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

INUBirda 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

**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

**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

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.

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.

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### INUBIA B6 vs INUBIA B12

<table>
<thead>
<tr>
<th>Feature</th>
<th>INUBIA B6</th>
<th>INUBIA B12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. coating height</td>
<td>600 mm</td>
<td>1200 mm</td>
</tr>
<tr>
<td>Door width x height</td>
<td>700 x 800 mm</td>
<td>720 x 1810 mm</td>
</tr>
<tr>
<td>Vacuum chamber doors</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Usable chamber diameter</td>
<td>600 mm</td>
<td>600 mm</td>
</tr>
<tr>
<td>Number of spindles</td>
<td>1 - 20</td>
<td>1 - 20</td>
</tr>
<tr>
<td>Spindle diameter</td>
<td>180 mm</td>
<td>180 mm</td>
</tr>
<tr>
<td>(for 6 spindle system)</td>
<td>(for 6 spindle system)</td>
<td></td>
</tr>
<tr>
<td>Turbomolecular pump</td>
<td>2 x 1450 l/s (N2)</td>
<td>6 x 1250 l/s (N2)</td>
</tr>
<tr>
<td>Roots pumps</td>
<td>1 x 490 m³/h</td>
<td>2 x 1070 m³/h</td>
</tr>
<tr>
<td>Rotary vanes pump</td>
<td>1 x 200 m³/h</td>
<td>2 x 200 m³/h</td>
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</tbody>
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**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!
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
INUHIA 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.

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