

# Material flow guide.

Your path to Intralogistics 4.0.



 **JUNGHEINRICH**





## **Make your processes more fail-safe!**

This guide provides you with valuable tips to make your intralogistics more fail-safe and efficient. This document is intended as a guide for those with little or no experience in using tow trains. Step by step, we show you the advantages of our electric tow tractors and clearly visualise the material flow using a tow train.

Important: The material flow guide is no substitute for comprehensive advice, nor does Jungheinrich claim to describe your specific situation. The capacities and layout of your storage areas and other stations, the travel routes of industrial trucks and the size of your company play just as much a role in the assessment as a multitude of other factors.

The guide contains suggestions for improvements as well as ideas for making various processes more cost-effective, faster and safer in the future. We would be happy to assist you personally if you have any questions. Just contact us by phone or email.



# Why choose tow trains?

Electric tow tractors from Jungheinrich are highly energy-efficient and the perfect solution for speeding up material flow in the warehouse. The trucks use trailers to form a tow train, thereby moving different goods at the same time. If necessary, they can also be automated. Tow trains can reduce traffic in the warehouse by simply combining individual trips that were previously necessary. Thanks to the directional stability (all trailers in the tow train follow precisely in the tracks of the electric tow tractor), narrower routes than those required by other industrial trucks are often sufficient. This feature is also important in terms of safety. In the following pages, we have outlined your potential for improvement in detail.

## The goals:

- Greater comfort for your staff.
- Faster material supply.
- Reduction of emissions.
- Improved safety.
- Smoother processes.





# This is important!

## Product supply.

Which industrial trucks can you use to optimise your intralogistics, counteract the lack of space and take the burden off your staff?

## Willingness to optimise.

Through a detailed analysis of the flow of goods, you gain valuable insights that you can use to improve material flow in the warehouse

## Loading devices and quantities.

The size and weight of your goods as well as the loading devices used, e.g. Euro pallets, pallet cages or storage boxes, have a major bearing on how effectively individual stations work together. Tow trains make it possible to bundle and transport goods even faster.

## Loading and unloading processes.

Smoothly functioning processes during loading and unloading at the respective stations (origin/destination) are an important building block for increasing productivity.

## Overview.

With a detailed overview of material flow as well as the corresponding route layout, you save time and utilise existing resources. Tow trains literally open up new ways of planning and provide greater flexibility.

## Electric tow tractors from Jungheinrich.

Increasing economic efficiency.

### Take the pressure off your personnel.

Move more material with fewer trips and make better use of your staff. Physical work is also reduced.

### Flexible.

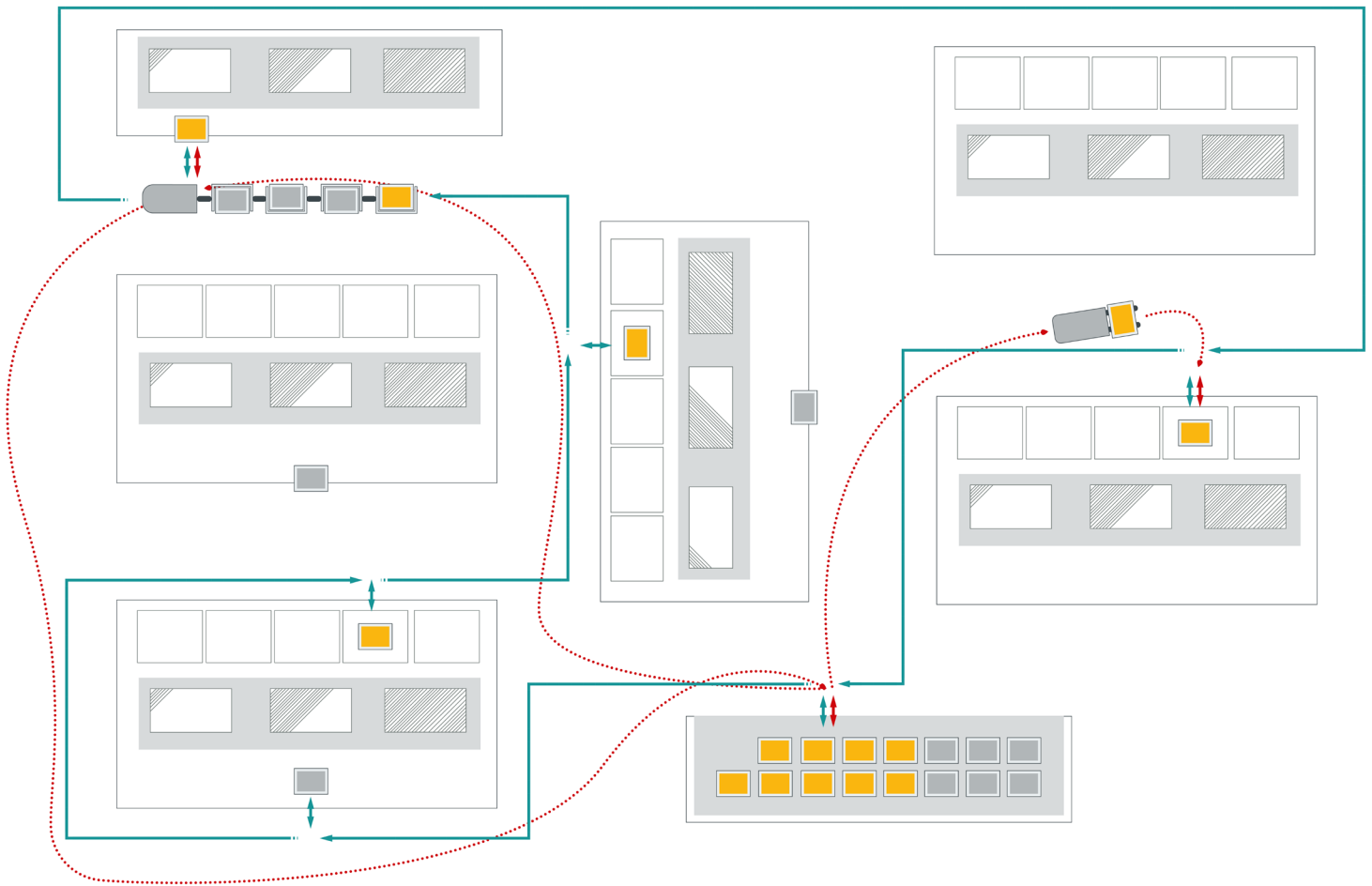
No matter how big and heavy your loads are: We find the right trailers so that you can bundle goods perfectly and transport quickly.

### Highly reliable.

Electric tow tractors from Jungheinrich are manufactured according to the highest quality standards. This means fewer breakdowns and smoother processes.

### Improved performance.

We offer high drawbar pull with zero emissions for every challenge.



# The perfect route layout?

More economical in just a few steps.



When you use tow trains, more goods are moved at the same time. Due to the precise tracking and its small width, the tow train can use routes that are inaccessible or difficult for forklift trucks to travel on. The material provision of individual trips can also be combined, which saves additional time.



Automated tow trains can also take the burden off your staff and reduce physical work. This not only makes your processes faster, but also reduces downtime.



Jungheinrich can help you choose the right electric tow tractor. We take into account the type of loads, the weight and the place of use (inside, outside).



Following on from this, a well-conceived route layout helps to fully exploit the possibilities of the tow trains and to make intralogistics more cost-effective and faster.

Our forward-looking energy concept with powerful electric motors based on lithium-ion batteries and solar panels makes a valuable contribution to environmental protection. And electric motors are low-maintenance and low-consumption.

If you have any questions and would like individual advice, we will be happy to help you.

Telephone +47 02350  
kontakt@jungheinrich.no

**ISO 9001** The German production facilities  
**ISO 14001** in Norderstedt, Moosburg  
and Landsberg are certified.

 Jungheinrich trucks  
conform to the European  
Safety Requirements.

### **Jungheinrich Norge AS**

Alf Bjerckes vei 30,  
0596 Oslo  
Norway

Telephone +47 02350

[kontakt@jungheinrich.no](mailto:kontakt@jungheinrich.no)  
[www.jungheinrich.no](http://www.jungheinrich.no)

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