The 850 DWMS (Die Wire Metrology System) utilizes high-resolution imaging, quad color lighting and 3D. to produce maximum defect, and measurement capabilities for Lead-Frame, Die and Wire Bond inspection. The MVP 850 DWMS is configured with MVP’s own integrated leadframe magazine loaders and unloaders. A range of inline defect identification options are also available including Ink Marking, Punching and Wire Ripping. The MVP 850 DWMS has been proven to deliver UPH in excess of 150,000 for leadframe applications.

Key features and inspection capabilities:

- **Highest UPH in the Industry**
- **Integrated Loader/Unloader Options**
- **Multiple Defect Identification Options**
- Au, Al, Ag, and Cu Wires
- Wedge, Ball, and Stitch Bonds
- Crescent, and Tape Bonds
- Epoxy Flow and Spread
- Die Placement, Die Surface and Edge Damage
- SMT Components
- Foreign Objects and Scratches

Discuss your SMT and microelectronics inspection application with Machine Vision Products, Inc and discover your solution.
### Key Capabilities

#### Inspection Capabilities

The MVP 850 Series, when configured for Die, Wire-Bond and Lead-Frame inspection provides capabilities for:

- Using three standard options (between 1 and 6um resolution)
  - Au, Al, Ag, and Cu Wires
  - Wedge, Ball, and Stitch Bonds
  - Crescent, and Tape Bonds
  - Bond Layer
  - Epoxy Flow and Spread
  - Die Placement
  - Die Surface
  - Edge Damage
  - SMT Components

#### Manufacturing Deployment

- **Post Die Bonder**
  - Die Surface Inspection
  - Die Position (DPMS)
  - Bond Layer Thickness (BLT)
  - Lead Frame Inspection
  - Epoxy Inspection
- **Post Wire Bonder**
  - Wire Inspection (Au, Al, Cu and Ag)
  - Lead Frame Inspection
  - Die Surface Inspection
  - Die Position (DPMS)
  - Coating
- **Final Packaging**
  - Coplanarity
  - Lead Inspection
  - Markings
  - Surface Inspection

#### Measurement Approach

The 850 Series Microelectronics Inspection System provides both 2D and 3D measurements through the use of its proprietary Optics and 3D Laser based measurement system.

### Handling Options

MVP provides complete handling solutions, which include:

- **Lot Solutions**
  - Magazine Lifters/Indexers
  - JEDEC Tray Handling
  - Waffle Pack
  - Auer Boats
  - Customized Handling
- **In-Line Solutions**
  - Single Lane
  - Dual Lane Conveyors
  - Strip Handling
  - In-Line Wafer Handling
- **Custom Solutions**

### Software Features

All algorithms and measurement techniques provide for full Wire-bond, Die, Surface and packaging inspection, Software Packages Include:

- ePro - Program set-up
- iRepair - Defect Map and review software
- Integrated Review for Increased Throughput
- Full Microelectronics algorithm suite
- Full AutoNetworker Support

### Defect Marking Options

MVP provide multiple options for defect identification, which include:

- Electronic Mapping/SECS/GEM
- Wire Removal/Cutting
- Ink Marking
- Punching
- External and Custom Solutions