



# Smart Linear Transfer System Intelligent material movement in an Industry 4.0 context







# Challenges in the Packaging Industry

### **DRIVER**

 Packaging drives the buying decision at the point of sales

# Industry 4.0

### **NEEDS**

- Short response time to new market trends
- Customized demands
- Cost pressure

### SOLUTION

- Reconfigurable lines
- Lines allowing a high product mix
- Improved Total Cost of Ownership





# Flexible & Intelligent: Linear Transfer System (LTS)

#### What is LTS?

- intelligent conveying system
- with Smart Carriages
- for flexible line integration

#### What does that mean?

- Smart Carriage knows the track
- is told where to go
- gets there autonomously



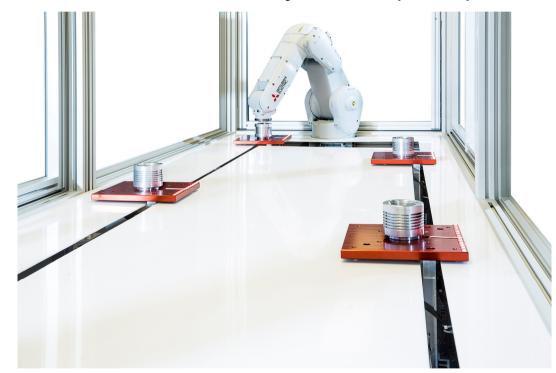




# Flexible & Intelligent: Linear Transfer System (LTS)

#### LTS also stands for:

- Power on the carriage
- Latest safety standards
- Free configurable tracks
- Predictive maintenance
- Energy efficiency
- Built on standard components







# Flexible & Intelligent: Linear Transfer System (LTS)

#### LTS use case: Multi Product Line

- Carriage chooses the best suitable way to reach next station
- Goods can be processed on the carriage
- Track and trace goods condition at any given time on the conveyor
- Reduce cost through fenceless safety design, predictive maintenance, energy efficiency and parameterization vs. engineering







### LTS in the Context of IoT

### **Edge Computing & IoT**

- What are the challenges?
- How do we take advantage of the data produced on the Smart Carriage?







### IoT can be ....

full of Locked Doors....





### You need





Multiple Vendors Devices and Networks

Legacy Systems

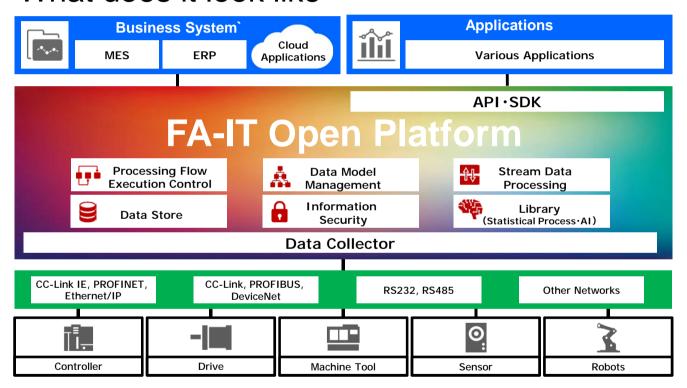
Diverse IT Software

Diverse Data storage and formats

An array of various Cloud Environments



### What does it look like



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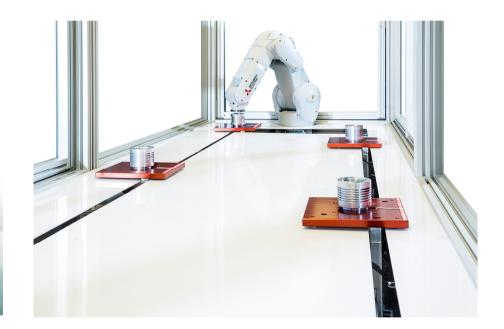




### LTS for Multi Product Lines

### **SOLUTION**

- Reconfigurable lines
- Lines allowing a high product mix
- Improved Total Cost of Ownership
- Data with value







# A company you can rely on

- Founded 1921
- Turnover over 40 billion \$US
- Over 120,000 employees
- 30 factories in Japan





Thank you.

Danke.

Merci.

Grazie.

Gracias.

Teşekkürler.

شكرا

ありがとうございました。

謝謝。

спасибо

You are welcome to visit us at our booth in

Hall 17 Booth D40





Linear Transfer System Flexible & Intelligent