

The diagram is a circular infographic. The outer ring consists of seven segments, each with a background image and a label: 'Wireless' (city skyline at night), 'AI Clusters' (server room), 'Medical' (operating room), 'Aerospace' (space station), 'Consumer' (woman on phone), 'Automotive' (car with sensor waves), and 'Sensors' (hand holding a device). The inner circle is divided into four colored quadrants: 'ACCURACY' (blue), 'SPEED' (dark blue), 'FLEXIBILITY' (grey), and 'RELIABILITY' (light blue). Arrows from these quadrants point towards a central white circle containing the text 'MAXIMIZE ROI'.



MRSI

MYCRONIC

mrsi.mycronic.com

North America

MRSI Systems

554 Clark Rd.,
Tewksbury, MA
USA 01876

Tel: +1 978 667 9449
sales.mrsi@mycronic.com

Asia

**MRSI Automation
(Shenzhen) Co., Ltd**

101, Building B,
Han's Innovation Tower,
9018 Beihuan Avenue, Nanshan
District, Shenzhen City,
Guangdong Province, China
518057

Tel: +86 755 26414155

EMEA

Distributor and Demo Center
Distek Strumenti & Misure Srl

Via Guglielmo Marconi, 15,
80125 Napoli NA, Italy

Tel: +39 348 3837815
marco@distek.it

Specifications are subject to change without notice.



Patented turret for "on-the-fly" tool change



MRSI Systems has been serving optoelectronic and microelectronic customers for the past 40+ years and understands their requirement to scale efficiently in today's fast-paced marketplace.

Applications are found across a wide range of market segments, such as AI Clusters, Medical, Aerospace, Wireless, Automotive, Sensors, and more.

MRSI's die bonding solutions help our customers to enable just-in-time supply and fast-pace innovations of critical components for high-growth market segments. The MRSI-HVM and MRSI-H provide industry-leading high-speed for high-volume manufacturing.

These die bonding solutions are built with the same hardware and software platforms configured to minimize process deviations, reduce NPI cost, and increase ROI for customers with MRSI's long proven product reliability and global customer support.

MRSI-HVM1 Applications



CoS/CoC/CoB

- The MRSI-HVM1 is designed for specific applications such as: Chip-on-Carrier (CoC), Chip-on-Submount (CoS), and Chip-on-Baseplate (CoB). These assemblies use eutectic and/or epoxy stamping die bonding.



Heated Head (Optional)

- Option for a heated head on the right side, heating at a fixed temperature or pulsed heating. The left side remains the same standard MRSI-HVM1 head. This heated option is specifically designed for eutectic bonding of multiple die onto a common carrier without reflowing the neighboring solder pads.



AOC/PCB/GOLD-BOX

- The conveyor version is equipped with inline conveyor for single fixture or multiple cassette inputs. Large forms of carriers of the die are automatically transported, for Active Optical Cables (AOC) or similar chip-on-printed circuit board (PCB) applications, gold-box packaging, and CoC in fixture. The process options include eutectic, epoxy stamping, UV epoxy dispensing, and in-situ UV curing.



Conveyor (Optional)

- Equipped with inline conveyor for single fixture or multiple cassette inputs that can automatically transport large forms of carriers of the dies for Active Optical Cables (AOC) or similar chip-on-printed circuit board (PCB) applications, gold-box packaging, and CoC in fixture.



Value to our customers

- Industry leading high-speed for high-volume manufacturing
- Industry leading high-accuracy for better assembly yield and future higher density packaging
- Industry leading high-flexibility for true multi-die multi-process production in high-volume high-mix manufacturing
- Industry leading local technical support teams and application expertise
- 40+ years of experiences in industry with reliable 24/7 field operations

MRSI-HVM1 1 Micron Die Bonder

HVM1			
CONFIGURATION	STANDARD	HEATED HEAD	CONVEYOR
APPLICATIONS			
CoC/CoS/CoB	●	●	●
CoC Silicon Photonics	●	●	●
3D Die Stacking	●	●	●
Pillar-to-Pillar Bonding	●	●	●
AOC/PCB			●
Gold Box	●		●
PROCESSES			
Multi-die, Multi-process	●	●	●
Eutectic	●	●	●
Epoxy Stamping	●	●	●
Epoxy Dispensing			●
UV Curing			●
Localized Heating		●	
Flip-chip Bonding	●	●	●
Co-planarity Bonding	●		●
FEATURES & OPTIONS			
Composite Base	●	●	●
Dual Gantry/Head	●	●	●
Heated Head (R)*		●	
Dual Ultrafast Eutectic Station	●	●	●
“On-the-fly” Patented Tool Change (L)	●	●	●
“On-the-fly” Patented Tool Change (R)	●		●
Remote Patented Auto Tool Change (R)		●	
Inline Conveyor			●
Input GP/WP & Wafer	●	●	●
Output Stage (L)	●	●	
Output Stage (R)			●

*R=Right Side, L=Left Side