



 **SuperTrak™**
GEN3
Patents: CA2507856, EP1015851, EP1270311, USRE39747 and other patents pending

THE FOUNDATION OF WORLD LEADING AUTOMATION

www.supertrakconveyance.com

 **SuperTrak™**
GEN3



Speed.
Precision.
Independent
Shuttle Control.

SuperTrak GEN3™ is a Smart Conveyance technology that offers engineers a way to design, develop, and deploy high-performing automation with less risk at a lower cost.

The platform's integrated functionality, in combination with higher speeds, precision, and independent shuttle control, provides a means to reduce floorspace, increase throughput, and improve OEE for manufacturers.

Build Better Automation with SuperTrak CONVEYANCE™

SuperTrak GEN3™ Benefits

1.

Faster Cycle Times

A combination of speed and precision allows engineers to efficiently utilize each component of a system station, so parts spend less time in motion and more time in process.

Reduced Footprint

Speed, precision, and independent shuttle control allow system designers to reduce engineering complexity and tooling to use space more efficiently.

3.

2.

Higher Quality

Precision enables higher repeatability, locate tooling is no longer required, and systems designers can achieve higher throughput without sacrificing product quality.

Less Effort

By leveraging tools for simulation, design, assembly, and integration, system designers achieve a higher level of performance with less engineering effort and risk.

4.

Enabling Better System Design for Engineers

SuperTrak GEN3™ Features

Speed

High speeds, quick acceleration, and industry-leading settling time offer maximum throughput.

- **Speeds of up to 4 m/s**
- **Rapid acceleration to 40 m/s²**

Precision

Tight repeatability, in combination with speed and acceleration, drives the consistency of processes not otherwise possible with alternative conveyance options.

+/-0.01 mm repeatability

Independent Shuttle Control

The ability to independently control each shuttle's destination, direction, speed, and acceleration enables maximum utilization of every component in the system.

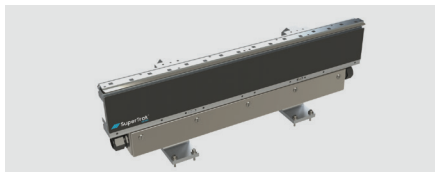


Maximum Functionality. Less Space.

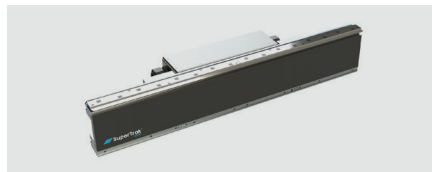
Reduced Footprint

Maximizing the functionality of your factory automation in the minimum amount of space is a top priority for today's manufacturers and their industrial automation processes.

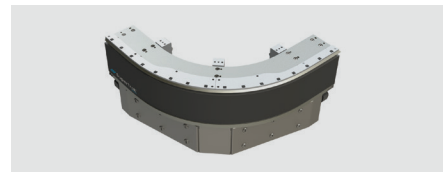
Different configuration options provide system designers the flexibility to mount tooling on the inside, outside, over-top, or underneath to meet their unique system requirements.



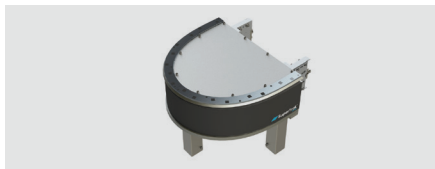
Straight section



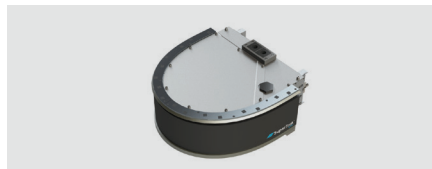
Low profile straight section



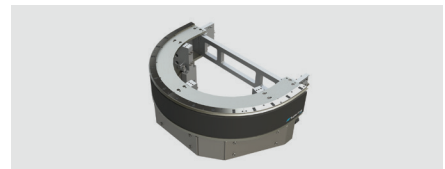
90° section



180° section
(500mm diameter)



Low profile 180° section
(500mm diameter)



180° section
(800mm diameter)

The Flexibility to Scale

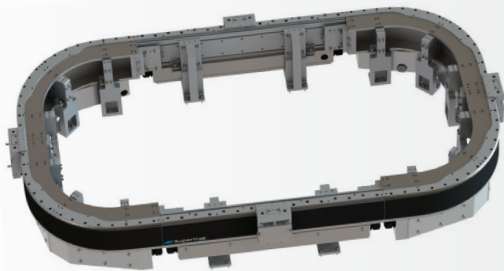
Being able to easily scale your business is essential for the success of today's manufacturers.

SuperTrak's modularity allows manufacturers to expand their systems by easily adding additional modular sections as the business grows and as products change. System designers can easily reconfigure the functionality of the conveyance platform as business requirements change.



Higher Availability.
Improved Quality.
Increased Performance.

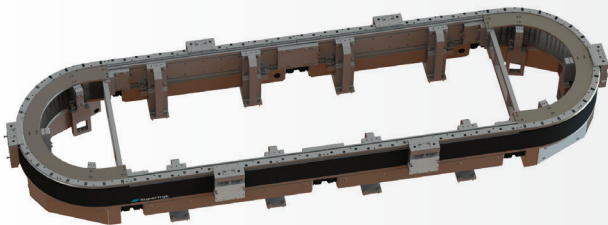
SuperTrak GEN3™ Configurations



SuperTrak GEN3™
90-degree Configuration

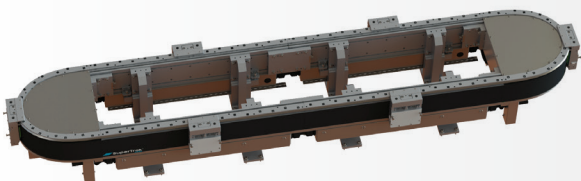
The 90° configuration offers the same floor-space saving as an indexing dial.

The 1200mm curved sections allow for even more configuration options such as a squared circle or rectangle. Manufacturers can fit even more tooling on the inside to minimize system footprint.



SuperTrak GEN3™
800mm Configuration

The 180° (800mm) configuration provides additional space within the conveyance platform and allows manufacturers many options to mount tooling on the inside. This helps minimize the amount of space your factory automation requires on the factory floor.



SuperTrak GEN3™
500mm Configuration

The 180° (500mm) configuration keeps the physical space required for the conveyor to a minimum while offering manufacturers options to mount tooling on the outside of the conveyance platform.

Reduce the Cost of High-Performance Automation

Integrated functionality incorporates a number of features into one platform thus reducing system design and integration hours. This enables a higher level of performance for your automation with less risk attributed to complex engineering.

A sample of integrated functionalities include:



Collision Avoidance

Shuttles will automatically avoid contact. No additional programming is necessary.



Target Routing

Set and release shuttles to destinations around the track without any additional management in the PLC.



Pre-stops

Set pre-stops where extra space for tooling or process is required.



Define Regions for Specific Motion Dynamics

Shuttles will move through the region with a specified velocity, acceleration, or jerk.



Design > Simulate > Build > Perform

Reduce Design and Integration Hours

The user interface for the SuperTrak CONVEYANCE™ platform provides a means to:

Create system simulations

View system performance statistics

Configure integrated functionality

Access diagnostic tools

Unlike other conveyance platforms' software, TrakMaster™ was designed and built with the intent to reduce engineering and integration hours, offering machine builders and manufacturers a faster path to production.

The easy-to-use software empowers an intuitive PLC interface to control the platform's high-performance capability with less engineering and therefore less risk.



Built by Machine Builders, for Machine Builders

Manufacturing Applications

The SuperTrak CONVEYANCE™ team has deployed systems across the globe spanning a variety of industries in some of the most demanding environments.

From harsh, dirty environments to cleanroom applications, we have conveyance solutions that can evolve with your changing needs.

Smart Conveyance Technology is Best Suited for Applications that Require:

High-volume assembly

Limited floor space

Energy efficiency

Cleanroom assembly

Quiet operation

Multiple process steps

Multi-part lines

Modularity to scale and adapt

Functionality in harsh environments

A high degree of precision

Automation for a Variety of Industries

Popular Industry Applications



Consumer Products

- Disposable shavers
- Glasses
- Pump bottles



Automotive Components

- EV battery assembly
- Valve assemblies – lash adjuster, seat/o-ring, ABS, motor components
- Door lock actuators



Consumer Electronics

- Cell phone assembly
- Small household appliances
- Household electronics



Medical Devices

- Contact lens packaging
- Syringe assembly
- Catheter assembly
- Insulin pumps



SuperTrak GEN3™ Data Sheet

Straight Section	1000mm
180° Section	<ul style="list-style-type: none"> • 500mm Diameter • 800mm Diameter
90° Section	600mm Radius
Product Fixture Width	152mm up to 600mm
Maximum Speed	4 m/s
Acceleration	<ul style="list-style-type: none"> • 1G with 10 kg Payload • 4G with 1 kg Payload
Repeatability	+/- 0.01mm
Payload	10+ kg per shuttle
Process on Curve	Full control
Shuttle Options	Standard shuttle configuration with 2- or 3-magnet array options
Communication	   

 SuperTrak™
GEN3

** Higher payloads and other protocols possible.
Speak to a member of the SuperTrak Team for more info.*



Reduce the Cost of High-Performance Automation

Have a project on the horizon?
Conveyance is a good place
to start.

We work with machine builders
and system designers to improve
system design and meet
automation goals.

Contact Us

supertrakteam@atsautomation.com

www.supertrakconveyance.com