

UNI-Mx **NEW GENERATION** TAPE & REEL



**UNIVERSAL FOR
ALL PACKAGES**

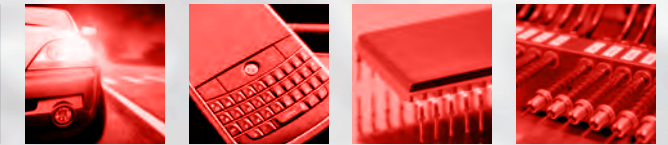
**ZERO DEFECT
DESIGN**

NEW GENERATION TAPE & REEL



Berlin-Oberspree
Sondermaschinenbau GmbH & Co. KG

UNI-Mx NEW GENERATION TAPE & REEL



Facts

- Universal Tape & Reel for all packages
- Designed for all in- & output carrier
- Zero defect design
- Easy and failproof operation
- Multiple quality assurance
- 100% modularity
- Best price/performance ratio
- Maximum uptime
- Maximum throughput at highest performance

Key Figures

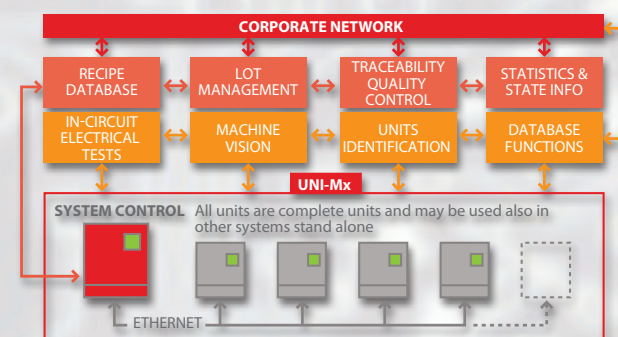
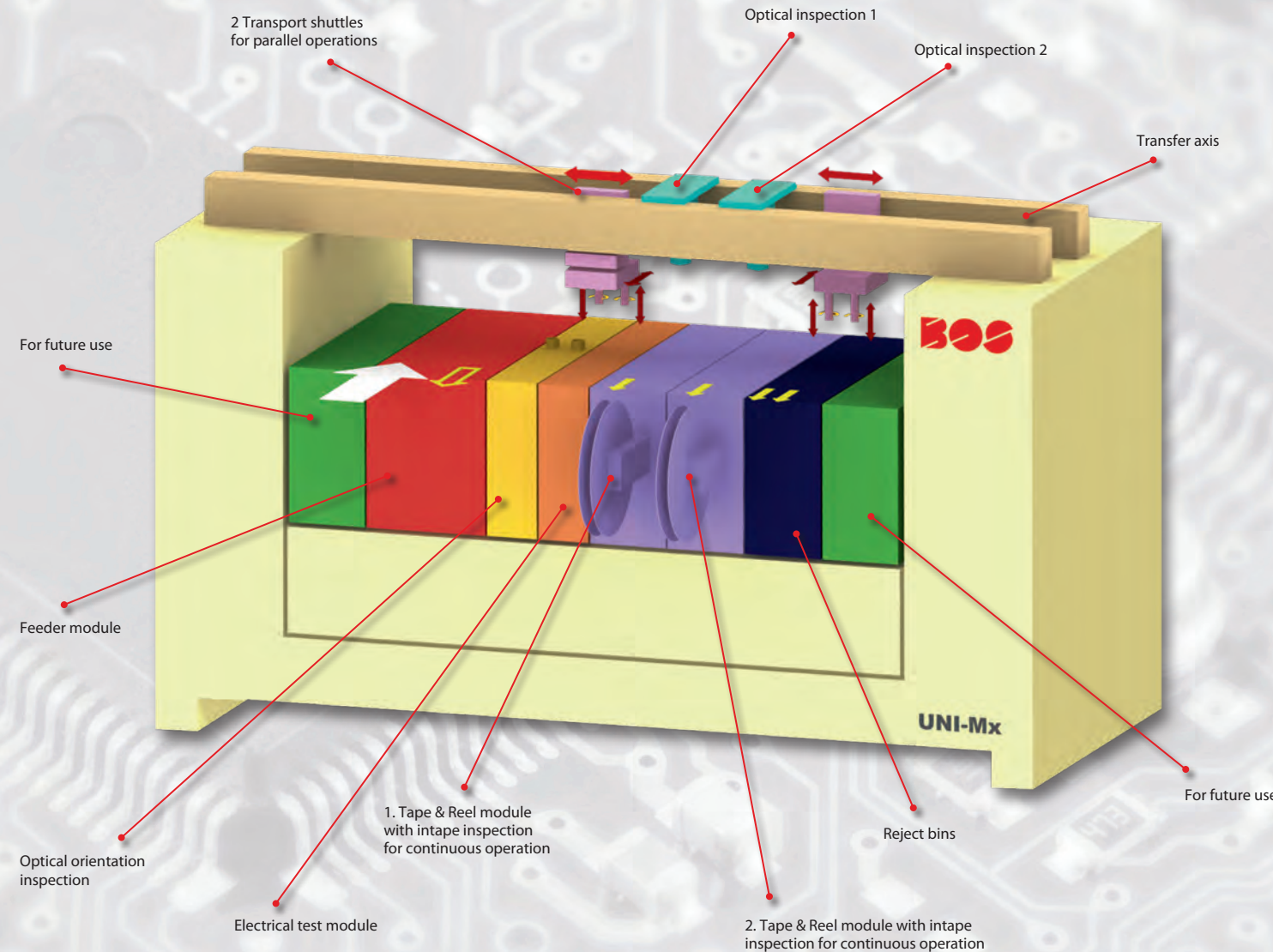
- Completely self controlled modules, open architecture to enable any further extensions
- Outstanding universal: kits for all packages in all input- and outputversions possible
- Simple and guided conversion with minimized adjustments
- Loading and unloading without need to stop system
- Outstanding simple operation and maintenance by easy accessibility
- Optimized throughput by parallel processing

Measurement Modul

- SPI tests
- Analog tests
- In circuit tests

Optical Control

- OCR
- 2D / 3D barcodes
- Geometry analysis (2D and 3D)
- Customer specific control data



Throughput

Minimum Index Time 250 ms

- Automatic input and intape inspection including fail binning

Typical Index Time 500 ms

- Automatic input, electrical tests and optical inspection including fail binning

APPLICATIONS

Packages

Actual

- MLF (QFN) 2x2, 3x3 and customer special packages

In development

- SOIC, PLCC

Optional

- Nearly all JEDEC packages and customer special packages

Input

Actual

- Metal single trays
- Tubes
- Metal magazines

In development

- InCarrier™ (licensed by Multitest)
- Frame (4" and 6" Versions)

Optional

- Alternate carrier systems
- Bulk (bowl or linear feeder with direction correction)

System Functionality

- Completely connected to customer CAM system
- Machine may be applied as single system or part of a complete line (950 mm table docking height)
- 100% device tracking including Test and Tape & Reel when InCarrier™ in use
- Providing all relevant operations and failure statistics
- Password saved manufacturing data base
- Total software based quality control



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Berlin-Oberspree
Sondermaschinenbau GmbH & Co. KG

Founded 1992: Design, Development and Manufacturing

- Automation for ATE
- Safety Technology Systems
- Environmental Technology Systems

Restructured 2004: Concentration on Core Activities

- Automation for ATE Tape & Reel Systems
- Life Detection Systems
- Environmental Technology (BOS Technology)

Key Activity: ATE Automation Tape & Reel

- 2009 Development and shipment of first new generation universal Tape & Reel unit: UNI-Mx
- > 150 Units delivered
- Key customers: Epcos, Bosch

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