

montratec

By Columbus McKinnon

AVS[®]

Monorail Shuttle Conveyors

**montrac[®] Intelligent Material
Handling Solutions**



Benefits of montrac® Monorail Solutions

AVS®

The montrac® monorail system from montratec is the key to managing internal product transport and assembly processes with speed, efficiency, and intelligent motion. With its flexibility and modular design, montrac® seamlessly links production processes between robots and workspaces. It also boosts the automation of complete production lines – from a lot size of one, to high-volume throughput.

The montrac® shuttle system is ideal for maximizing production and reducing cycle times in a wide range of industries, including automotive, plastics, consumer goods, optics, food, medical, and pharmaceutical.

- Modular Design for Easy Reconfiguration
- Low Maintenance & Nearly Zero Downtime
- Cleanroom Compatible Designs
- Low Cost of Ownership
- Shock-Free Transport
- ESD Compatibility
- Energy Efficient





Small Parts & Subassembly

The montrac[®] system offers superior material handling and process sequencing for automotive and aerospace assembly lines. With the shock-free and static dissipative shuttles, delicate parts such as gauge clusters, clutch assemblies, and control panels are transported safely and quickly to the exact place they are needed in the assembly line.

Benefits:

- Flexible & modular layout
- On-board power for on-the-go testing
- Shock-free transport
- Seamless robotics interfacing
- Safe low-voltage power requirements
- Ergonomic accessories for manual assembly applications



ESD-Safe & Shock Free Designs

montrac's® shock-free and static dissipative features make it an ideal transportation system for semiconductor and electronics manufacturing applications. On-board power makes it easy and time-efficient to test components while on the move, and the ESD-safe design means delicate electronics won't be damaged by external particles or static discharge.

Benefits:

- 100% ESD-capable: meets DIN standard EN 61340-5-1 requirements
- Modular design easily scales to evolving production needs
- <1mm positioning accuracy
- Seamless integration with robotics & automated production equipment



Cleanroom Rated Systems

Rated for ISO class 5 and 7 cleanrooms, the montrac® system is an ideal solution for pharmaceutical manufacturing, electronic medical device assembly, and automated medical testing operations. The smooth start-stop capabilities and micron-level accuracy allow the montrac® shuttle to transport open vials and interface with technicians or robotics without risk of product loss or contamination.

Benefits:

- Pneumatic & belt-free design reduces particle production
- Smart speed variation
- Ultra-low profile design
- Individually programmable shuttles for operational flexibility
- Energy-efficient operation
- ISO cleanroom class 5 & 7 rated

A black and white photograph of a factory interior. In the foreground, a montrac system is shown, which is a material handling system consisting of a track and a shuttle. The shuttle is a black, rectangular unit with a red light bar on top. It is positioned on a track that runs horizontally across the frame. The background shows various industrial equipment, including pipes, valves, and structural elements of the factory ceiling.

Durable & Versatile Construction

The montrac® system is built with robust material and is designed for demanding industrial environments. With elevator modules and automated trac switch technology, montrac® can carry materials between multiple floors and through numerous processes. Whether transferring plastic molded parts from an extruder to storage or running products through high dust environments, montrac® offers the versatility and durability needed for industrial manufacturing applications.

Benefits

- Load capacity up to 154 lbs
- Efficient material handling for long runs and multi-floor operations
- Removable shuttles for easy maintenance and no downtime
- Built-in proximity sensors
- Wide range of shuttle sizes
- Small-footprint design

Pallet System Comparison

AVS

| | FlexMove | DualMove | ERT150 | ERT250 | montrac® |
|-----------------------------------|------------|-------------|------------|-------------|---------------------------|
| Long Runs & Multi-Level | ✓ | | | | ✓ |
| Cleanroom Capable | | | ✓ | ✓ | ✓ |
| Pneumatic Free | | | | | ✓ |
| ESD Compatible | | ✓ | ✓ | ✓ | ✓ |
| Light Load | Max 20 lbs | | Max 35 lbs | | Light Models Up to 33 lbs |
| Medium Duty | | Max 100 lbs | | | Max 154 lbs |
| Heavy Duty | | | | Max 250 lbs | |
| Low Voltage Control | | | ✓ | ✓ | ✓ |
| Price Sensitivity | ✓ | ✓ | | | |
| Flexible Configurations | ✓ | | | | ✓ |
| Shock-Free Operation | | | | | ✓ |
| Lower Total Cost of Ownership | | | | | ✓ |
| Zoning & No Pressure Accumulation | | | ✓ | ✓ | ✓ |

Configure Your Custom montrac[®] System

AVS[®]

- ✓ Easy-to-Use Drag and Drop Configurator
- ✓ Instant 3D Models and System Layouts
- ✓ Submit Models for Fast Quote Turnaround

Visit **montratec.de/products/configurator**
to download our free configuration
software.

**Visit our site to find the right
shuttle conveyance solution
for your application!**

- ✓ Fully Customizable Solutions
- ✓ Global Aftermarket Support
- ✓ On-Site Installation



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