

# **ENDURO-STST<sup>TM</sup>** Synthetic Tilt-Tray Sorters

**Durable, Cost-Effective, RFID-Compatible**

The ENDURO-STST<sup>TM</sup> is a versatile non-metallic tilt-tray sortation system that is the first to be made completely from Brandonite<sup>®</sup> high-performance composites. The end-result is a cost effective delivery system that is lightweight, modular, durable, and quiet. The ENDURO-STST<sup>TM</sup> is quickly becoming the standard for RFID-enabled systems since major components (carriage, tipper-arm and track) are made with synthetic materials that are virtually transparent to RFID frequencies. And, the specially-formulated materials allow ENDURO-STST<sup>TM</sup> to operate in extremely harsh environments, ranging from -70°F to +200°F.

All ENDURO-STST<sup>TM</sup> components are manufactured using our proprietary MFC (maintenance-friendly component) process. This means that each component is designed with the fewest number of parts to eliminate potential product failure and allow replacement or repair with minimal tools and labor time. You can be assured that each and every ENDURO-STST<sup>TM</sup> component has been designed to provide years of maintenance-free service at a fraction of the cost of traditional sorter systems

## **COMPOSITE TRACK** *Modular, Quiet, Resilient*

The composite track (patents pending) which guides the carriages, is modular and specially designed to absorb sound and maintain tight spacing tolerances. The track was designed by engineers experienced in naval silencing technology to significantly reduce noise and vibration. When combined with the composite carriages, this track can reduce noise levels by up to 10-15dB.

How tough is this track? It can withstand stress up to 10,000 pounds per square inch and not crack, split or be otherwise damaged. Access gates can be easily installed on any straight section to allow for quick removal and installation of carriages and drive components. Also, the track has a new Infinite Indexing<sup>TM</sup> system, which allows tipper arm assemblies to be installed within one inch of any point on the circuit by simply inserting two set screws. No more welding and costly adjustments.



## **COMPOSITE CARRIAGES** *Lightweight, Maintenance-Friendly, Durable*

The heart of the ENDURO-STST<sup>TM</sup> is the synthetic carriage (patents pending) that is built for demanding material handling assignments. These carriages can handle loads up to 150 pounds and operate for years maintenance-free. Built of Brandonite<sup>®</sup>, these carriages are designed to absorb the impact and vibration typically encountered on tilt-tray sortation systems. When combined with the synthetic track, these smooth-running carriages will require 10-20% less energy to operate when compared to metallic-carriage systems. The carriages have also been designed by our MFC process resulting in 20% fewer parts, and any part can be replaced in a matter of minutes with little more than an adjustable wrench and screwdriver.

## **COMPOSITE CHAIN** *No Stretch, No Wear, No Noise. No Problem.*

The composite chain (patents pending) operates in most any length system and can handle a wide variety of transport loads. The unique chain design with integral link pivot bearing surfaces (patent pending) evenly distributes the stress, yielding a composite chain that can handle a static tension load of 4,000 pounds and peak load of up to 10,000 pounds. Also, the chain is made of a special material that gives the chain incredible durability and is resistant to wear or stretch, thereby eliminating the need for periodic drive line tension adjustments.

## RFID-COMPATIBLE

*Be prepared for the future TODAY.*

Need to add a sorter line but you're not sure of whether you're going to deploy RFID? No problem. With the ENDURO-STSTM, the carriages, track, and tip-up mechanisms are made with materials that are virtually transparent to RFID frequencies to avoid backscatter and interference normally encountered

with metallic systems. Now you can install the ENDURO-STSTM system using your existing bar-code or line-of-sight systems, and add RFID capabilities later without worrying about interference from the sorter line.

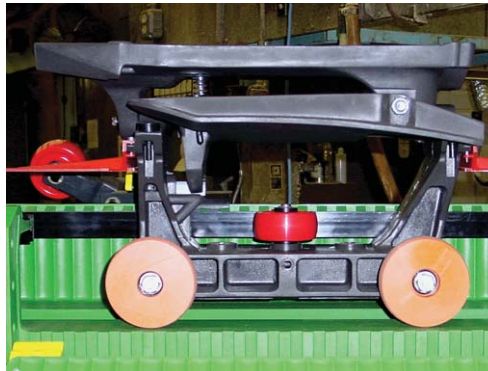
## LIM-READY

The ENDURO-STSTM has been specifically designed to work with either chain or Linear Induction Motor (LIM) drive units. Since

the track and carriage have been designed to accept either chain or LIM, you now have the flexibility of converting drive systems with little change to the transport system. Our LIM-drive configuration utilizes Force Engineering's horizontal stators to give the ENDURO-STSTM system a more efficient operating profile which also reduces possible interference with RFID systems.

## BENEFITS

- Made with BRANDONITE® ultra-durable high-performance composite polymers.
- Components have been designed using Globe's MFC system that allows parts to be replaced with a minimum number of tools and labor time.
- Lightweight, smooth-running carriages ride on synthetic track which reduces energy consumption by 15% - 20%.
- Specially designed acoustic track reduces noise levels by 10-15 dB.
- Track is available with optional access panels that can be located anywhere along the system for easy service and maintenance.
- Track is designed with special Infinite Indexing™ grooves to easily install tip-up mechanisms without welding.
- Unique track guard prevents foreign objects from falling into the track.
- Tip-up assemblies are lightweight and outlast conventional metallic tippers by a factor of three to four times.
- Can be driven by Globe's synthetic chain (patent pending), or by linear induction motor.
- Extremely cost competitive with traditional sorter transport systems.



ENDURO-STSTM composite carriage



ENDURO-STSTM acoustic track

### ENDURO-STSTM Features

<b>Configuration</b>	Horizontal or over/under
<b>Induction/Discharge</b>	Left or right
<b>Tray Size</b>	Customer specified (nominal 20 in. x 36 in.)
<b>Tray Pitch</b>	28 in.
<b>Speeds</b>	Up to 355 fpm.
<b>Throughput</b>	150 sorts/min. @ 355 fpm.
<b>Drive Type</b>	Engineered chain or linear induction motor (LIM)
<b>Curve Radius</b>	10 ft. to centerline of chain.
<b>Sorter Length</b>	Up to 3000 ft.
<b>Dead Load</b>	100 lbs. per ft.
<b>Track Composition</b>	Brandonite® Composite supported on 4 in. x 3 in. x 1/4 in. structural steel tubing
<b>Chain Composition</b>	Brandonite® Composite, 9 or 12 in. pitch
<b>Linear Motor</b>	460v., 60Hz., 3-phase, mfd. by Force Engineering
<b>Rotation</b>	Clockwise or counterclockwise
<b>LIM Drive Requirements</b>	1 LIM every 100 ft. plus redundancy requirement
<b>Tray Unload Angle</b>	30°
<b>Operating Temperatures</b>	-70°F to +200°F