Our team develops the systems with modern development tools:

- Concept Development
- 3D Design Environment
- Prototype Systems
- Finite Element Analysis
- Vision System Integration
- Software development
- Customized machine controls
- Process vision systems
- Image processing systems
- Process development & process production transfer
- Sampling and small volume production

We are open to custom designs & complete solution developments

For Example:
- Gel Fill Assembly Line
- Pressure Sensor Lid Attach Line
- Customized 6-axis Freedom System
- Integration of unique dispensing systems
- Active alignment system
- Plasma cleaner integration
- FOUP Wafer Loader
- Innovative Submount Fixture Solutions
- Unique Process Gas Solutions
- Wafer Bonding Integration

ASM AMICRA follows a policy of continuous product improvement. Products and specifications are subject to change without notice.

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### Advanced Packaging Die Bonder & Flip Chip Bonders

**NANO**

**Ultra-Precision Die & Flip Chip Bonder**
- Supports ±0.3µm @ 3s placement accuracy
- Supports all die attach and flip chip applications including all AFC™ capabilities
- Higher resolution alignment optics
- Active vibration damping system
- Automatic placement offset tuning system
- High resolution 300mm bonding station
- Dynamic alignment system
- Quantitative parallelism calibration

**MARKETS**
- Single Mode/SiPhotonics/PIC
- AOC/MLP
- Optical Device Packaging
- Direct Bond Interconnect

**AFC PLUS**

**Fully Automatic Sub-Micron Die & Flip Chip Bonder**
- Accuracy down to ±0.1µm @ 3s with cycle times down to 25 sec. Au/Sn eutectic process
- Eutectic laser soldering or epoxy bonding
- Small die size down to 100µm
- Closed loop bond force control
- Supports all dispensing technologies
- Optional: flip chip bonding, wafer mapping, post bond inspection, heated tools, etc.

**MARKETS**
- AOC/VCSEL/Multi Mode/Lidar
- Laser Bar and MEMS assembly
- Semiconductor advanced packaging (3D, Stack Die etc.)

**NOVA PLUS**

**High-Speed Dual Head Die & Flip Chip Bonder**
- Accuracy down to ±2.5 µm @ 3s with cycle times down to <3 sec AuSn eutectic process
- Modular machine concept for all micro assembly applications
- Eutectic laser soldering for high-speed assembly
- Supports all dispensing technologies
- Offering automatic tool changers
- Optional: flip chip bonding, wafer mapping, post bond inspection, heated tools, etc.

**MARKETS**
- AOC/Optoelectronic/Photonics/LED
- Lidar/Laser Bar and MEMS Assembly
- Semiconductor advanced packaging (TSV, eWLB, FanOut, WLP, 3D, Stack Die)

### High-Speed Dispense System

**HDS**

**Fully Automatic High-Speed and Precision Dispense System**
- Quad or dual headed dispensing system
- Underfill, GloStap, Flux, entry dispensing applications
- Supports all standard dispensing pump technologies (Jet Pump, Spindle Pump, time pressure vacuum pump)
- Cognex Vision System (automatic fiducial mapping, post inspection system)
- Support PCB, laminate strip, leadframes, carriers, etc.
- Inline, magazine to magazine, reel to reel

**MARKETS**
- MEMS, Automotive, Semiconductor Industry, Electronics

### Wafer Inking Systems

**AIS & SIS**

**Fully Automatic or Semi Automatic High-Speed Inking System**
- Dot size down to 70 µm
- Inking of diced und undiced wafers down to 20 dots/s
- Automatic wafer loader for up to 12” wafers