

# TF 1400

Thin Film Deposition Systems



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Technologies



The TF 1400 is designed to meet your mass production requirements for multi-layer dichroic coatings with a low cost of ownership. The system is designed for accommodating large volume electron beam guns of crucible capacity ranging from 25 cc to 235 cc coupled to a 12 kW power supply. A suitable combination of rotary, roots and diffusion pumps ensures optimal pumping times for maximizing productivity. Complete process automation guarantees process repeatability and the intelligent HMI software allows operators to quickly input data, set up procedures and change between process parameters ensuring ease-of-operation. This versatile high-volume coating system is ideal for large mass-manufacturing facilities that want to maximize their productivity with reliable and consistent coatings.

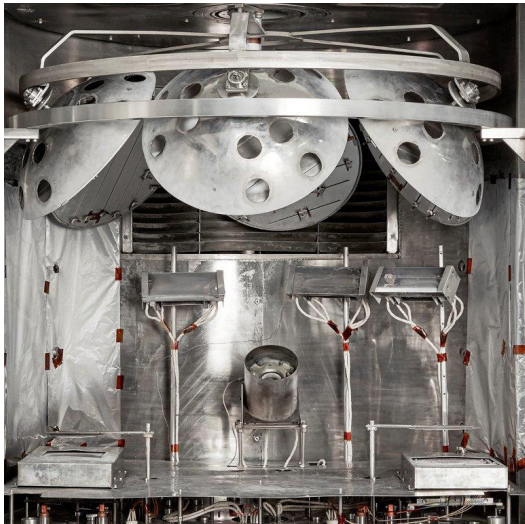
# CHAMBER CONFIGURATIONS



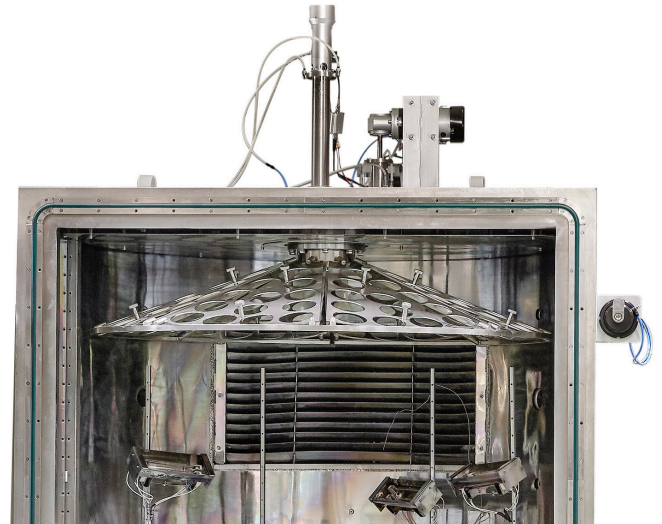
Stand-alone system Configuration



Wall-mounted system Configuration



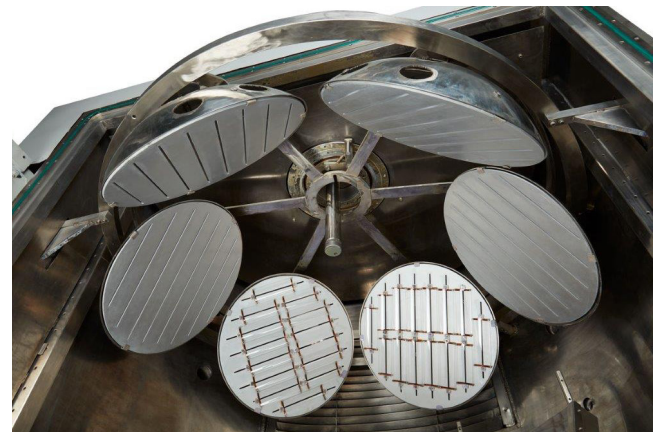
System inside view



Domed work holder for ophthalmic applications



Planar planetary work holder



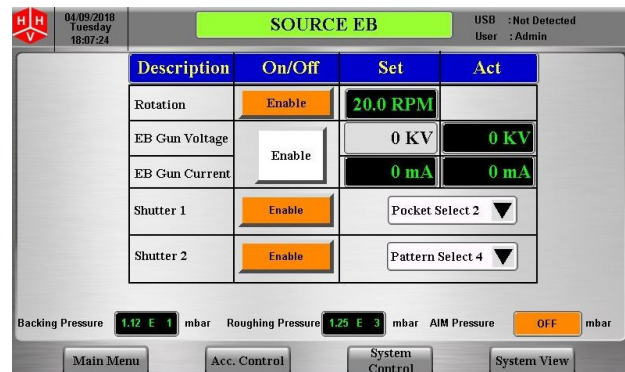
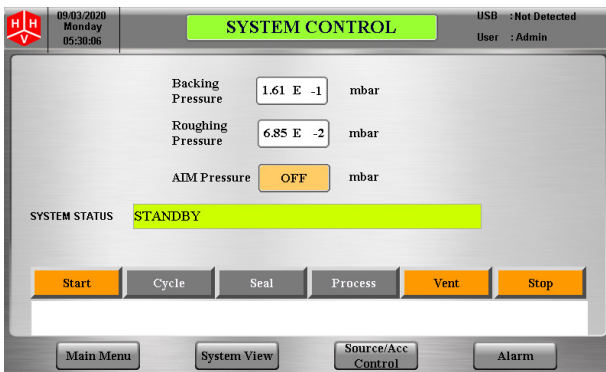
Knudsen planetary work holder with thickness monitor



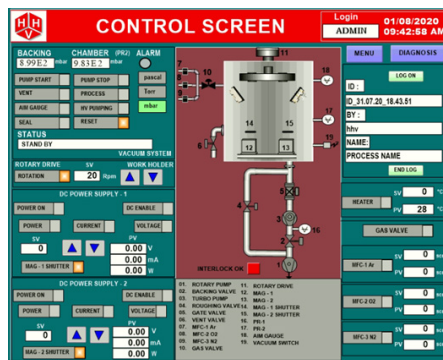
# SPECIFICATIONS

|                          |   |
|--------------------------|---|
| CHAMBER SIZE             | 1400 mm (Ø) x 1400 (H)  |
| HV PUMPING OPTIONS       | Diffusion pump as standard. Turbo and Cryo pumps options available                    |
| ROUGHING/BACKING OPTIONS | Rotary / Dry  |
| BASE PRESSURE            | Up to $10^{-6}$ mbar  |
| SUBSTRATE SIZE           | Customizable work holders to suit production needs over a working diameter of 1100 mm |
| SUBSTRATE HOLDER         | Planar Planetary, Knudsen Planetary, Domed holder and other custom options            |

# CONTROL OPTIONS

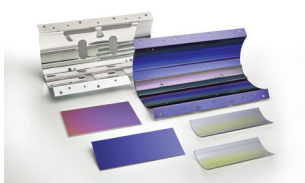


Touch screen HMI based operation



SCADA based system operation

# RESULTS



UV reflectors



Optical filters



Laser optics

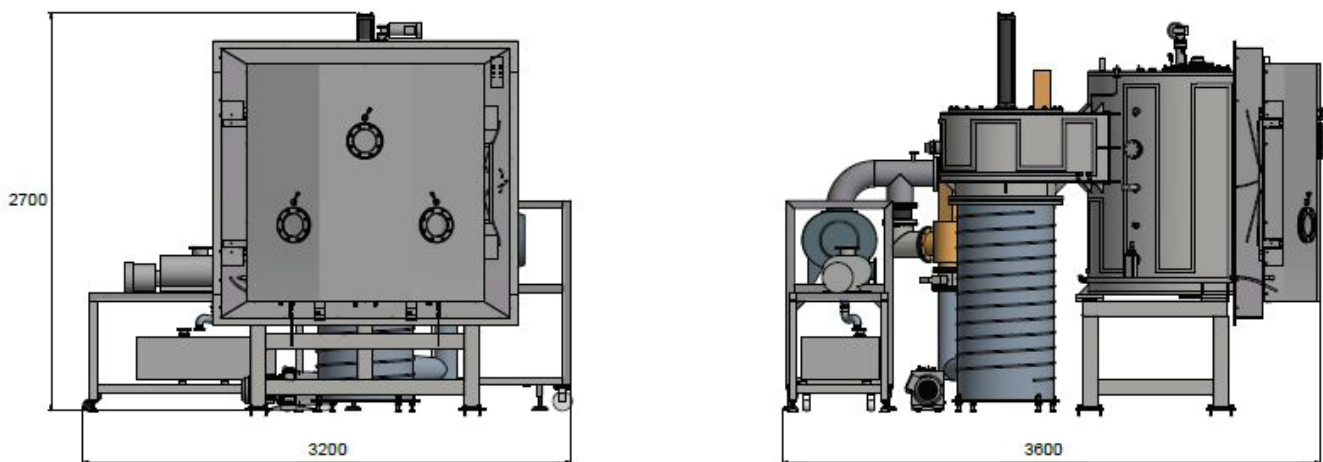
## FEATURES

- Proven for large volume industrial production
- Rugged components for high MTTR and MTBF
- Powerful and fast diffusion pumping system
- Supports large volume electron beam guns
- Clean room compatible
- Complete process automation

## APPLICATIONS

- Anti- Reflection coatings
- UV reflector coatings
- Narrow band filters
- Laser optics
- Transparent conducting oxides
- IR coatings

## LAYOUT



All dimensions in mm



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