

# MIDAS Fiber Metalization System

For Fiber-Optics and Radial Coating

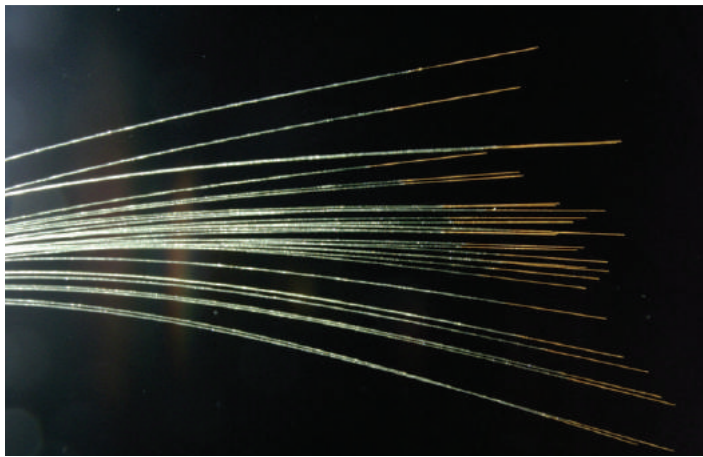


## Applications

- Coating optical fibers of any geometry
- Single & Ribbon fiber coating
- Coating midspan window, connectorized or jacketed components
- Fiber termini, fanouts, breakouts and patch cords
- DTS, FBG's, optical isolators and filters
- Waveguides, image conduits and light guides
- Rod & Tube exteriors

# METALIZATION SYSTEM FOR FIBER-OPTICS

The MIDAS Metalization System is designed to produce a single or multi-layer symmetrical metal coating on ends, mid spans, or windows of optical fibers for use in a hermetically sealed opto-electric package. It can also create radially symmetrical material stacks on a cylindrical rod or tube components.



Designed for a small clean room footprint, this load-lock system uses a low energy plasma pre-clean to ensure adhesion by removing residual hydrocarbon and water vapor contamination.

The coating chamber contains an array of sputter cathodes allowing for the uniform distribution of different metal and multi-layer coatings.

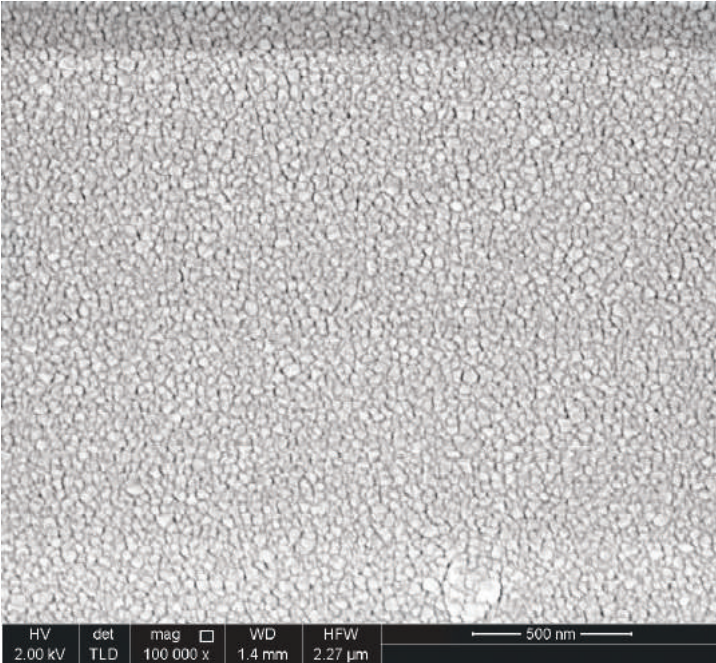
## PROCESS METHODS:

- Apply materials for Brazing, Soldering or Ultrasonic Welding
- Add Passivation layers and buffers
- Radially symmetrical coating application with controllable over-spray onto fiber jackets



[sales@intlvac.com](mailto:sales@intlvac.com)

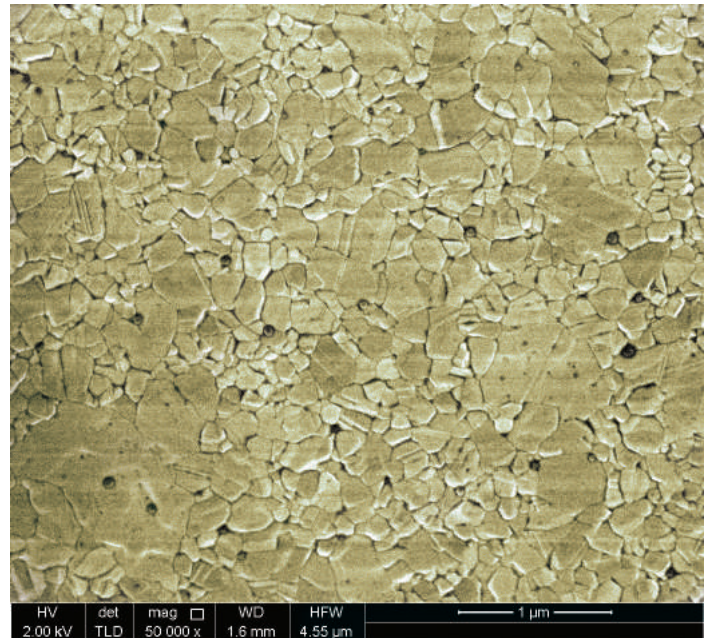
## SYSTEM ADVANTAGES:



Platinum sample

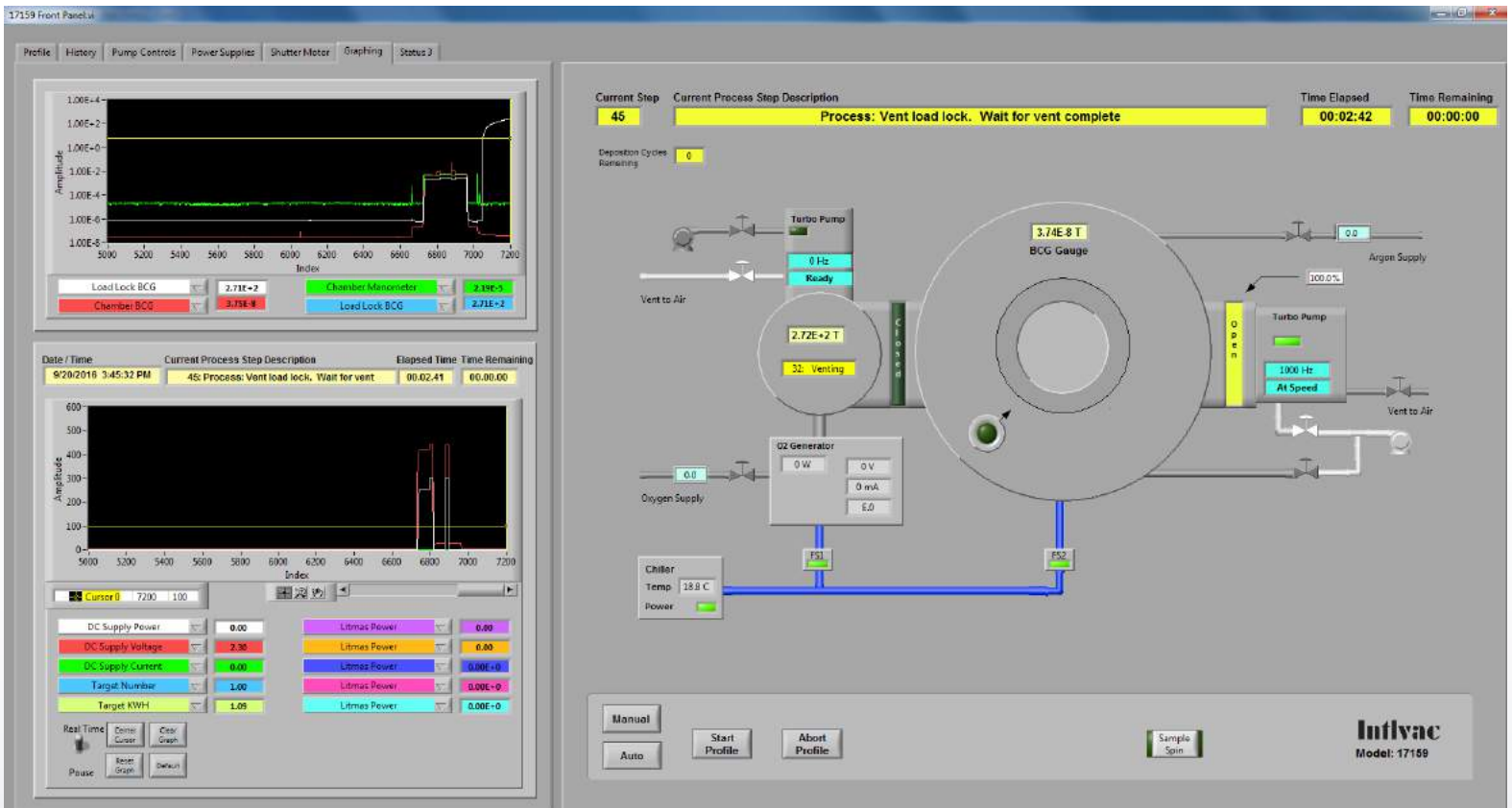
- Ultra low porosity metal or dielectric coatings
- Uses 99.99% pure metals. No phosphorus or sulfur electroplating
- Low temperature operation allows all types of fiber jackets: acrylate, silicone, polyimide, carbon and sensitive components
- Fully automated process control for one button operation after load-lock
- Load-lock design streams outgas vapors away from cores during processing
- Minimal precious metal consumption (micrograms) per component (after reclaim) for low cost per component

- Uniform coating around entire fiber for accurate fiber alignments and thickness controlled to nanometers
- High pull strength on finished parts
- Easy to reconfigure to accommodate process changes and new materials
- Low maintenance operation, 3 years before first service
- Nominal 45 minute cycle time
- Unprecedented high-volume throughput and low maintenance
- Designed to meet or exceed Bellcore/Telcordia and MIL-STD-883 standards



Ti/Pt/Au on Fiber





Fully automated process control for one button operation after load-lock

## PROVIDING TECHNOLOGY SOLUTIONS

At Intlvac, we design and manufacture a wide variety of systems for Thin Film PVD and Etch. Our product line ranges from small R&D/pilot project systems to large production systems utilizing processes such as Ion Beam Etching, Sputtering, E-beam, Thermal Evaporation, Fiber-optic coating, and more! Call today to discuss your specific requirements.



Intlvac Thin Film Corporation  
 1401 Duff Drive, Unit 600, Fort Collins CO USA 80524  
 Phone: 716.284.0830, Toll Free: 800.959.5517, Fax: 716.284.0842  
 www.intlvac.com sales@intlvac.com