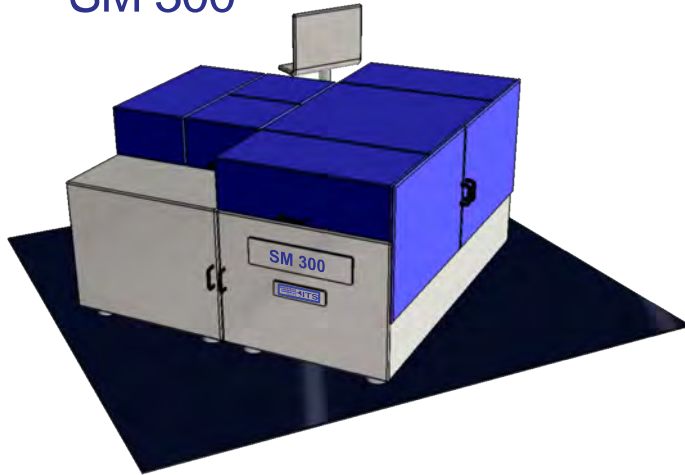


Universal coating machine SM 300



Metal coating machine for high vacuum coating of parts made of glass, plastic, ceramic and other materials, with a maximum size of 300mm and height of 20mm*.



ITS-tec is a special purpose machine engineering company, with its core business in the optical storage industry. We have been designing and servicing machines for the production of optical storage media such as CD, DVD, CD-R and DVD-R for many years.

Our extensive experience in the high vacuum coating of optical storage media with diverse metals, enables us to develop machines, which in high vacuum, are also able by means of sputtering to coat other materials with metal. Priorities during the development of our equipment are; all-purpose usage, exact coating thickness control and a tailor-made service for our customers.

Would you like more information? Arrange an appointment with us. Our specialists can provide a detailed and competent in-house consultation concerning diverse application possibilities.

You can also visit us on our homepage:

www.its-tec.de

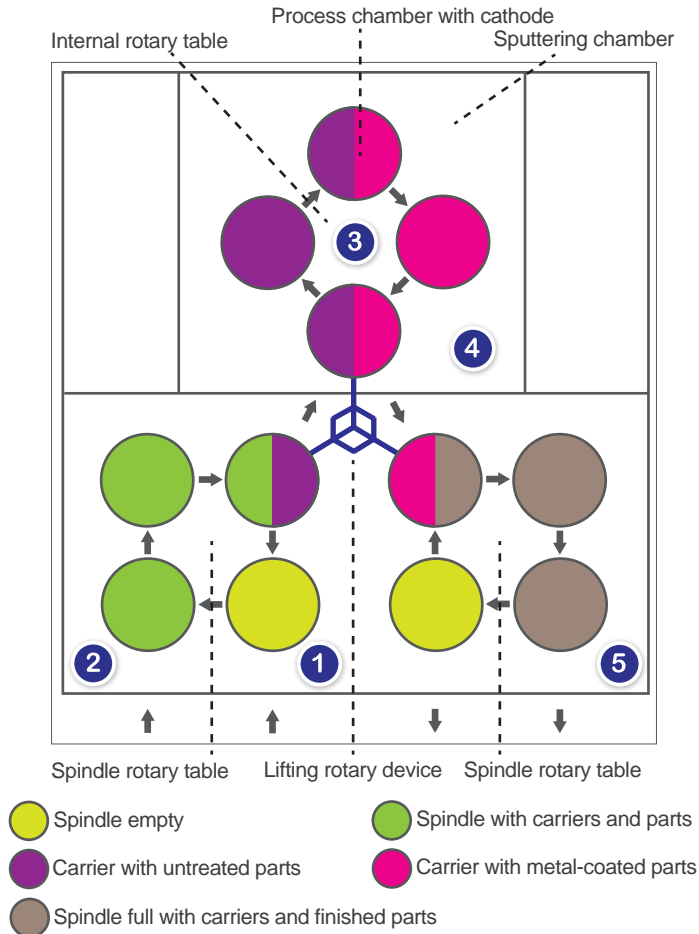
* Further formats feasible.

ITS-tec GmbH
Am tiefen See 5/6
D-75433 Maulbronn

Tel.: +49 (0) 7043 310 992
Fax: +49 (0) 7043 310 993

Web: www.its-tec.de
Mail: info@its-tec.de

Material flow-diagram



Function and technical data

- 1 The loading of the machine takes place by means of special spindles with carriers (glass slides, all-purpose).
- 2 The carriers contain the objects to be treated. Several objects can be transported in one carrier. The pieces can be fixed but this is not always necessary.
- 3 The handling system transports the carriers containing the objects to be treated into the high-vacuum cathode chamber. Here the metal coating takes place by means of sputtering.
- 4 After coating, the carriers are returned to a spindle and transported for unloading.
- 5 Easy removal of the spindle from the machine.

Cycle time: Depending on the application and type of metal coating, 4-8 seconds. A number of pieces can be treated in one cycle. The cycle time per piece is therefore much shorter.

Technical data for the Universal Metal Coating Machine SM 300

Measurements: 2000 x 2100 mm
 Weight: ca. 1600 kg
 Required supplies: 400v, 3 phases + N + PE,
 Power: ca. 4 kw
 Cooling water
 Argon gas (standard compressed gas cylinder)
 Compressed air 6 bar (dried)

Additional equipment such as compressors, water coolers etc can be obtained from ITS-tec.

Our technological advantage

- » Environmentally friendly due to no use of chemicals.
- » Very quick cycle time, as several objects can be coated simultaneously.
- » Chrome, silver, gold, aluminium and silicium can be used as coating. Other metals are also possible.
- » Perfectly adjustable coating thickness, enabling easy production of semi-reflective mirrors. (Coating thickness control at nanometer level).
- » Universal carriers are re-usable.
- » No wastage, as surplus material is 100 percent re-usable.
- » Minimal energy input per product.
- » All- purpose.
- » No handling damage.
- » Exactly definable coating range through object masking.
- » Very easy and clear handling by use of visualization interface.

Application examples

The pictures represent only a small sample. We would be pleased to illustrate further application possibilities.

