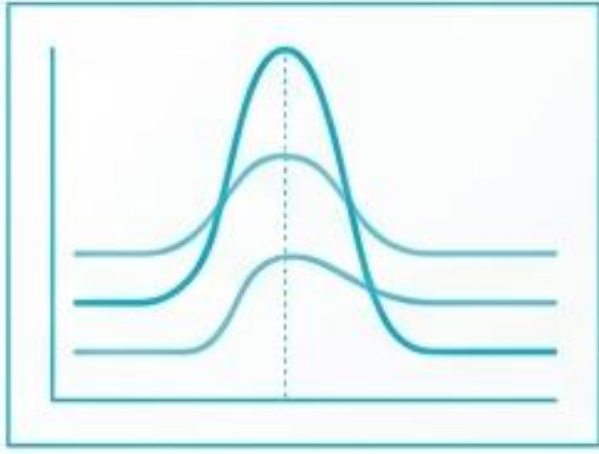


A decorative graphic consisting of a thick, curved line that starts thin on the left and gradually thickens as it curves upwards to the right, transitioning from a teal color to a bright green.

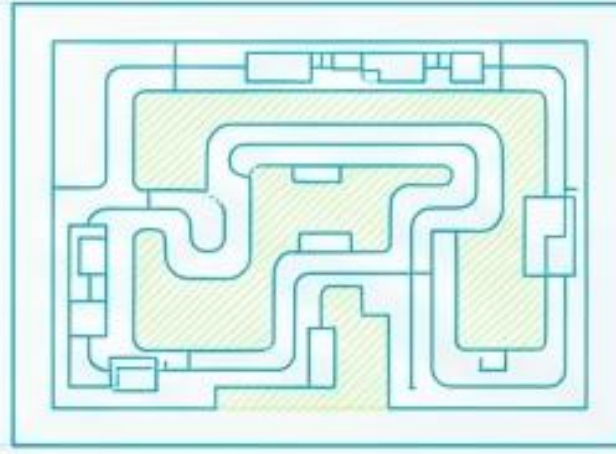
# Next-Generation PCB Board Handling Systems

Engineering seamless automation and maximum throughput for the modern EMS.



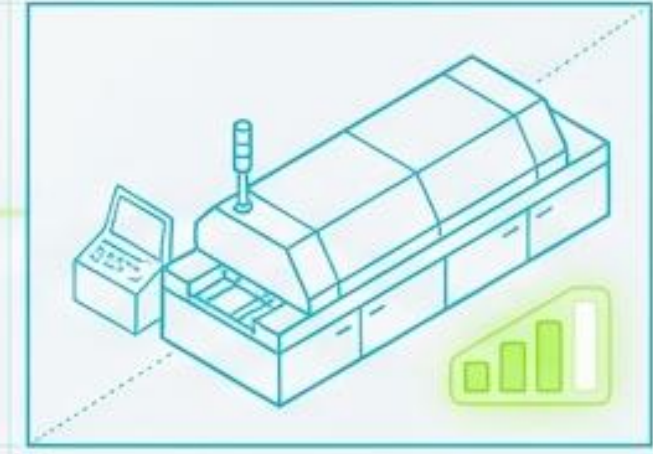
## The Friction: Line Imbalance

Uneven machine speeds creating bottlenecks, directly reducing per-unit yield.



## The Footprint: Spatial Inefficiency

Linear, unoptimized layouts resulting in wasted, high-value factory floor space.



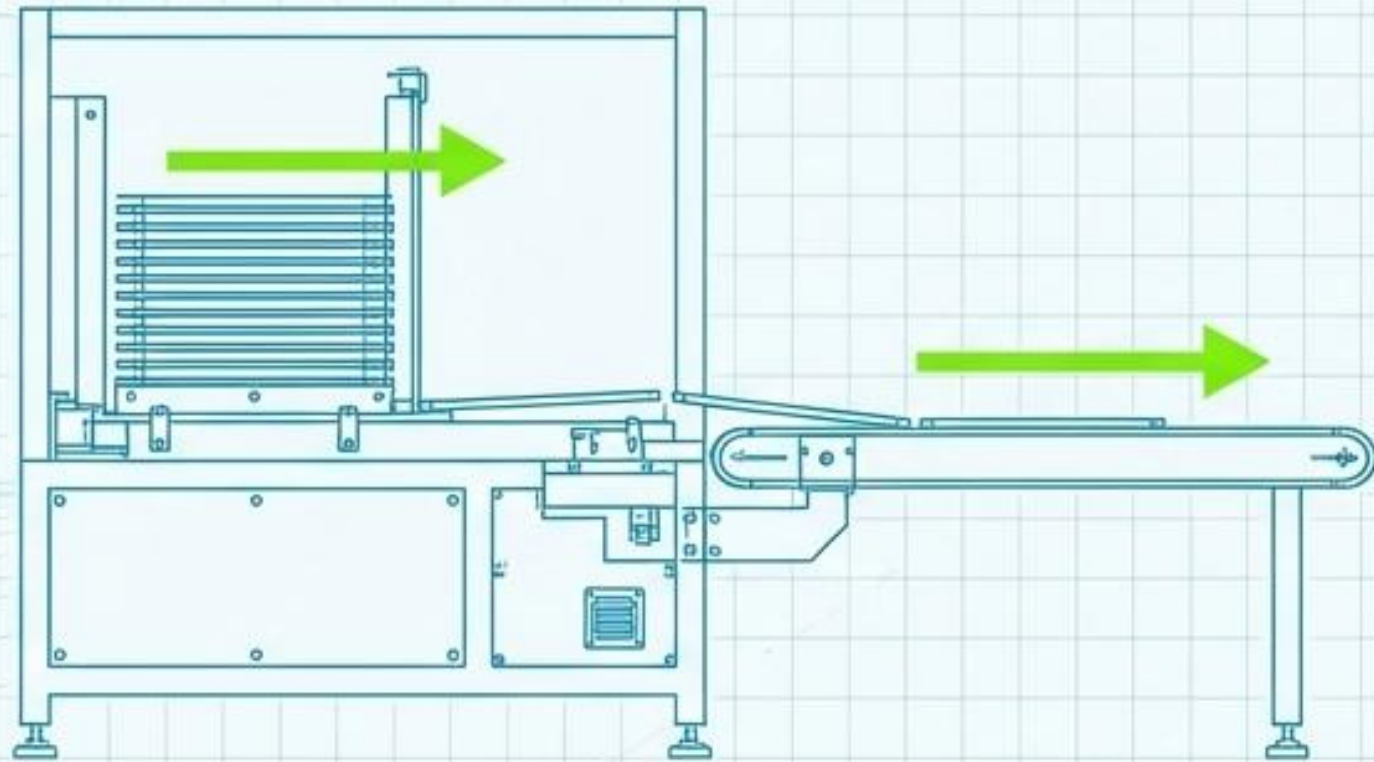
## The Capital: Capital Redundancy

Underutilized, energy-heavy reflow ovens artificially inflating operational costs.



# Solving Line Balance: Spatial Intelligence

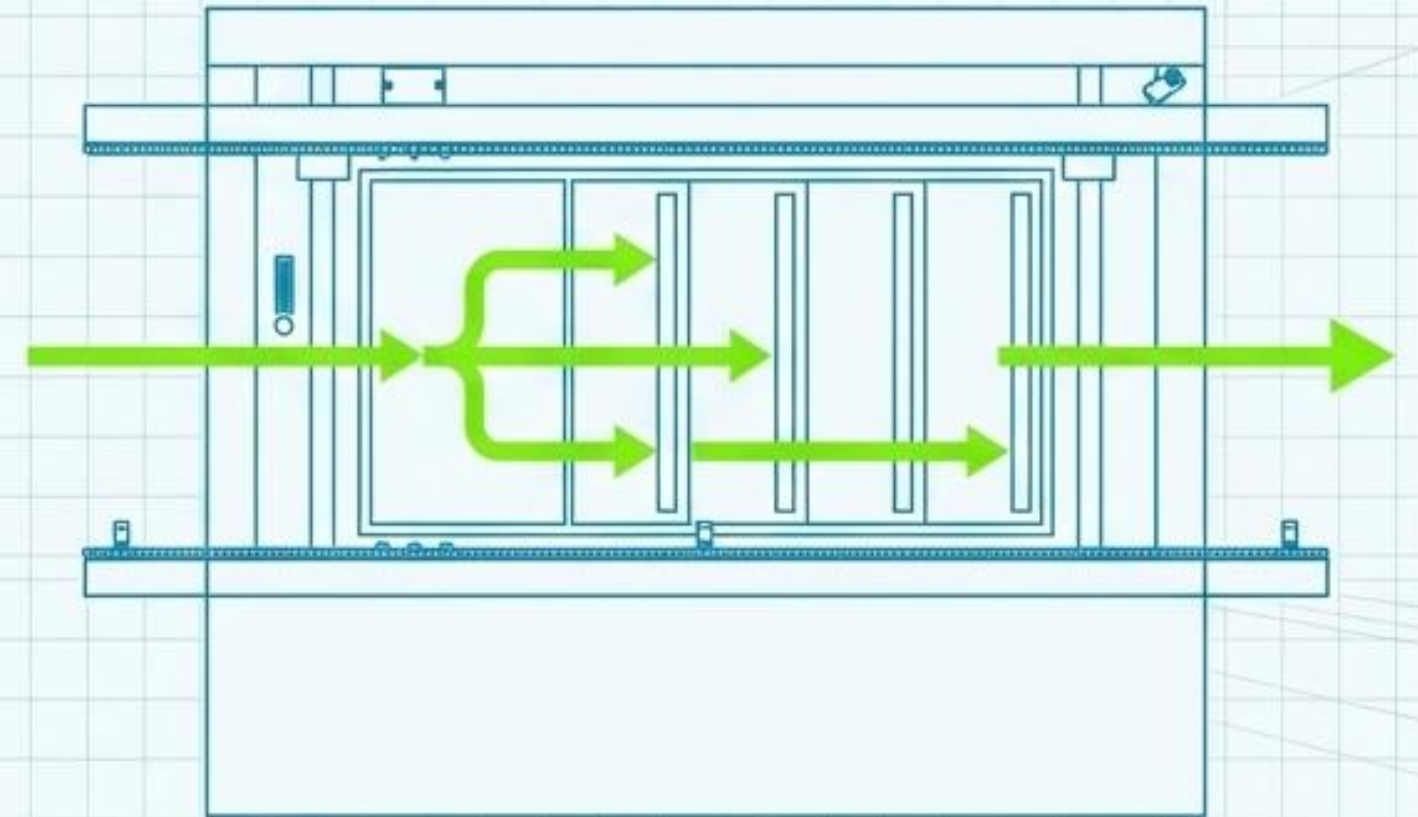
## L-Type Loader/Unloader



**Mechanism:** Pushes PCBs out of a magazine directly onto the downstream conveyor.

**Impact:** Drastically saves factory floor space compared to linear loading. Allows magazines to be placed at the beginning of the same line or another line.

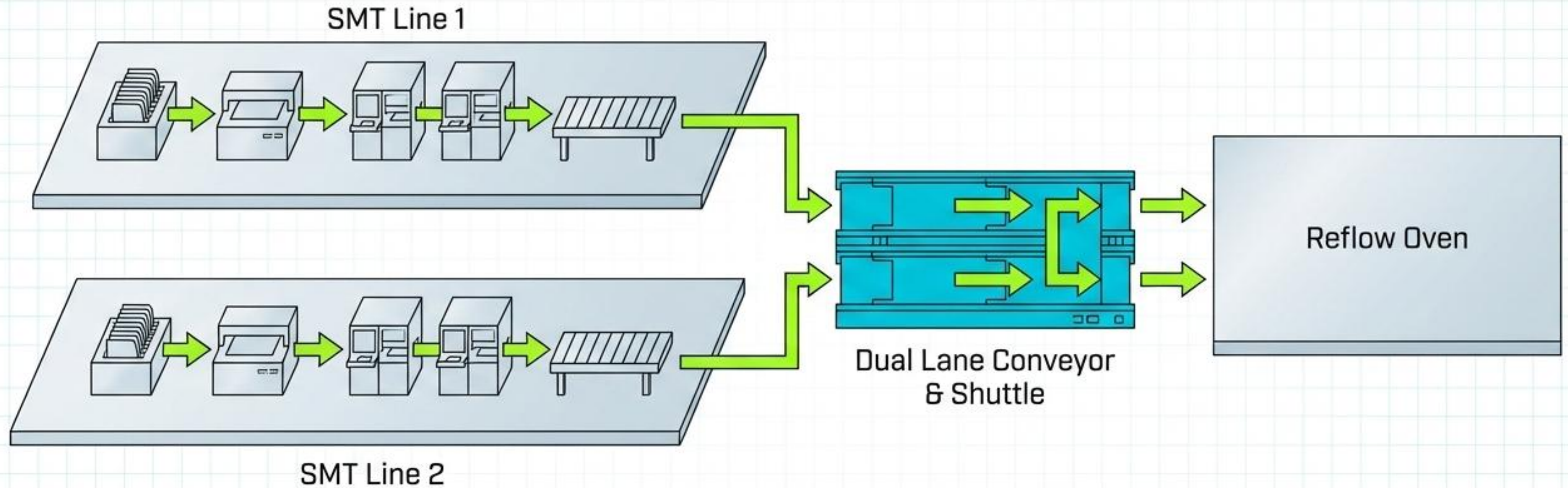
## Smart PCB Buffering



**Mechanism:** Acts as the heartbeat regulator between disparate machine speeds.

**Impact:** Solves line balancing issues, receives NG/Memory boards, and maximizes per-unit yield.

# Layout Optimization: The 2-to-1 Equation

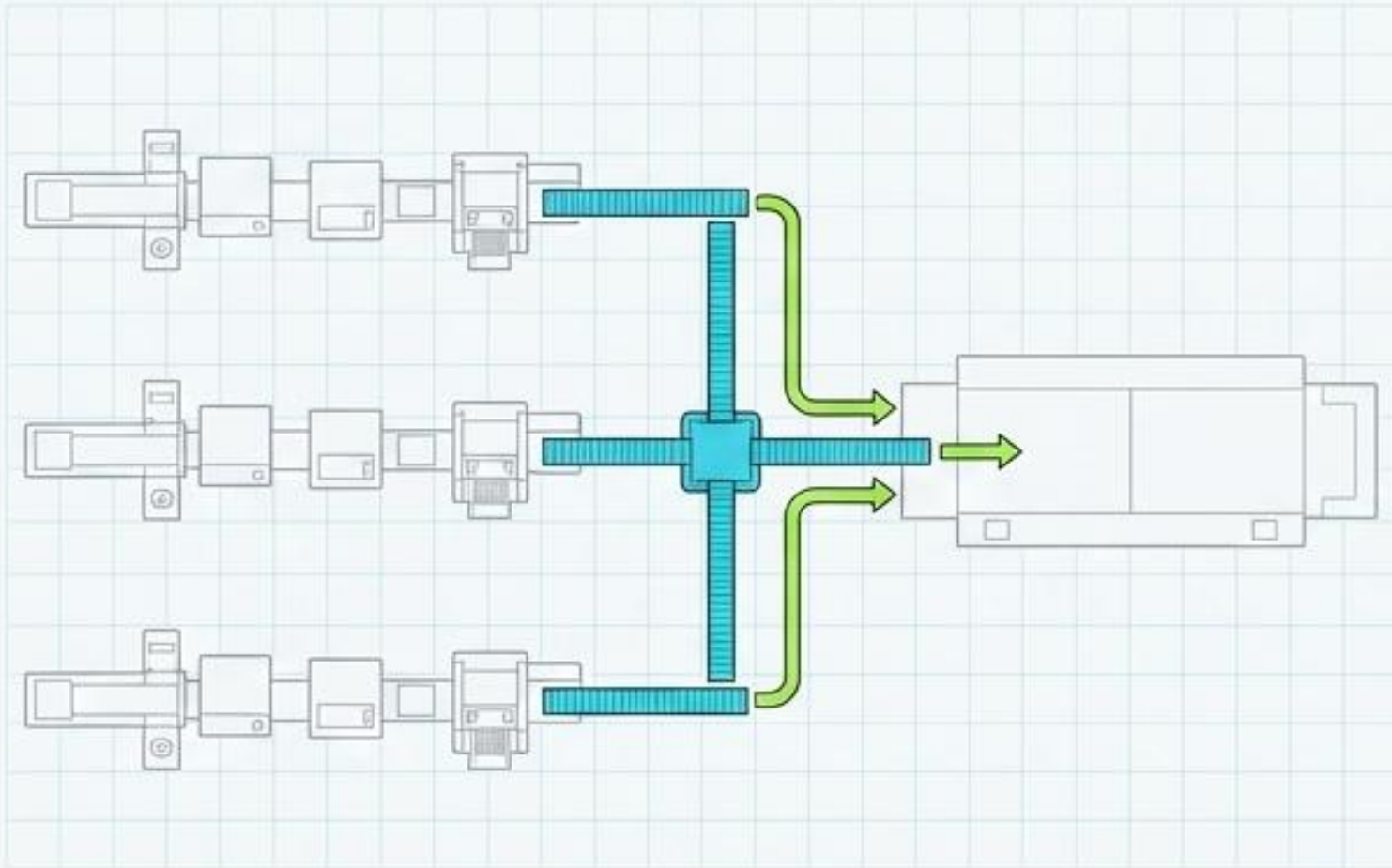


## The Blueprint: The Output:

2 SMT Lines + 1 PCB Shuttle = 1 Reflow Oven.

- Eliminates the capital expenditure of purchasing a second reflow oven.
- Drastically reduces ongoing factory power consumption.
- Maximizes the utilization rate of a single oven's footprint.

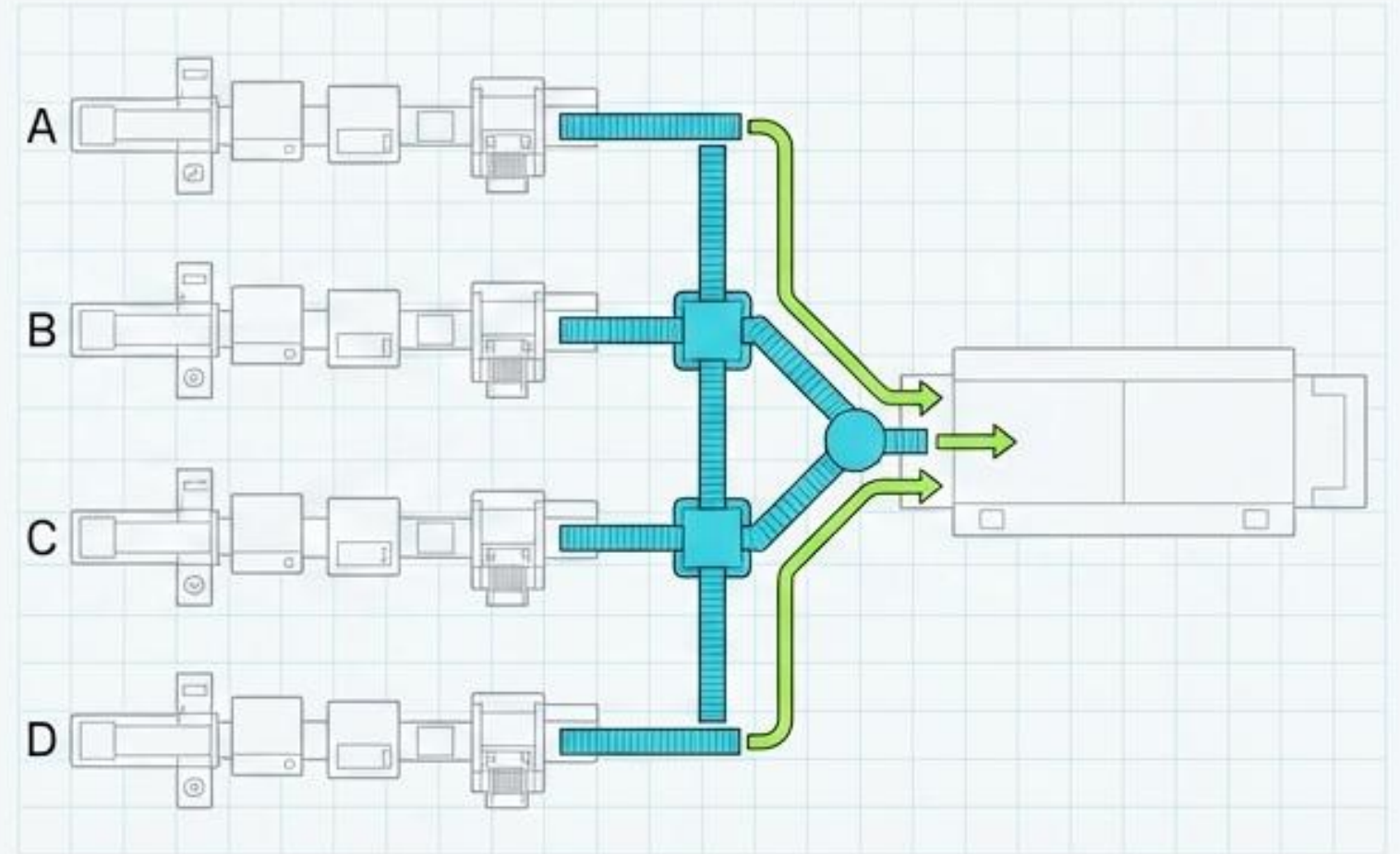
# Extreme Scaling: 3x & 4x Multiplier Architectures



## 3 SMT Lines to 1 Oven

Demonstrates complex multi-lane routing to feed three distinct print/mount lines into a single reflow system.

**Impact:** Saving 2 Ovens + immense power consumption.



## 4 SMT Lines to 1 Oven

The ultimate capacity layout seamlessly shuttled to a central oven.

**Impact:** Saving 3 Ovens + maximizing spatial density.

# SLD/SULD Series: Automated Loading Systems



Model	Dimension (mm)	PCB Size (mm)	Weight
SLD250L	1500×870×1200	Up to 350x250	250KG
SLD330L	1860×950×1200	Up to 460x330	300KG
SLD390L	2100×1000×1200	Up to 535x390	340KG
SLD400B	1646×726×1250	Up to 350x250	200KG
SULD400B	2440×726×1250	Up to 350x250	240KG

## Universal Features:

- PLC Program Control
- Built-in SMEMA compatibility
- Ball screw driven positioning
- User-friendly LED membrane control panel

Power: 220V, 180W | Air Supply: 5-7kg/cm<sup>2</sup>

# S & SH Series: Precision Transport Nodes

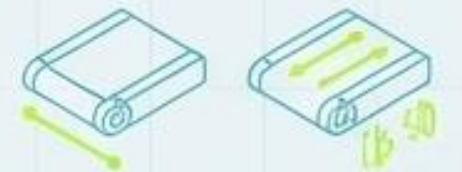


## Universal Specs:

- ✓ Anti-static flat belts (3mm)
- ✓ Mechanical stoppers
- ✓ Smooth screw width adjustment
- ✓ SMEMA communication
- ✓ Motorized/automatic options available

### S-350C / S-460C:

500mm Length | No Lighting / With Lighting



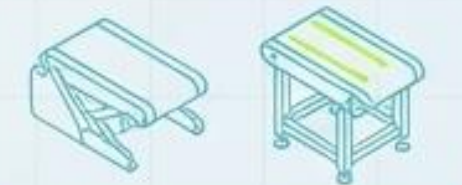
### S-350D / S-460D:

1000/1200mm Length | No Lighting / With Lighting



### SH-407C / SH-460D:

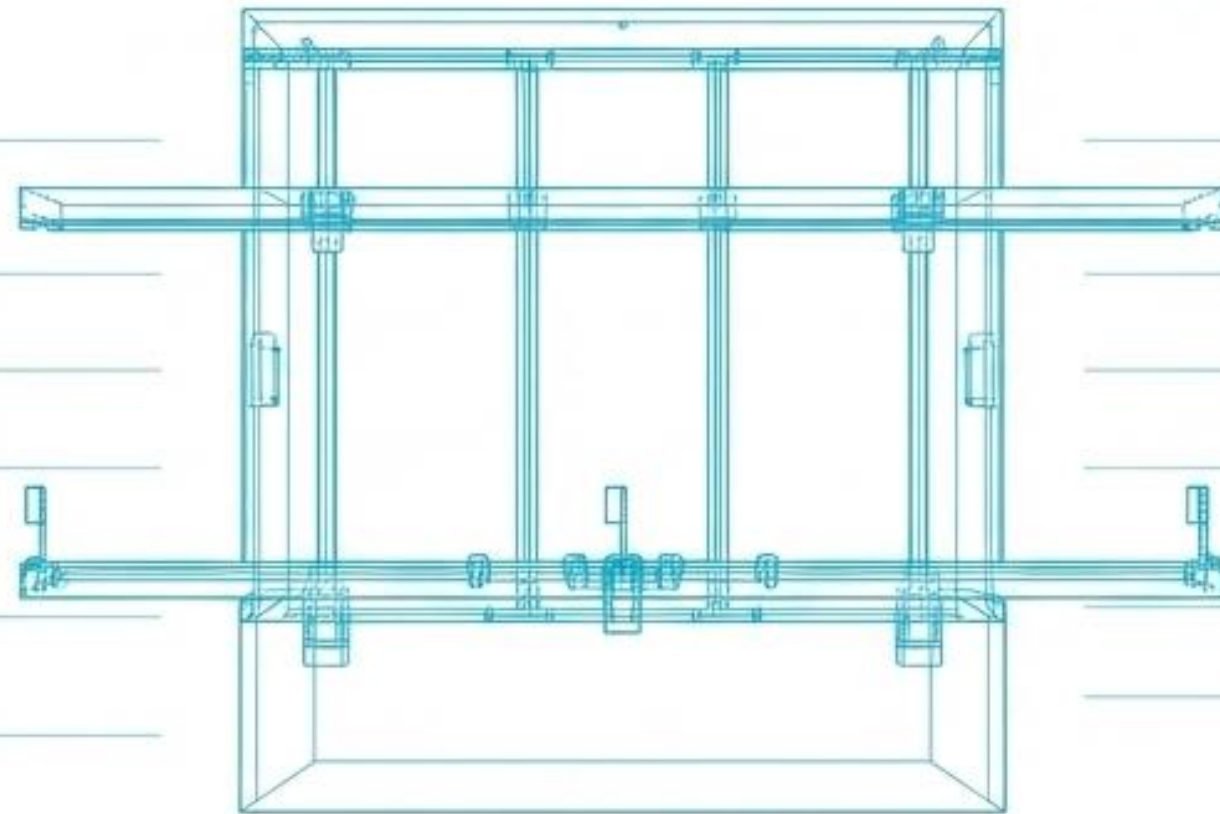
High-clearance heavy-duty linkage.



# SBM Series: Smart Buffering Architecture

## System Logic (SBM390):

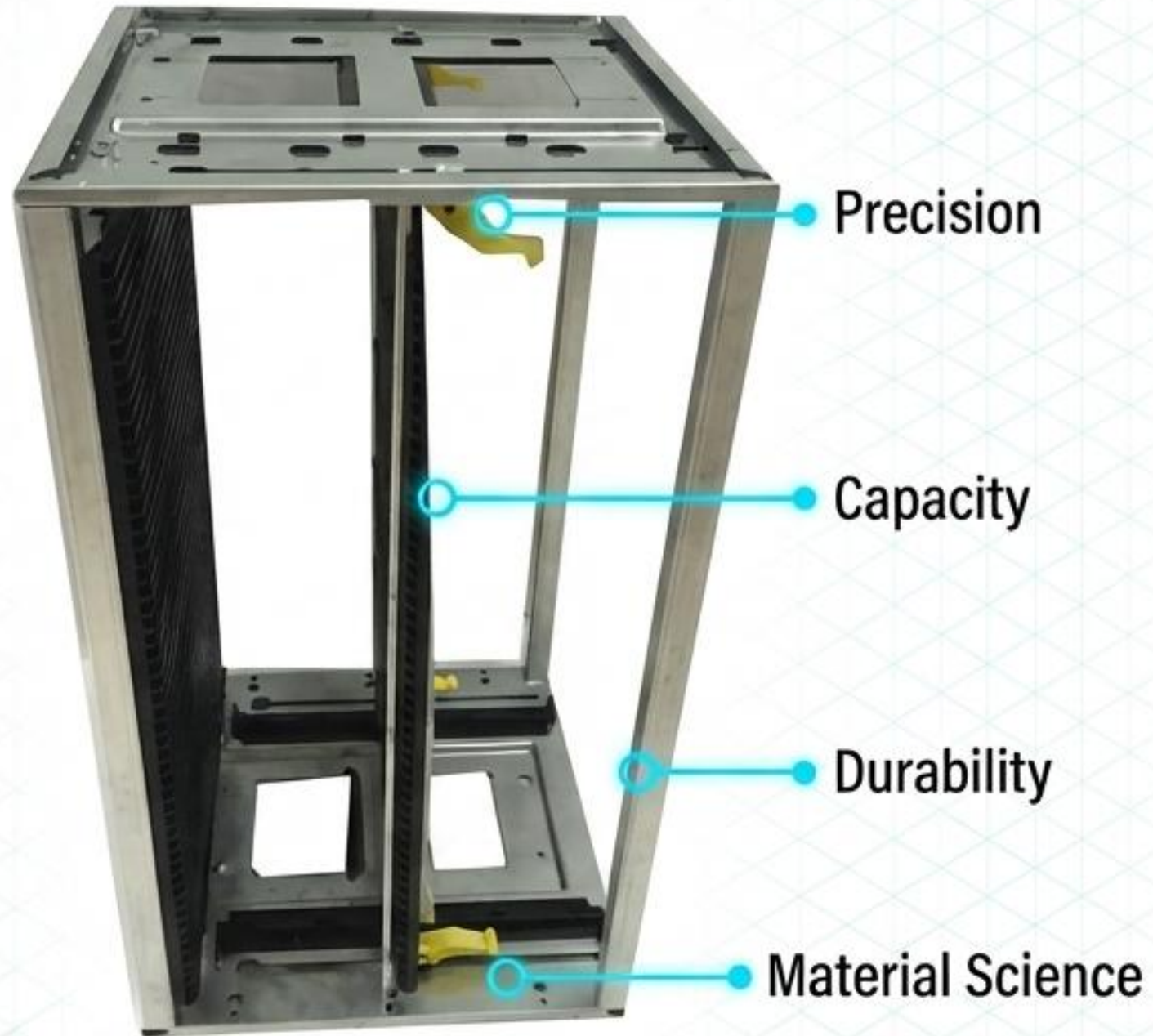
- Designed for receiving NG boards or Memory boards.
- Capacity: 1 Upper Magazine, 2 Lower Magazines.



## Technical Parameters:

- Indexing Pitch: 10, 20, 30, 40mm (Selective).
- Transport Height: 900±20mm.
- Air Supply: 4-6bar, 15ltr/Min.
- Power Consumption: Max 250VA.

# Foundation: SMT ESD Magazine Racks



## Core Specifications

### Capacity:

50 pcs of PCB plates (Max size: 350x250mm).

### Precision:

Screw and gear adjustment for exact width calibration.

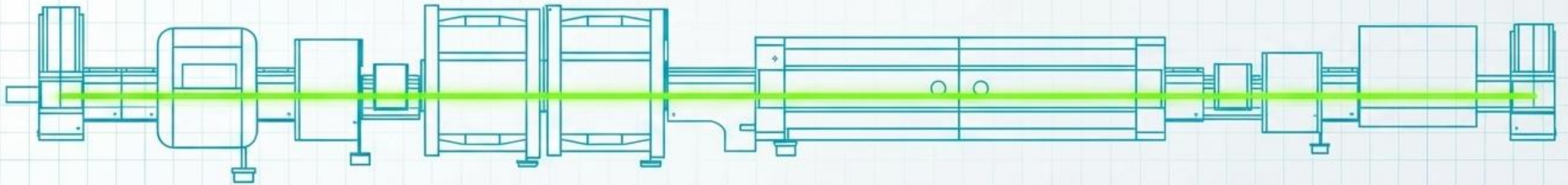
### Durability:

Top/bottom boards made of 1.2mm thickness metal. Conductive plastic or stainless metal bases.

### Material Science:

Surface resistance of  $10^4 \sim 10^6$  Ohm. Available in Common type (60°C) and Heat-Resistant types (120°C, 160~200°C).

# The Connected Line Synthesis



From the SLD Loaders to the SBM Buffers, every single node links perfectly via SMEMA protocols. No isolated machines. No manual bottlenecks. One unified, automated factory heartbeat engineered to maximize ROI.



**Engineering the Future of EMS.**

[www.smthelp.com](http://www.smthelp.com) | [info@smthelp.com](mailto:info@smthelp.com)