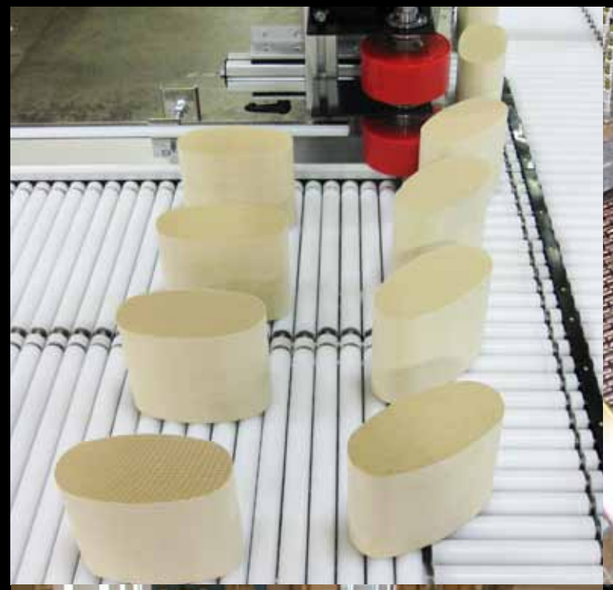
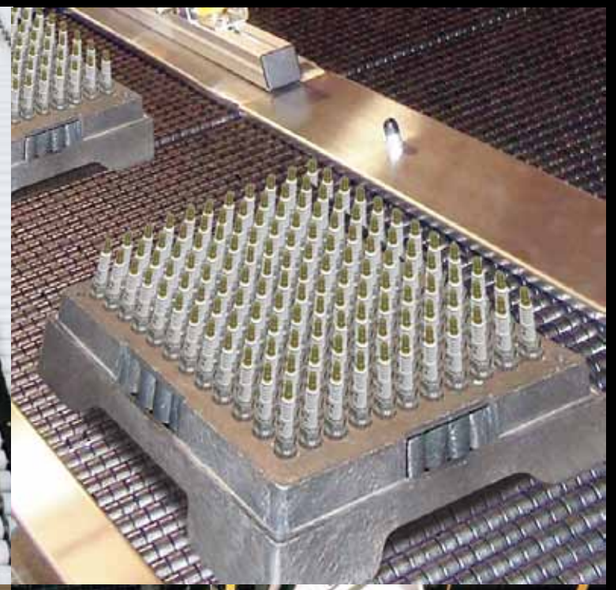
Shuttleworth®
EXTRAORDINARY CONVEYOR SOLUTIONS

powered by Pro Mach

AUTOMOTIVE





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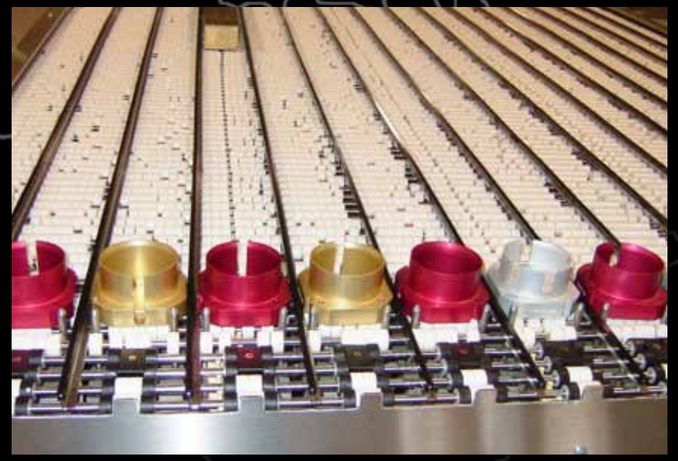


Accuracy / Gentle Handling
Positioning parts through the use of automated material handling devices provides consistent product control. Utilizing Slip-Torque® technology, our design engineers will create the best solution to accurately handle your fragile parts before or after the sintering process in powered metal applications. We will design a system so your machined parts can be accumulated without damage to the parts nor the rollers on the conveyor.

Accumulation
When conveying multiple products in multiple lanes, our low line pressure Accumulators are an excellent choice. After learning about your project needs, we will design a system for mass or inline accumulation for either manual or robotic handling operations using low line pressure, which minimizes product damage.

Optimized Resources
Controlling the amount of time needed at each furnace or press is critical. Through the use of automated parts handling, we can design solutions that optimize labor and increase the efficiency of your facility.

Flexibility
Having the ability to accommodate product changes is extremely valuable in this ever changing market. Whatever size or shape of your product, your Shuttleworth system will be flexible to help you minimize changeover time.

Full Service
When you want to integrate specific equipment, such as scales, marking systems, or robotic interfaces, our engineering team can help you simplify the process. Our dedication, experience, ongoing communication, and project management process enable us to function as an extension of your engineering department.

Automotive Electronics Assembly and Test System using Bi-directional Flow with One Frame and One Drive

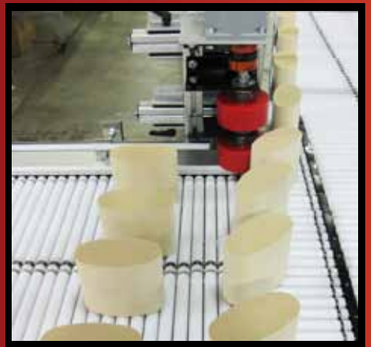
Parts with Machined Surfaces are Protected from Damage

Multi-lane Accumulation without Product Damage

Multi-lane Conveyance of Metal Parts during Cooling Process

Stacking of Metal Parts

Accumulation of Pistons



Accumulation and Single Rowing of Catalytic Converter Substrates

Extended Roller Transfer of Powdered Metal Parts Eliminates the Need for Dead Plates

Precision Machined Edges are Protected with Slip-torque Slip-fit Technology to Buffer the Product and Increase Efficiency

Accumulation and Pattern Forming of Oil Filters

Accumulation with Assembly and Testing of Radiators and AC Evaporators

Locating Parts for Robotic Pick Up

Tight Right Angle Transfer with Traffic Control

Serpentine Cooling with Bi-directional Product Flow

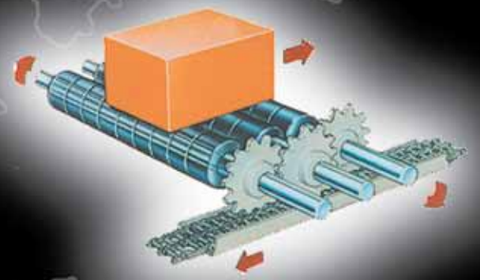
Pattern Forming and Indexing using Right Angle Transfers to feed Single or Multi-product Processes

Open Center Track System with Customized Conveyor Surface

Tight 90° Corners

Heavy Duty Tube Rollers for Transferring Large Products in Oily Environments

CHAIN DRIVE TECHNOLOGY



Attributes
- 100 lbs./sq. ft. loads
- Drives with automatic oilers and chain tensioners
- Suitable for Class 100 (ISO Class 5) clean environments

Slip-Torque Technology
- Slip-fit rollers minimize product damage
- Low line pressure provides gentle product accumulation
- Close roller shaft centers offer maximum product stability

Innovative Custom-Engineered Solutions
- Modular design allows for future reconfiguration
- Ergonomic operator requirements may be incorporated
- Inherent safety of Slip-Torque design meets OHSA standards

PROVEN AUTOMOTIVE APPLICATIONS

Auto Electronics
- Body Control Modules
- Circuit Board Inspection & Repair
- Heater & AC Controls
- Power Train Control Modules
- Radios - Test/Inspection/Repair
- Sorting/Pack-off of Modules

Catalytic Converters
- Coating Infeeds
- Inspection & Pack-off

Clean Conveyors for Assembly
- Air Bag Sensors
- Air Conditioning Components
- Anti-lock Braking Systems
- Rear View Mirrors

Component Assembly
- Air Bags
- Air Bags X-ray Inspection
- Air Conditioner Compressors
- Air Conditioner Evaporators
- Automatic Transmissions
- Fuel Injectors
- Headlights
- Radiators
- Rearview Mirrors
- Sensors

Cooling Systems
- High-temperature Parts

Packaging & Assembly
- Air & Oil Filters

Parts Queueing for Assembly
- Cylinder Heads
- Alternators

Powdered Metal Products
- Automated Transfers To/From Furnace
- Clutch Components
- Transmission & Engine Pump Gears

Specialty Coatings
- Plastic Parts

Feedback From Our Customers...

"The Shuttleworth conveyor is the critical component of a completely automated system for building our complex part. The fact that we can safely move these parts from the press through all of the various stages without an operator is a big deal."

"Although the system has only been in place a short time, we have benefited from significant quality improvements and reduced labor and inventory costs. Not only are we seeing fewer damaged parts, but the Shuttleworth conveyor helps us speed up work in progress and reduces our inventory."

Shuttleworth has extensive experience in light to medium weight automotive assembly and components manufacturing. We have designed, manufactured, and installed hundreds of gentle handling solutions for automotive parts applications.

We understand the unique, ever-changing challenges of the automotive industry and are here to help. To learn more about how we can improve your material handling processes while reducing production times, contact us today.

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ISO 9001:2008 Certified

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