

AT268

Rotary Scan-Pack Handler
for **Leaded & Leadless**
Packages

STI

SEMICONDUCTOR
TECHNOLOGIES &
INSTRUMENTS



www.stigp.com

an **ASTI** company

AT268

Rotary Scan-Pack Handler

AT268 is a high speed multi-function scan-pack handler engineered for Leaded and Leadless packages. This fully automated design consists of a primary 24-station rotary turret coupled with a secondary multi-station inspection table.

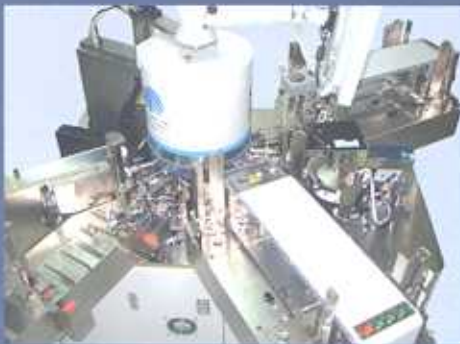
The modular concept allows for media transfer flexibility, supporting a wide range of I/O configurations. These include plastic tube, multi-channel metal magazine, vibratory bowl, Jedec tray and reel. Test integration is available as option.

STI's proprietary vision technologies are employed to provide ONE Vision Solution for all package types. This architecture provides our customers with a powerful one-stop strategy, facilitating standardization of quality assurance inspection techniques.

Multi-function I/O flexibility



The basic machine includes a modular tube loader, tube unloader and taper. Options for handling other input media such as metal magazine, vibratory bowl or Jedec tray can be fitted.



With the taper removed, AT268 can be configured as a quality assurance tool. In this fashion, the machine performs an extensive range of lead/pad measurements, pvi, mark, 2D Matrix, etc, while transferring the devices from an input media to an output one. Input media can take the form of a plastic tube, metal magazine or vibratory bowl. Output options include plastic tube, metal magazine and canister.



Dual taper option is available to improve machine utilization. Using STI's unique de-taping capability, the dual taper arrangement also offers tape-to-tape transfer with full inspection.

With a Jedec tray loader module installed, very high tray-to-tape throughput can be achieved and sustained.



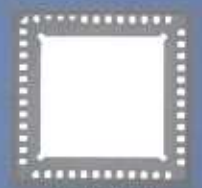
ONE Vision Solution

AT268 Vision engine offers ONE Vision Solution for Leaded, Leadless and LGA packages. It uses powerful sub-pixel edge detection algorithms for all defect measurements.



AT268 Vision Engine

5-side Inspection
Top Package Inspection
In Pocket Inspection
Post Seal Inspection



Mold Flash



Flange Defect



Package Chip



Post Seal Quality



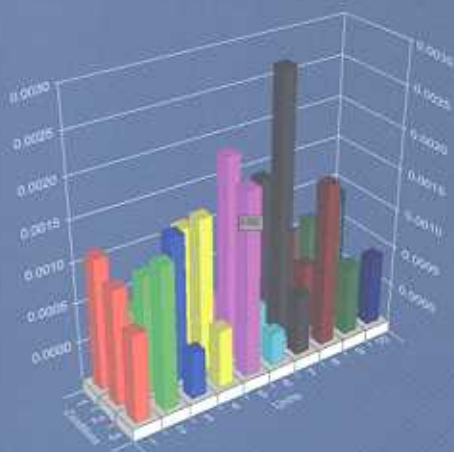
Edge Chip



Auto Tip-Height Check

- Inspects Lead, Leadless & LGA Packages
- High performance 5-side Inspection offers True 3D measurement
- Post Seal Quality Inspection
- Powerful Auto-teach Algorithm
- Inspects Flexible Pad
- Micro Crack detection
- 2D Matrix & OCR Capable
- Sub-pixel defect detection & measurement
- Lead Burr Inspection

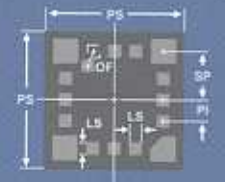
Intelligent GUI enables easy setup for high volume production, as well as allowing wide range of data reports for process control and performance analysis.



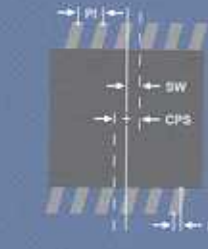
CO = COPLANARITY
PH = PAD HEIGHT



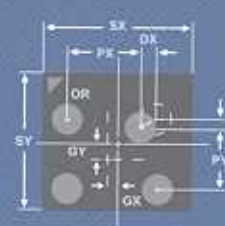
CO = COPLANARITY
SO = STAND OFF



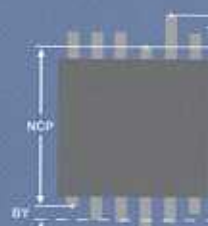
OF = OFFSET
SP = SPAN
PH = PAD HEIGHT
LS = LEAD SIZE
PS = PKG. SIZE



PI = PITCH
BX = BENT X
SW = SWEEP
CPS = CROSS PKG. SWEEP



DX / DY = DISPLACEMENT X / Y
PX / PY = PITCH X / Y
SX / SY = GRID TO PKG. OFFSET X / Y
SX / SY = PKG. SIZE X / Y
OR = ORIENTATION



BY = BENT Y (Per Pin To Nominal)
TW = TWEEZE
NCP = MIN. CROSS PKG.
XCP = MAX. CROSS PKG.

AT268 Specifications

Specifications	Description
Package Type	Leadless: eg QFN, MLF, LGA Lead: eg SOIC, TSSOP
Package Size	2x2 to 12x12 mm
UPH	up to 20,000 depending on package type
Loader / Unloader	Tube Width 5~14 mm Tube Length 300~550 mm Tube stack 30 tubes
Tape & Reel	8~24 mm Tape Width Jumbo Reel capability Auto Tape Cutter
Optional I/O	Metal Magazine Loader Metal Magazine Unloader Bowl Feeder Jedec Tray Loader 2nd Taper
User Interface	Windows platform with GUI Full machine diagnostics capability
Facilities	
Footprint	1.6Lx1.6Wx2.0H m
Weight	1400 kg
AC Power supply	230V
Air Supply	6 bar minimum
Vacuum	850 mbar minimum

Inspection	Details
Top View	Mark / Orientation
5-side (Sides & Bottom)	Package Dimensions Pad Length & Width Pad Pitch Pad Co-planarity Pad Height
3D Lead	Bent Co-planarity Pitch Stand-off Tip to Tip
In-Pocket	Device present Mark Orientation Empty Pocket Out of Pocket
Post Seal	Sealing Quality Part Present Orientation
PVI	Chip Void Crack Mold Flash Scratch

Layout

