



TRATUS

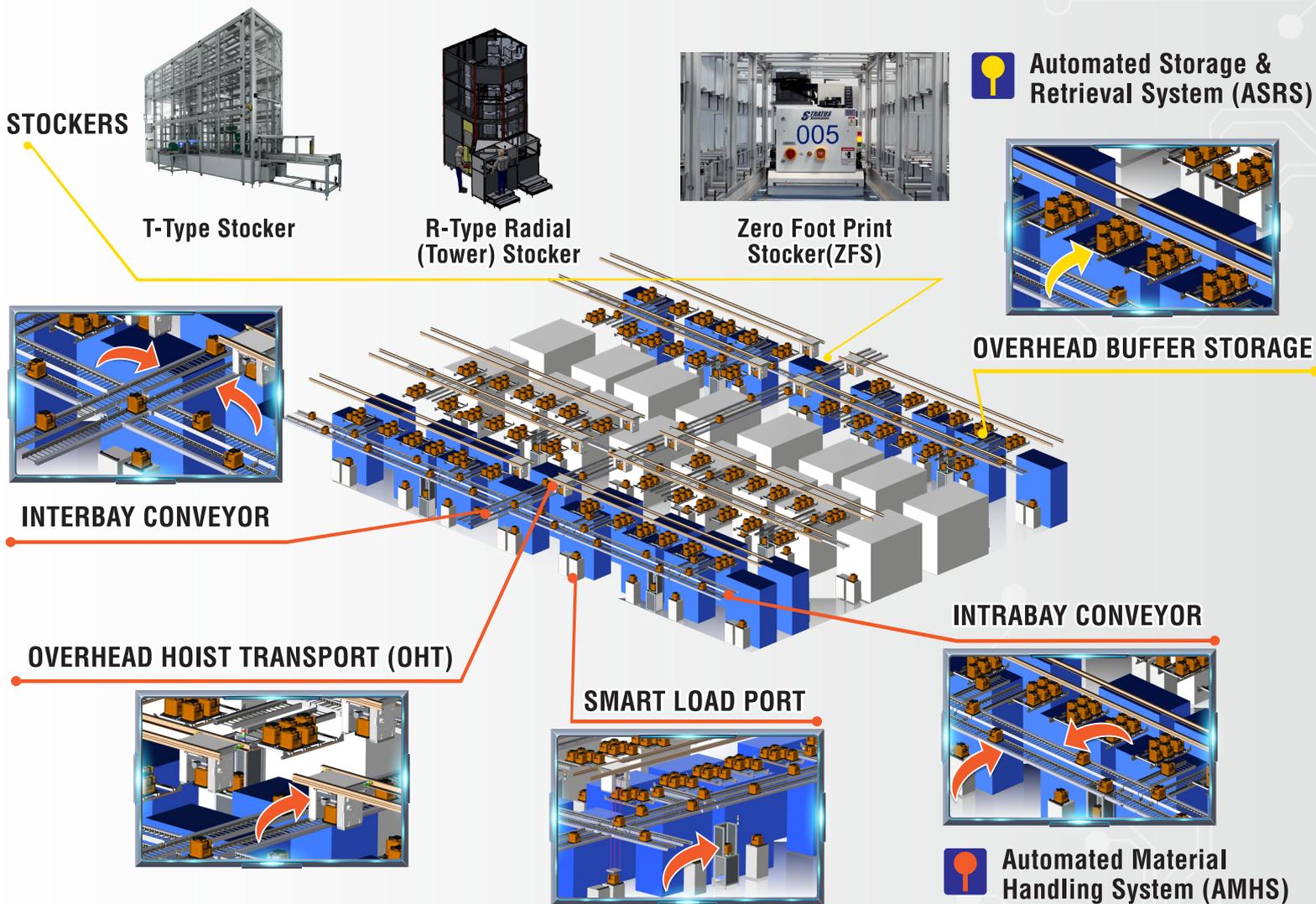
Automation

“Twice the throughput
for half the cost”

2026

HYBRID AUTOMATED MATERIAL HANDLING SYSTEM (AMHS)

i A combination of multiple material handling technologies designed to optimize the transportation of wafers, components or products in high-tech manufacturing environments such as semiconductor fabs.



AMHS SOFTWARE CONTROL

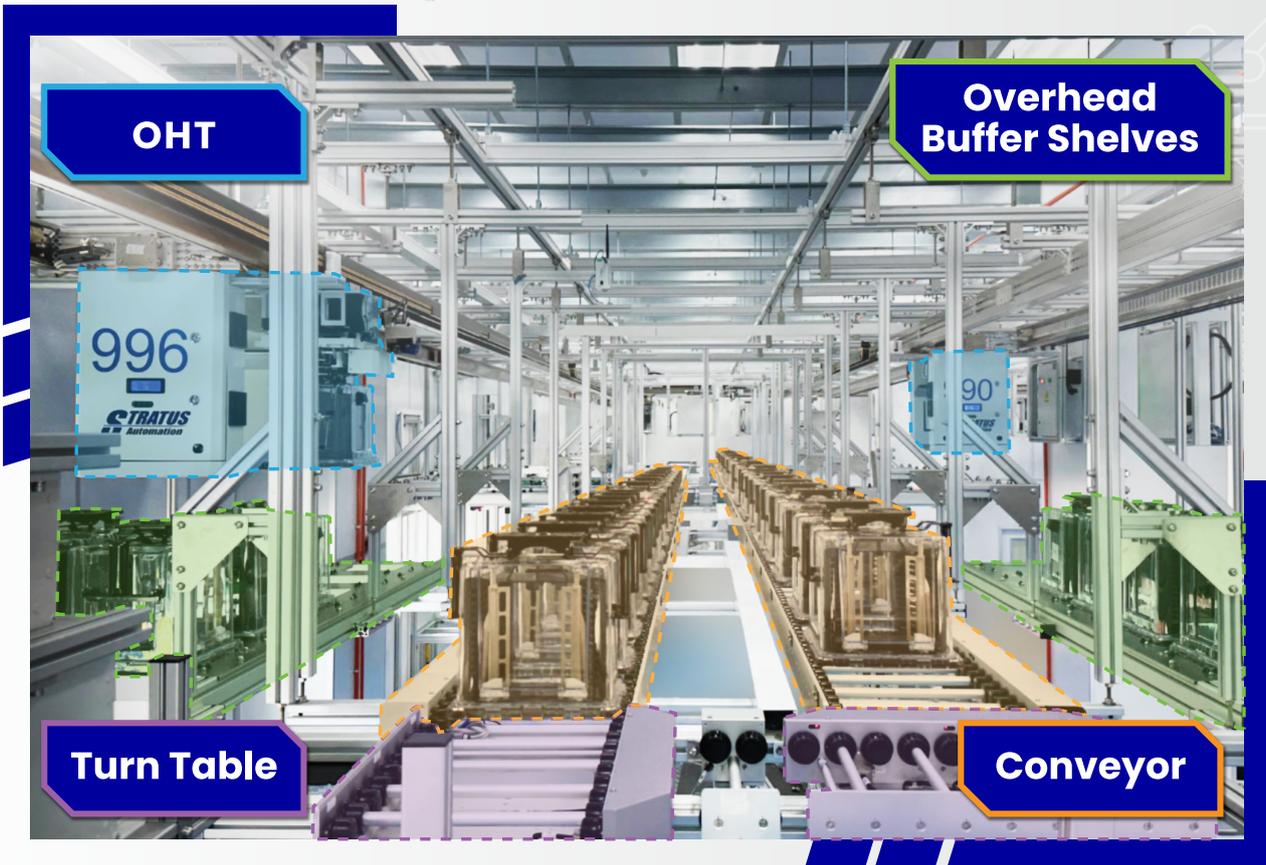
IntelliControl (MCS)

IntelliMove (TCS)

IntelliStock (Stocker Control)

HYBRID AMHS

Automated Material Handling System



AMHS PRODUCT OVERVIEW

Transport System



**Overhead Hoist
Transport (OHT)**



Conveyor



Turn Table



IO Lifter



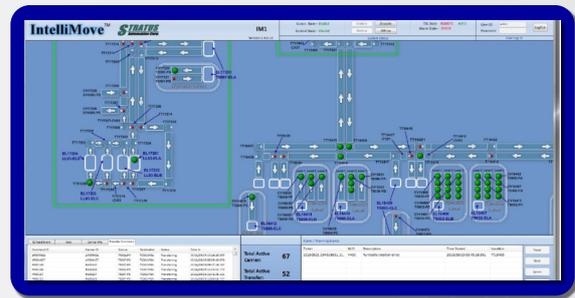
Long Lifter

AMHS PRODUCT OVERVIEW

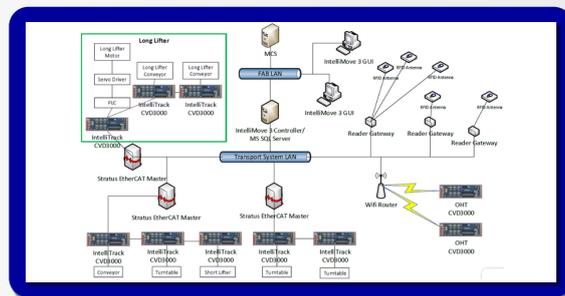
AMHS Software



Material Control System (MCS)



IntelliMove



IntelliStock

Automated Storage & Retrieval System (ASRS)



T-Type Stocker



R-Type Radial
(Tower) Stocker



Zero Footprint Stocker (ZFS)

CONVEYOR



OVERALL WEIGHT (kg)
Approx. 4.5kg/Segment



MAXIMUM TRAVEL SPEED
0.3ms⁻¹ to 0.5ms⁻¹
(Depending On The Carrier Type)



THROUGHPUT
600 Box/Hour



ACCELERATION
1ms⁻²



OPERATING TEMPERATURE & AMBIENT HUMIDITY
22°C ± 2°C
45% ± 5% RH



STRUCTURAL DESIGN LOAD LIMIT
Zone 4 Seismic Load (0.4G)



MAXIMUM LOAD PER SEGMENT
<12kg



CARRIER INTERFACE MATERIAL
Polyurethane



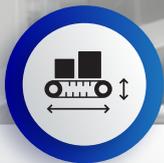
CLEANLINESS
Class 10/100 Std.
(Fed Std 209E)



NOISE LEVEL
<80dB



OVERALL VIBRATION
<1.0G



PRODUCT

Type of Cassette / Carrier
SMIF POD, HA200, FOUP

Dimension & Unit Weight
Subject to Carrier Type



DRIVING SYSTEM

DRIVE SYSTEM
Belt Driven Stepper Motor

BELT TYPE
Polyurethane Flat Belt



ELECTRICAL

OPERATING VOLTAGE
DC 36V

POWER CONSUMPTION (W)
Running - 15W / 500mm
Idling - 2.1W



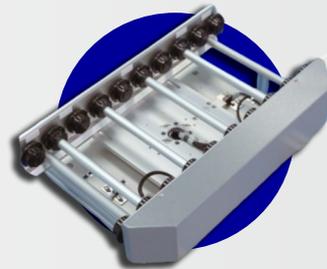
CONTROLLER & COMMUNICATION

CONTROLLER CARD
Stratus CVD Card

SOFTWARE
Stratus IntelMove



TURN TABLE



GENERAL SPECIFICATIONS



**CASSETTE/
CARRIER TYPE**
SMIF



DIMENSION
Subject to carrier type



WEIGHT
Subject to carrier



**CASSETTE
INTERFACE MATERIAL**
Polyurethane



TURNING ANGLE
0° to 270°



THROUGHPUT
300 Box/Hour



MAX TURNING SPEED
1.5 rads⁻¹



VIBRATION
<1.0G



CLEANLINESS
Class 100 Std.
(Fed Std. 209E)

OHT



FOUP



FOUP



MEDIA HANDLED TYPE
FOUP



GRIPPER GRIPPING INTERFACE
SEMI E-47 top flange



SPEED
X-axis: 2000mms⁻¹
Y-axis: 500mms⁻¹
Z-axis
Standard: 1200mms⁻¹
Orbitron: 800mms⁻¹



DIMENSION
W: 985mm
L: 1030mm
H: 745mm



WEIGHT
Approx. 110kg



ROTATION ANGLE
Standard: ± 10°
Orbitron: 270° (±10°)



RATED LOAD
15kg



VIBRATION
<1.0G



CLEANLINESS
Class 100
(Fed Std. 209E)

SMIF



MEDIA HANDLED TYPE
SMIF



GRIPPER GRIPPING INTERFACE
SEMI E-47 top flange
SMIF E-47 pod handle



SPEED
X-axis: 2000mms⁻¹
Y-axis: 500mms⁻¹
Z-axis: 1500mms⁻¹



DIMENSION
W: 985mm
L: 1030mm
H: Standard: 700mm
Orbitron: 715mm



WEIGHT
Approx. 100kg



ROTATION ANGLE
Standard: ± 10°
Orbitron: 280° (±10°)



RATED LOAD
10kg



VIBRATION
<1.0G



CLEANLINESS
Class 100
(Fed Std. 209E)



SMIF



LEAD FRAME MAGAZINE



LEAD FRAME MAGAZINE



MEDIA HANDLED TYPE
Lead Frame Magazine



GRIPPER GRIPPING INTERFACE
SEMI E-47 top flange
AMR Hook Type
Hole Type



SPEED
X-axis: 2000mms⁻¹
Y-axis: 500mms⁻¹
Z-axis: 1500mms⁻¹



DIMENSION
W: 985mm
L: 1030mm
H: Standard: 700mm
Orbitron: 715mm



WEIGHT
Approx. 100kg



ROTATION ANGLE
Standard: ± 10°
Orbitron: 280° (±10°)



RATED LOAD
10kg



VIBRATION
<1.0G



CLEANLINESS
Class 100
(Fed Std. 209E)

CARRIERS SUPPORTED

Front End



FOUP



SMIF



Reticle Pod



HA200



Open Cassette



Panel FOUP

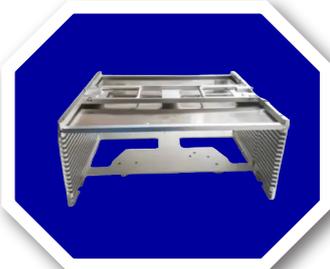


Wafer Ring Cassette

Back End



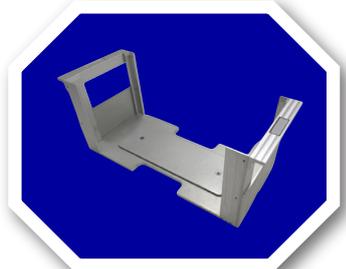
Std. Magazine



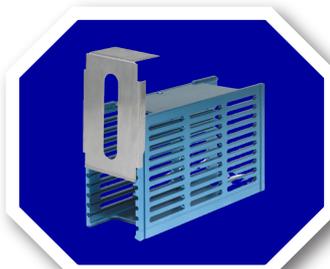
Slot Magazine



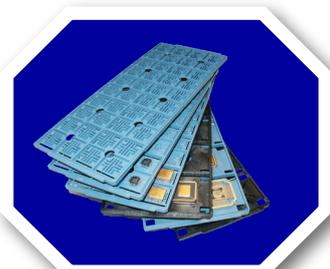
Boat Magazine



Tray



Lead Frame Carrier



JEDEC Tray



Tape And Reel

LONG LIFTER



01. CASSETTE / CARRIER TYPE

- SMIF POD
- HA200
- FOUP

02. WEIGHT

1200kg - 1205kg



03. DIMENSION

Subject to carrier type

04. PAYLOAD

60kg



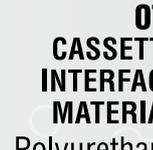
05. VIBRATION

<1.0G



06. CLEANLINESS

Class 100 Std.
(Fed Std 209E)



07. CASSETTE INTERFACE MATERIAL

Polyurethane



08. LIFTING STROKE

6980mm



09. NOISE LEVEL

65dB - 68dB



10. CYCLE / HOUR

Average move time <20s

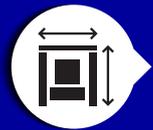


01. CASSETTE / CARRIER TYPE

- SMIF POD
- HA200
- FOUP

02. WEIGHT

300kg - 350kg



03. DIMENSION

Subject to carrier type

04. PAYLOAD

15kg



05. VIBRATION

<1.0G



06. CLEANLINESS

Class 100 Std.
(Fed Std 209E)



07. CASSETTE INTERFACE MATERIAL

Polyurethane



08. LIFTING STROKE

2800mm



09. NOISE LEVEL

65dB - 68dB



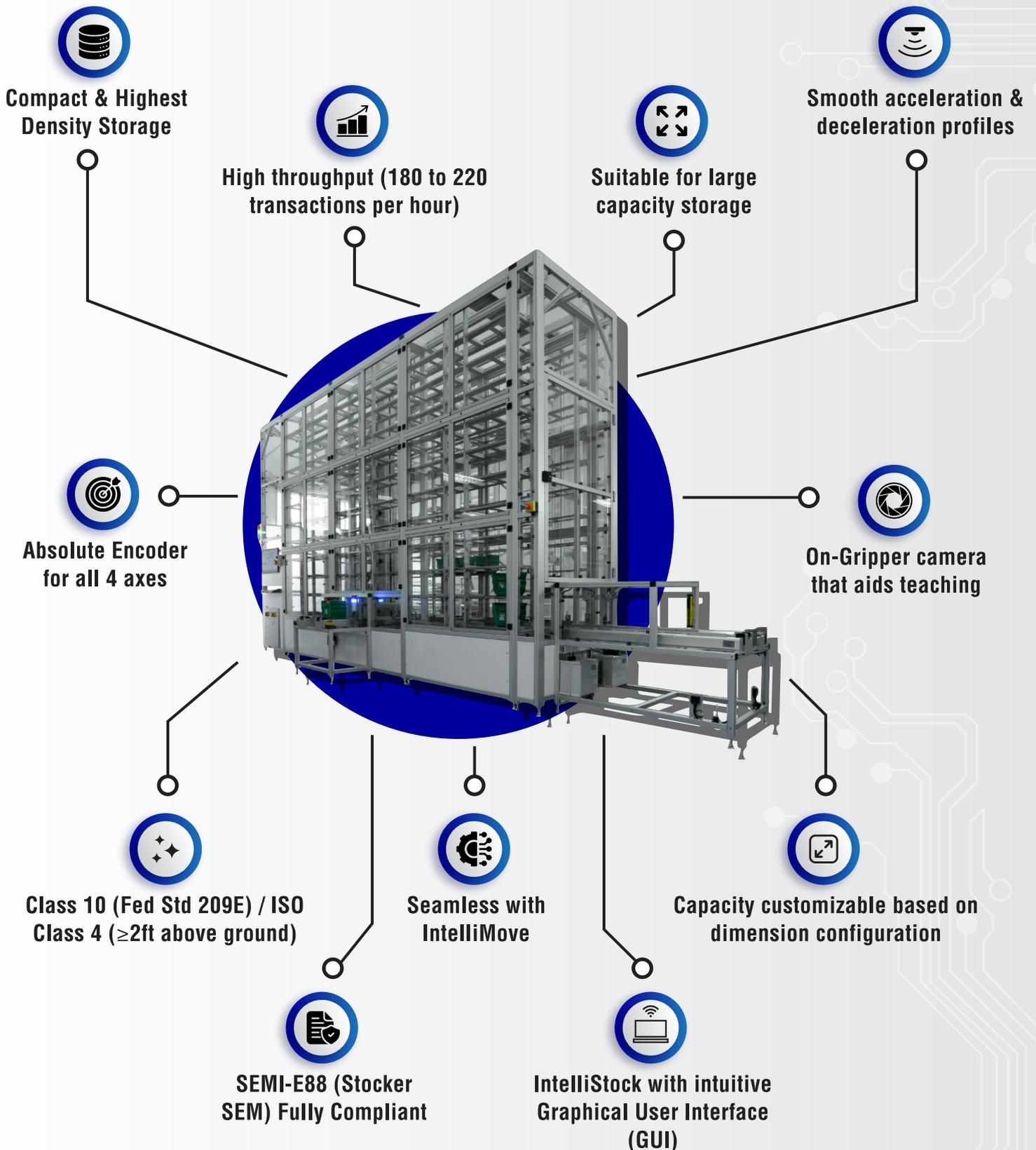
10. CYCLE / HOUR

Average move time <10s

IO LIFTER



T-TYPE STOCKER



ZERO FOOTPRINT STOCKER (ZFS)



Multi-Layer High Capacity – Up to 4 layers (for 200mm wafer box) and unlimited (Full Bay) length



Typical capacity of 200 to 300 boxes/bay (24M Bay length)



Light Weight suitable for hanging



Suitable as Intra-Bay Near-Tool Buffer



Easy interface with Conveyor, OHT or Lifter



Fast recovery from EMO due to Absolute Encoder on X-Axis



Uses Wireless Power Transmission (WPT) System



Suitable for overhead storage

SMART LOAD PORT



CARRIER TYPE

SMIF, HA200, FOUP



PAYLOAD

Approx. 10kg (SMIF Pod)/Time



CLEANLINESS

Class 100 Std. (Fed Std 209E)



VIBRATION

<1.0G



DIMENSION

Subject to carrier type



WEIGHT

Approx. 70kg



Throughput

1 Box/Time



CASSETTE INTERFACE

ESD Black Delrin
Loading Base and Divider



IO PORT DOCKING

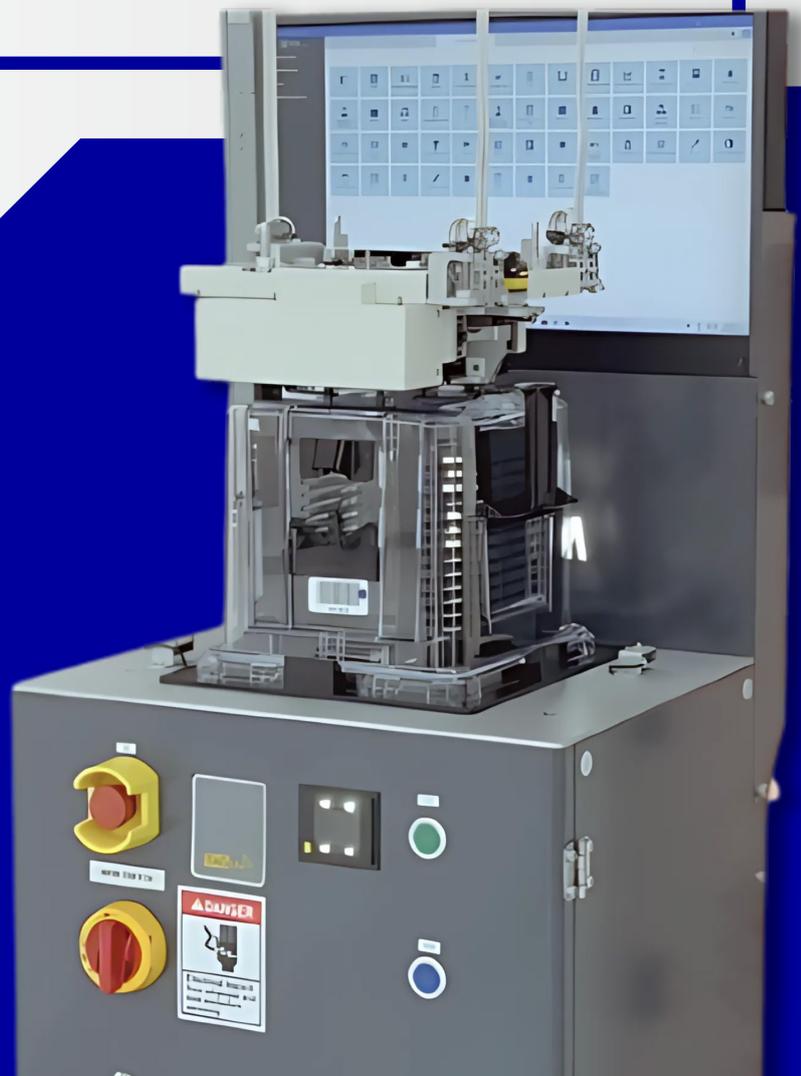
Human or OHTV



| SMIF

| FOUP

| HA200





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