

TFDS-141K - Optical Coater

The **TFDS-141K** is a compact high vacuum coater from **VST**'s series **TFDS-141**, for large-scale production.



The box type vacuum chamber made of stainless steel is sealed with Viton® O-Rings. Cooling channels are welded to the exterior wall of the chamber and front door.

The planetary drive substrate holder is designed to achieve uniform film thickness over a large work area.

The 4 kW quartz lamps (4x1000W) substrate heater is mounted on frame below substrate holder.

A four-crucibles electron beam gun is used for deposition material evaporation. Two pairs of thermal evaporation are mounted on the right side of the chamber.

The deposition controller with six crystal in-vacuum head is the heart of the system with a library of process parameters and materials, adjusting and saving the data during the process.

A look inside



The basic system may be set for specific applications.

Technical Data

Ultimate pressure:	less than 2.0×10^{-7} Torr
Pump Down Time:	5.0×10^{-7} Torr in 100 min
Frame:	closed type, aluminum anodizes profiles, painting doors and panels, leveling feet
Cryogenics Vacuum pump:	Cryo-
Model:	Torr 10
Nominal pumping speed, water:	9000 l/sec
Nominal pumping speed, air:	3000 l/sec
Chamber:	box type, stainless steel, 36"W, 34"H, 340 Lt, front door, two 4" Pyrex® view port
Valves:	All vacuum valves (roughing, purge and vent) are stainless steel bellow sealed, pneumatic operated.
Electron beam source:	rotary, multi-pocket ,4x25 cc,10 kW max, operating voltage 6kV to 10kV, hidden filament design, direct water cooling
Thermal evaporation sources:	
Max supply voltage	Output 4kW
current	Max output 5/10/20 V 1000A