

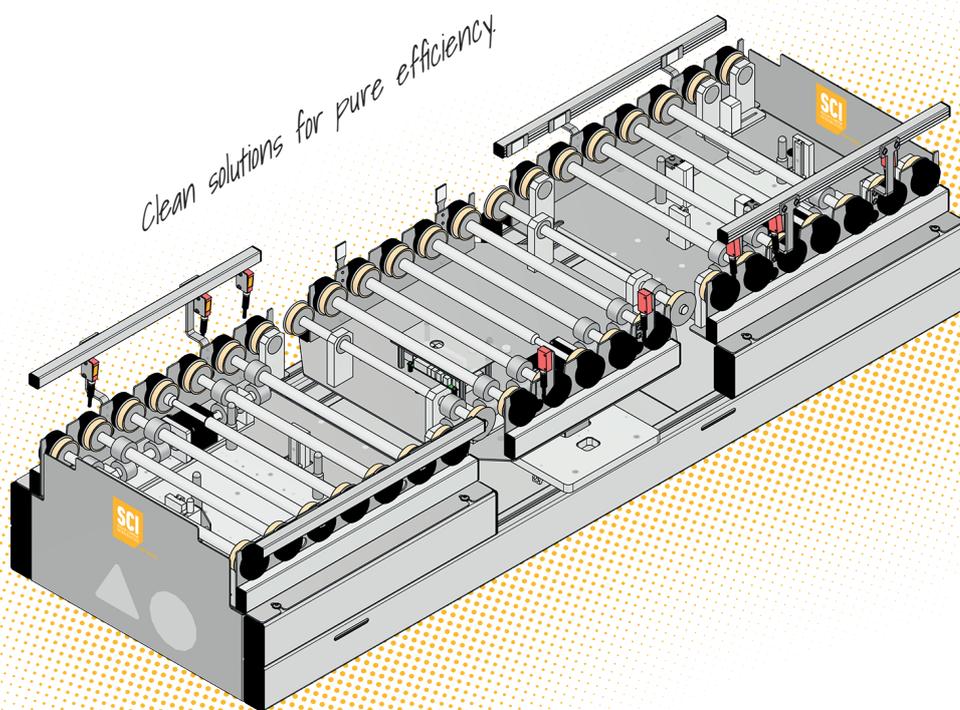
SCI

SCHILLER CLEANROOM
INTRALOGISTICS

clean moving.

TRANSPORT SYSTEMS

The reliable cleanroom transfer



DATASHEET · EN · 231128 · TRANSPORT SYSTEMS · 1/5

Technical data and illustrations not binding for deliveries. Subject to change without notice.

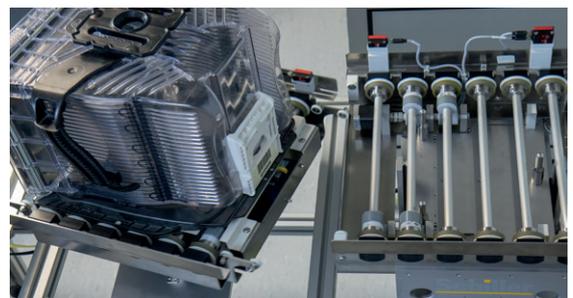
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Member of

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AUTOMATION

System Specifications

| Technical Data | |
|--------------------------|---|
| Compatible Carrier Types | FOUP / FOSB / HA 200 / other |
| ISO Class (ISO14644) | 3 |
| Length | Variable |
| Width | 53 cm (300 mm) and 43 cm (200 mm) |
| Height | Project defined |
| Average delivery rate | depends on project and carrier types |
| Interfaces | SEMI-E82 MCS / SEMI-E84 Transfer |
| Control System | Siemens TIA PLC |
| Inventory Management | SHostPro - PRC |
| Speed 300 mm | $V_{max} = 1,0 \text{ m/s}$ $a_{max} = 0,5 \text{ m/s}^2$ * |
| Speed 200 mm | $V_{max} = 0,5 \text{ m/s}$ $a_{max} = 0,5 \text{ m/s}^2$ * |
| * acceleration | |



Application

Schillers Cleanroom Transport System is designed to transport wafer carriers, equipment, and/or materials between different stages of the semiconductor manufacturing process efficiently and with extreme care.

Highly automated, with sensors, controls, and software ensure precise movement, positioning, and synchronization of materials and wafers throughout the fab. This automation minimizes the risk of human error and maintains a controlled and clean manufacturing environment.

The design of the conveyor system can vary depending on the specific manufacturing process and the layout of the facility.

The core is the Schiller Cleanroom Conveyor, consisting of clean-room-tested components and the innovative Magnetic Drive technology for contactless and frictionless power transmission to the rollers.

Features

| Features | |
|--|---|
| Magnetic drive technology | contact-free, friction-free power transmission to the rollers |
| Easy roller replacement | Easy access for cleaning |
| Stainless steel buffed to < Ra 0,8 surfaces | PU coated wheels = zero static charge |
| One modular element compatible for both 200 and 300 mm carrier types | Low vibration < $\pm 0,5$ g |
| Intrinsically safe design | |

Key Benefits



Configuration and design optimized to customers' requirements.



Maximum uptime



Low cost of ownership



Maintenance free



Vibration free transport

Our conveyor systems are equipped with safety features to prevent accidents and ensure the integrity of the wafers and materials being transported

and offer high availability in a high-performance demanding environment for intralogistics in modern semiconductor factories.

System Configuration Options

| Modular Elements |
|---|
| Straight |
| Rotating table |
| Transfer Elevating table with kinematic coupling |
| Integration of external equipment (CV, AGV, Sorter, Shuttle) |
| System redundancy through cross-functional vehicles (parallel system) |

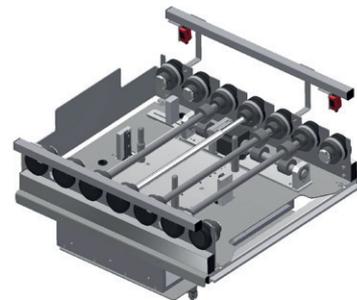
Conveyor



Rotary Table



Lifting Table



Key Benefits

- ★ Complete automation of the workflow
- ★ Improve operational efficiency
- ★ Reduced contamination risk
- ★ Integrated inventory control



Our commitment to Industry 4.0

Our systems support IoT

Interconnected Systems

Data Security

End-to-end visibility

Preventative maintenance software and analytics



Our commitment to the Environment

Energy efficiency

Reduced carbon footprint through our corporate philosophy, using local providers, minimizing packaging, electric cars



MORE INFORMATION

email sci@schiller.de

web www.schiller.de



Website and Video:

Get more information and see how the Transport System works!