

In sync with
tomorrow's reality.

Checklist: Dynamic Tugger Trains in Action

Check how well you have your
dynamic tugger trains under control
with this preped checklist by ipolog.



How well are your tuggger trains planned?

Do you consider the following layout aspects when planning the material flow?

	Current Situation?			Action Required?	
	yes	sometimes	no	yes	no
2D structural framework (columns, pathways, enclosures)	yes	sometimes	no	yes	no
Factory layout in 3D (TGA, suspensions, plants, machines, etc.)	yes	sometimes	no	yes	no
Storage types incl. material flow reference & key figures such as range of coverage	yes	sometimes	no	yes	no
Stops, access points to layout areas, one-way streets, gradients	yes	sometimes	no	yes	no
Fine layout of parts supply in production	yes	sometimes	no	yes	no
Fine layout of storage areas (shelf type, aisles, bays, etc.)	yes	sometimes	no	yes	no

Do you consider characteristics of load carriers and loading units in material flow planning?

	Current Situation?			Action Required?	
	yes	sometimes	no	yes	no
Weight of the loading unit	yes	sometimes	no	yes	no
Length/height/width of the loading unit	yes	sometimes	no	yes	no
Stacking factor of the loading units	yes	sometimes	no	yes	no
Weight of the load carriers	yes	sometimes	no	yes	no
Length/height/width of the load carriers	yes	sometimes	no	yes	no
Stacking factor of the load carriers	yes	sometimes	no	yes	no
Load carriers per load unit	yes	sometimes	no	yes	no
Parts per load carrier	yes	sometimes	no	yes	no
Dimensions & cost of racks	yes	sometimes	no	yes	no

Do you consider the characteristics of tugs and trailers when planning the material flow?

	Current Situation?			Action Required?	
	yes	sometimes	no	yes	no
Driving speed, curve behavior, inclination	yes	sometimes	no	yes	no
Costs	yes	sometimes	no	yes	no
Size	yes	sometimes	no	yes	no

How well are your tugging trains planned?

Are these processes observed during material flow planning?

- Supply chains (source-sink relationships)
- Travel times of the means of transport (layout-dependent)
- Process times (of employees)
- Loading and unloading times
- Distribution time, hourly rate, work hours (per employee type)

Current Situation?			Action Required?	
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no

Do you integrate information from the logistical quantity structure (parts) when planning material flows?

- Part numbers
- Part designation
- Parts per product
- Component weight
- Shoring advice/needs
- Number of variants
- Delivery rate per supplier

Current Situation?			Action Required?	
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no

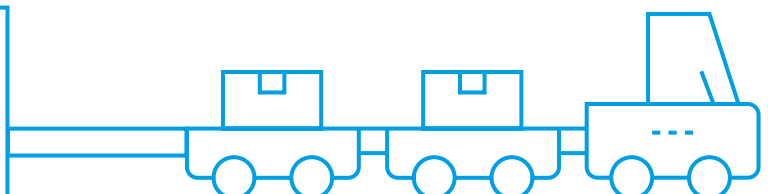
Do you integrate production data when planning material flows?

- Order data
- Number of pieces/number of products or cycle times

Current Situation?			Action Required?	
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no
yes	sometimes	no	yes	no

Are you looking for a tool that allows you to holistically plan and analyze your material flow?

[Watch Webinar: Optimize Your Logistics: From Idea to Reality in 5 Steps](#)



How well are your tugging trains planned?

Do you know important parameters to evaluate your material flow?

Assessment of required tugging trains has taken place

Current Situation?

Action Required?

yes sometimes no

yes no

Load carrier capacity is known

yes sometimes no

yes no

Tugging train utilization is known

yes sometimes no

yes no

Routing takes place according to the shortest routes

yes sometimes no

yes no

Dynamic scheduling is possible

yes sometimes no

yes no

Utilization between source and sink is known

yes sometimes no

yes no

Display of capacity levels for routes and driving paths is possible

yes sometimes no

yes no

Visualization of the hall layout, route network, including all route lengths and directions is possible

yes sometimes no

yes no

Comparison calculations are made of:

Routes

yes sometimes no

yes no

Trailers

yes sometimes no

yes no

Containers

yes sometimes no

yes no

Tugging trains (other technique)

yes sometimes no

yes no

Alternative technologies (AGVs, forklifts, etc.)

yes sometimes no

yes no

Are the following key figures used for evaluation?

Cycle time

yes sometimes no

yes no

Lead time

yes sometimes no

yes no

Number of employees including utilization

yes sometimes no

yes no

Number of means of transport/trailers incl. capacity utilization

yes sometimes no

yes no

Number of load carriers

yes sometimes no

yes no

Total utilization rate

yes sometimes no

yes no

Investment & operating costs

yes sometimes no

yes no

Point value multiple load tools

yes sometimes no

yes no