

## Surface Engineering Solution for High Volume Production

2006

FROST &amp; SULLIVAN

Advanced Materials Processing  
Technology Innovation of the Year Award

### MVD150 Features

- Precision Vapor Delivery
- Integrated Surface Treatment
- Up to 8" Substrates/Plates
- Arbitrary shaped devices
- Multiple Precursors (up to 4)
- Touch-Screen Interface
- Safety Interlocks
- Simple Facilities
- Small Footprint
- Automated Processing Sequence
- Factory Automation (SECS/GEM)
- Robotic Interface (optional)

### MVD<sup>®</sup> Advantages

- Low work of adhesion
- Low defect density
- Low temperature process
- In-situ surface preparation
- In-situ adhesion layers
- Excellent repeatability
- Excellent conformality
- Excellent uniformity



### Substrate Materials

- Semiconductors (Si, Ge, GaAs, etc.)
- Metals (Al, Ni, Ti, Cr, stainless steel, etc.)
- Noble Metals (Au, Ag, Pt, etc.)
- Oxides (SiO<sub>2</sub>, Si<sub>x</sub>N<sub>y</sub>) and Glass Materials
- Plastics (Acrylics, PC, PP, PMMA, PDMS, etc.)
- Photoresists & SU-8

### Loading

- Wafers or Dies
- Packaged Parts & Small Assemblies
- Boxes of Glass Slides
- Plastic Sheets
- Micro-fluidic components



**Multiple Molecular Vapor Deposition (MVD<sup>®</sup>) systems are in Global production for MEMS Displays, Microphones, Inkjets and Medical Devices Worldwide.**