SWISSNANOCOAT SA

Установка 3D напыления

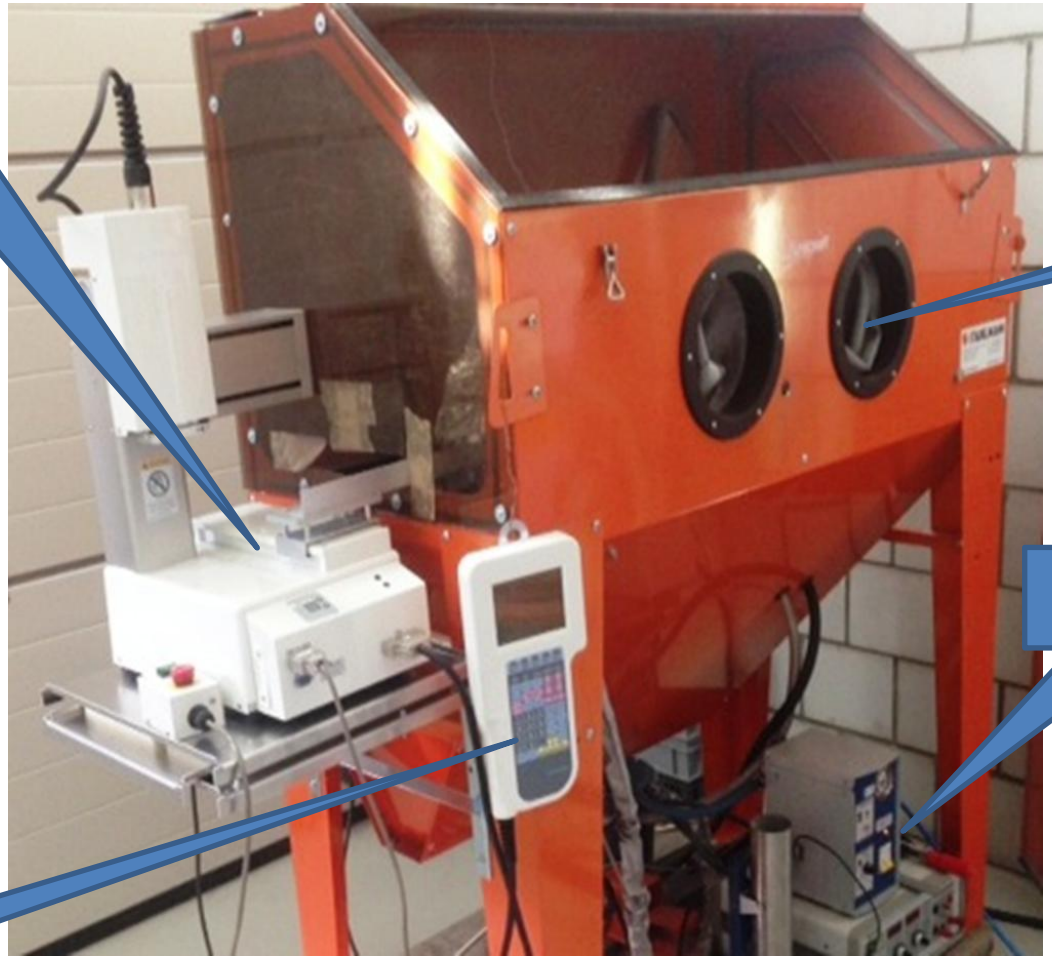
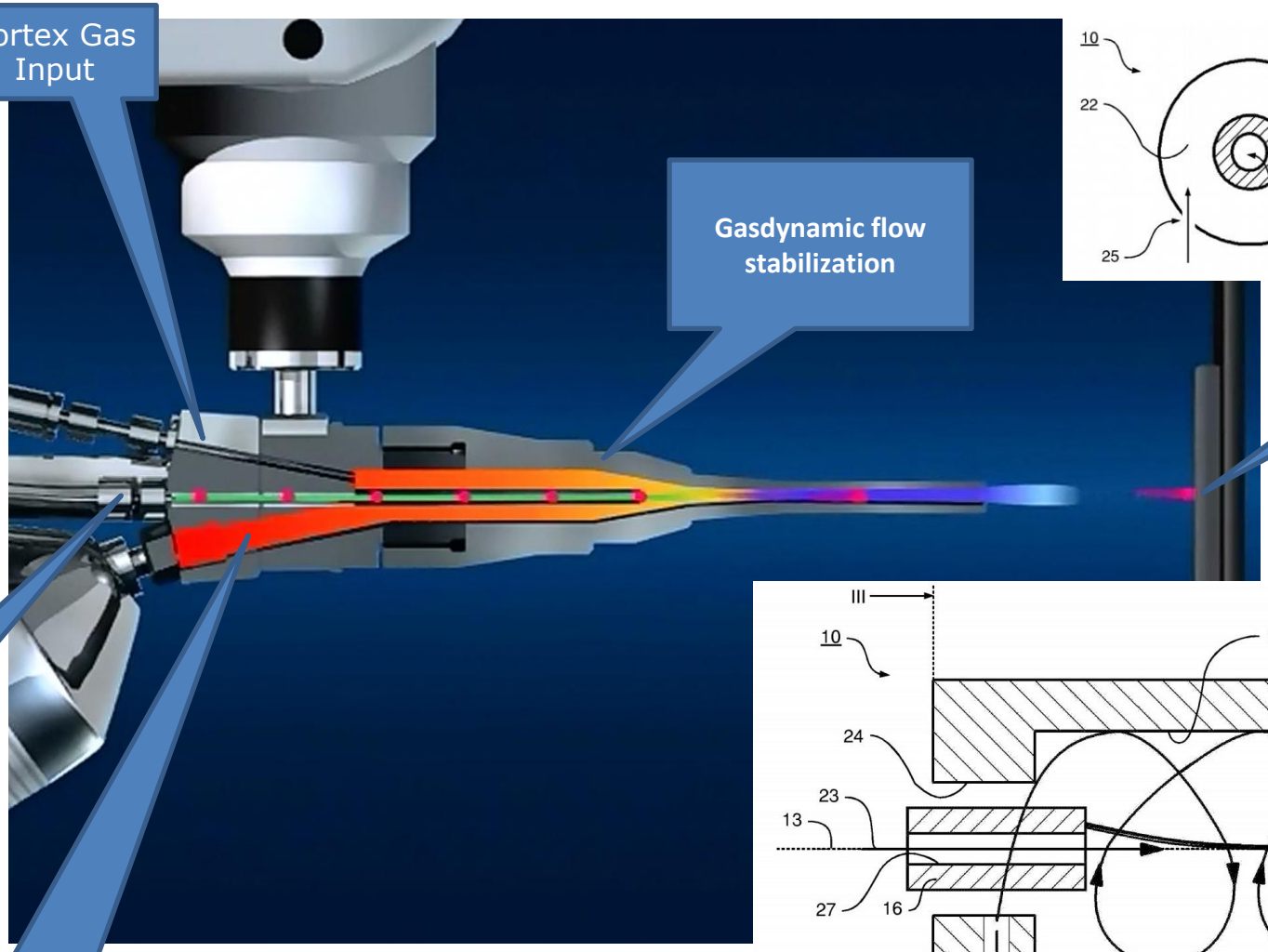


Diagram of the nozzle device



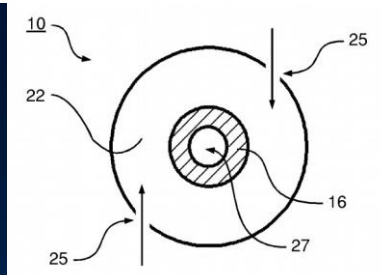


FIG. 3

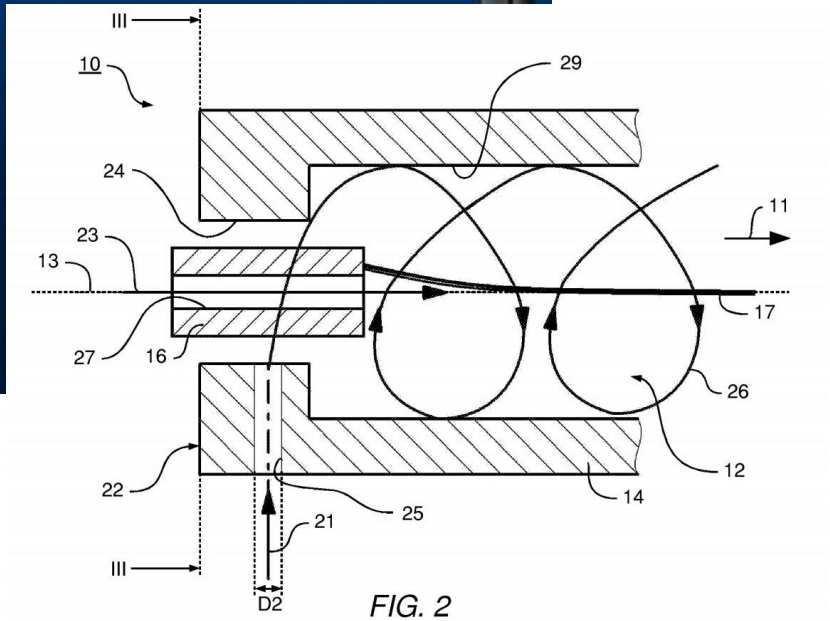
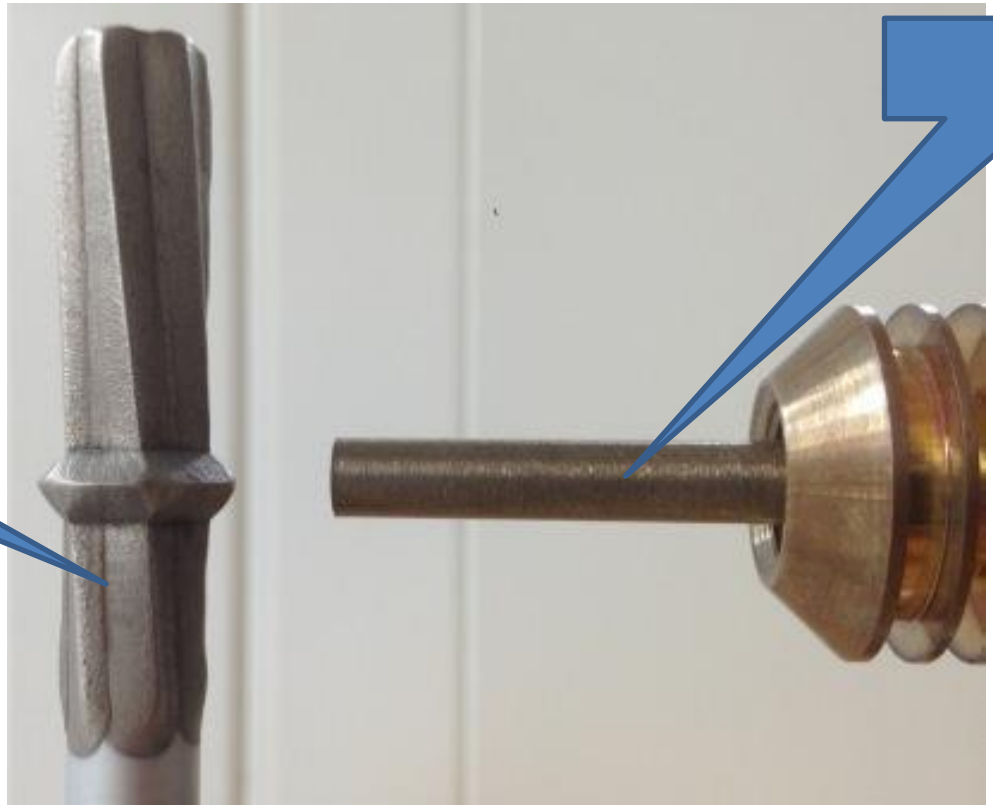


FIG. 2

3D Coating Printing



Rapid prototyping of complex shapes

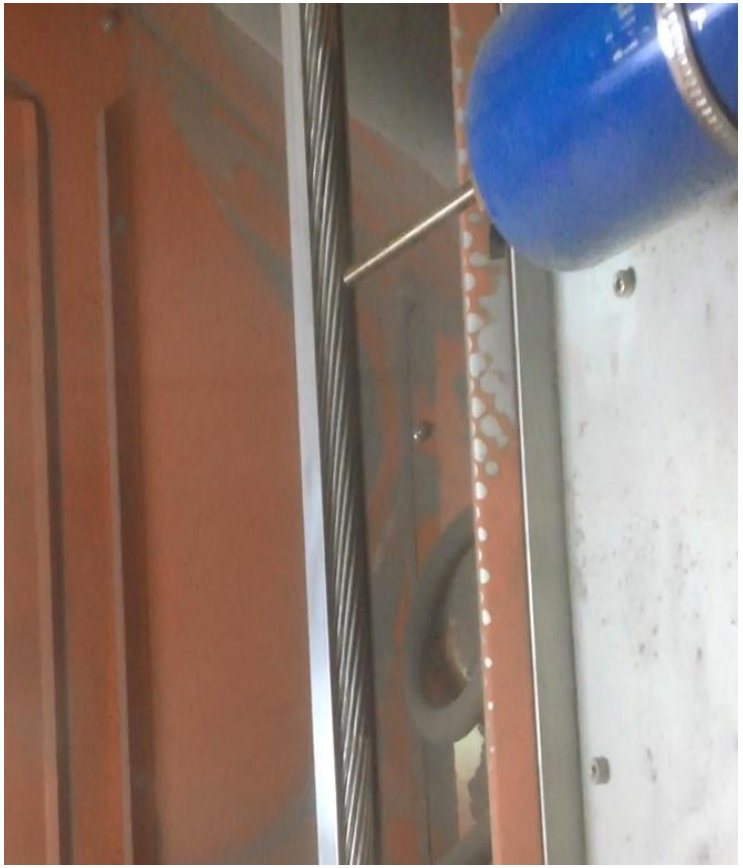
Basic properties of 3D structures

- High adhesion(30-120 MPa)
- Homogeneous structure of spraying
- Low porosity (0.1-1%)
- High electrical and thermal conductivity between the coating and the substrate
- Any thickness(0.02 – 5 mm);
- Smooth surface Rz = 20-40;
- Possibility of any subsequent machining

- **Material of powder: metal, metal alloys, ceramics:** WC-Co, CrC-NiCr, Al, Cu, Al2O3, SiO2, SiC, Ni, Cr, Fe, B, C, Ti, Cr2O3, Zn, B2O, TiO2, WC, ZnB2, (TiB2+Ni+MoS2), (Ti+Ni), (TiC+Ni+MoS2), (TiB2+Ni), (C, Co, Fe, W), (C, Cr, Ni), (Al, Ni), (Al, Hf, Fe, Mg, Si, Ti, Y, Zr)
- On metals, metal alloys, ceramics, glass, some plastics

The growth of 3D structures as possible on flat and on curved surfaces or complex shape

Nickel on ceramics



Ferromagnetic alloys
on aluminum

Example of complex shapes rapid 3D prototyping

Cu-part