

SD1 Tray Denester

UK/Europe Specification Sheet



Standard Features Include:

- **Precision Automated Tray Handling:** Advanced servo-driven mechanism picks individual trays from nested stacks and delivers them with consistent placement accuracy to any existing conveyor system.
- **Smart Production Line Integration:** Real-time communication with existing production lines via industry-standard protocols, featuring automatic start/stop synchronization and fault detection to prevent tray wastage.
- **Precision Placement Technology:** $\pm 2\text{mm}$ placement accuracy with integrated orientation sensors ensuring 100% correct tray positioning and preventing downstream production issues.

- **Variable Speed Control:** Infinitely adjustable speed from 10-80 packs per minute with digital speed control and memory presets for different production requirements.
 - **100% Electric Drive System:** Eliminates compressed air dependency, reducing operating costs by up to 30% while achieving 99.9% uptime reliability through elimination of pneumatic failure points.
 - **Two-Component Modular Architecture:** Universal base unit with interchangeable tray-specific magazines, enabling multi-format production capability on a single platform.
 - **Rapid Changeover System:** Tool-free magazine exchange in under 30 seconds with foolproof 'handed' design preventing incorrect installation and reducing changeover downtime by 85%.
 - **Intuitive Touch Screen Interface:** 7-inch colour HMI with recipe storage, diagnostic displays, and multi-language support for operator-friendly operation.
 - **Industrial-Grade Construction:** Stainless steel 316L contact surfaces with IP65 rating for harsh production environments and easy washdown procedures.
 - **CE Marked Compliance:** Fully compliant with European machinery directives and food safety regulations.
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Other Advantages:

- **Cost-Effective Operation:** Low energy consumption and minimal maintenance requirements deliver rapid ROI, typically within 12-18 months.
- **Industry-Leading Reliability:** 99.9% uptime with predictive maintenance alerts and remote diagnostic capabilities.
- **Space-Efficient Footprint:** Compact 1.2m² footprint accommodates tray sizes from 100mm to 400mm without compromising performance.
- **Minimal Maintenance Design:** Self-lubricating components and wear-resistant materials ensure maintenance intervals of 6+ months with simple visual inspection protocols.
- **Fail-Safe Magazine Design:** Asymmetric 'handed' magazine connectors with mechanical interlocks prevent incorrect installation, eliminating operator error and potential equipment damage.

- **Hygienic Design:** Tool-free disassembly with smooth surfaces and minimal crevices, meeting food safety standards with CIP (Clean-in-Place) compatibility.
 - **Energy Efficient:** Low power consumption of <2kW during operation.
 - **Remote Monitoring Ready:** Optional IoT connectivity for real-time performance monitoring and predictive maintenance.
 - **Flexible Integration:** Compatible with all major conveyor manufacturers and production line configurations.
 - **Proven Performance:** Over 500 installations worldwide with documented reliability data.
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