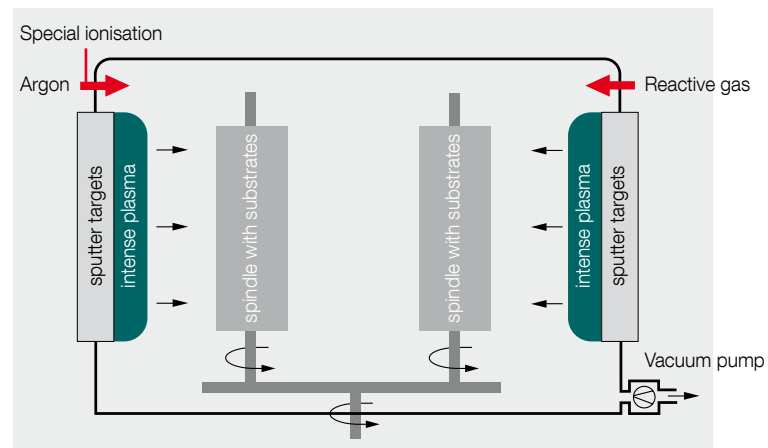
Triple door design of INUBIA B6 recipient



Through the impact of accelerated argon ions, free metal ions of the source metal are emitted from the target. By applying DC- or pulsed DC bias voltages to the components (substrates), while adding the process gases, a thin film of metal-gas compound is formed. Up to three different process gases can be used during one coating process simultaneously. Coatings with more than one metallic phase can be deposited by using up to three different target metals on the three sputter sources, or through using alloyed sputter targets. By altering the process gases and target metals, a large variety of colours and decorative effects can be achieved.

Smooth and glossy coatings

INUBIA B6 and B12 PVD coating machines are planar magnetron sputtering machines that run both, reactive and non-reactive gas processes. Various decorative and functional thin film coatings can be deposited by intelligently combining different metal plasma sources and process gases. INUBIA B6 and B12 provide smooth and glossy coatings with high durability and high adhesion on a variety of conductive and nonconductive base materials. Substrates retain the smoothness and gloss of the original surface.



Sputter process

PVD Process

Recommended sputter target metals:

chromium, titanium, zirconium, aluminium, tungsten, molybdenum, stainless steel, copper, silver, gold (option) and many other non-ferromagnetic metals

Process gases:

argon, nitrogen, acetylene, (optional CO₂ and other process gases)

Recommended substrate materials:

Plastics: ABS, PC, PC/ABS, PC/PBT, PC/PET, selected blends of PA (fibre glass and mineral enforced) and many other polymers. Electroplated plastics coated with electroless nickel, lacquer spray painted substrates, glass.

Metals: stainless steel, aluminium, titanium alloys, aluminium alloys, brass, and many other metals.

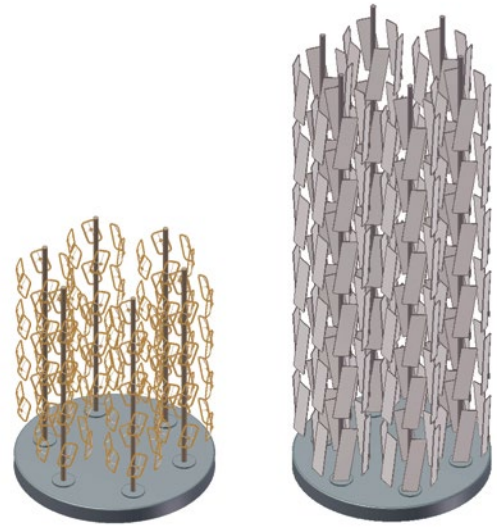
Cycle time: typically 30 to 150 min
Coating thickness: typically 0.05 - 1.5 µm

User-friendly operation – Automated batch processes

The INUBIA B6 and INUBIA B12 are fully automated batch process machines. High efficiency and short operation times are achieved through short pump-, coating-, and maintenance times. Operational efficiency is also supported by simple maintenance routines and optional auxiliary carousel handling hardware.

With the Oerlikon Balzers software, process parameters can be programmed, saved and reproduced. History profiles can be run and process events are recorded and can be retrieved at any time. Automatic messages indicate the type and location of relevant process events.

By remote control, service engineers can access the equipment controls, perform troubleshooting and indicate corrective measures.



Carousel for INUBIA B6

Carousel for INUBIA B12

Spindles and fixtures are supplied on demand

	INUBIA B6	INUBIA B12
Max. coating height	600 mm	1200 mm
Door width x height	700 x 800 mm	720 x 1810 mm
Vacuum chamber doors	3	2
Usable chamber diameter	600 mm	600 mm
Number of spindles	1 - 20	1 - 20
Spindle diameter	180 mm (for 6 spindle system)	180 mm (for 6 spindle system)
Turbomolecular pump	2 x 1450 l/s (N2)	6 x 1250 l/s (N2)
Roots pumps	1 x 490 m ³ /h	2 x 1070 m ³ /h
Rotary vanes pump	1 x 200 m ³ /h	2 x 200 m ³ /h

COATING SYSTEMS

GOOD TO KNOW!

Oerlikon Balzers offers also in-line PVD coating equipment – for outstanding coating results at high volume operations with short cycle times. Ask us for INUBIA V6 and V9 vertical in-line machines!



Aubergine



Blue



TiN - Golden



Bronze



Brass



Copper



Chocolate



Deep Black



Black



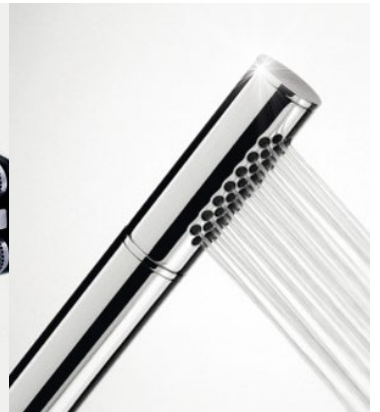
Anthracite



Chrome

Unmatched versatility of reproducible colour coatings

Oerlikon Balzers INUBIA B6 and INUBIA B12 provide your coating operation with unmatched versatility of reproducible colour coatings. In addition to the standard colours, Oerlikon Balzers develops other colours on request.



Large variety of modern colours for a broad range of applications

INUBIA B6 and B12 coating machines are designed for efficient PVD surface technology operations that need flexibility for a large variety of processes on various substrate materials and geometries. Hence, these coating systems satisfy the requirements of the jewellery, medical, automotive, sanitary, customer electronics and home appliances industries.

Superior mechanical properties

Oerlikon Balzers INUBIA B6 and INUBIA B12 provide a wide range of high-performance coatings, which fulfil the individual specifications of various industries. Properties like adhesion, scratch- and abrasion resistance and colour stability are just a few examples.



Customer service

Service and engineering teams provide customer support on site and remote.

Headquarters

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