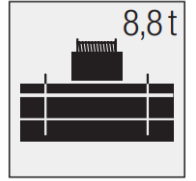


Improving the economic efficiency of cranes by technical innovations

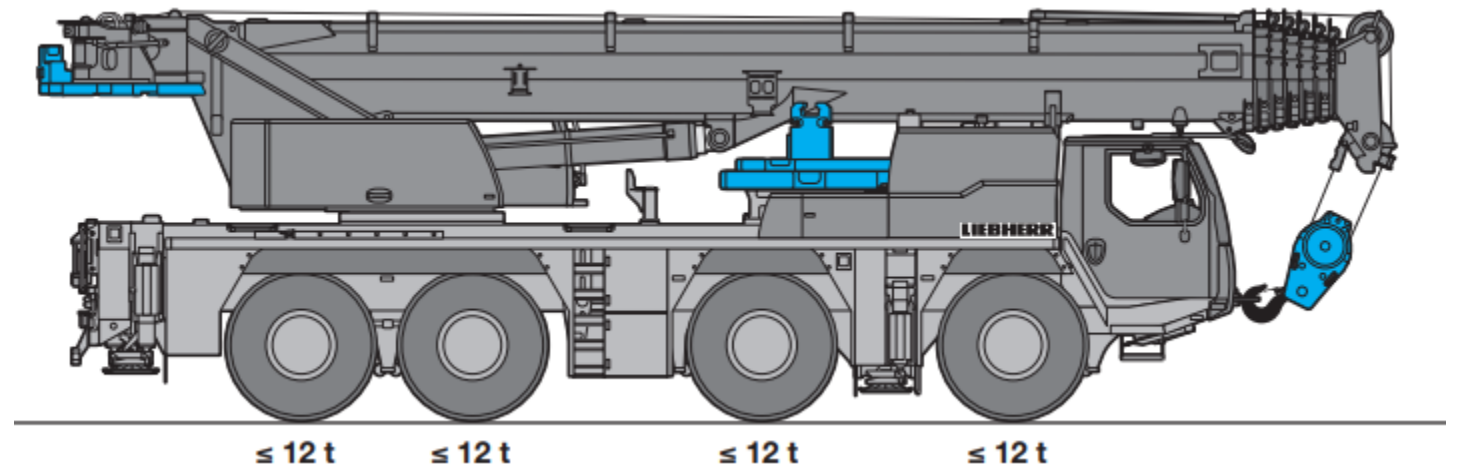
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**LIEBHERR**

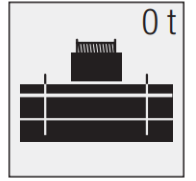
# Variety of driving conditions



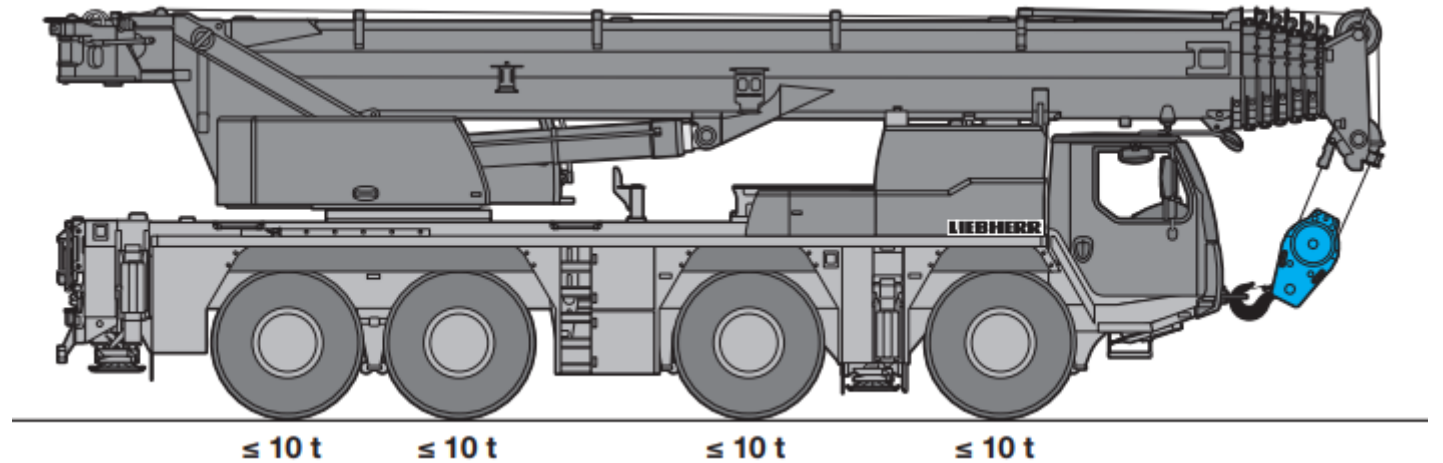
≤ 48 t



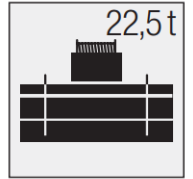
# Variety of driving conditions



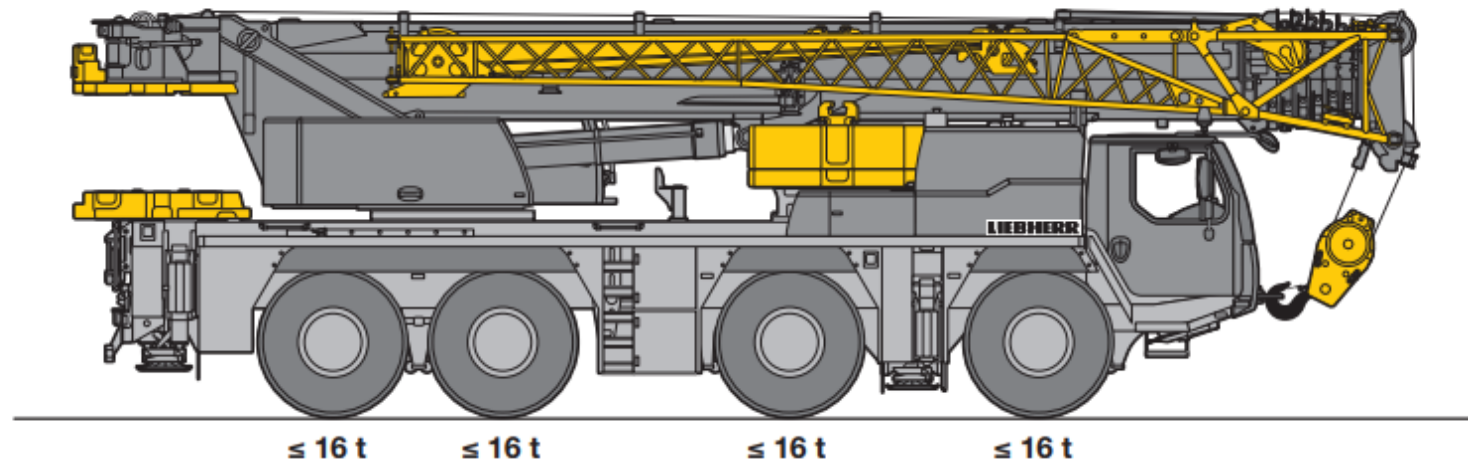
≤ 40 t



# Variety of driving conditions



≤ 64 t



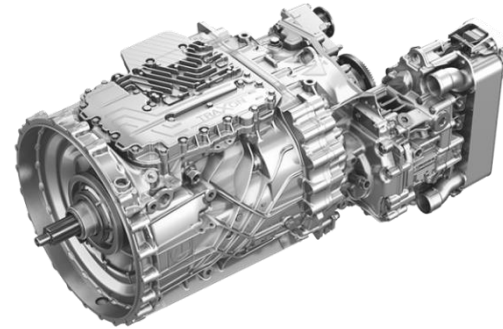


# TraXon

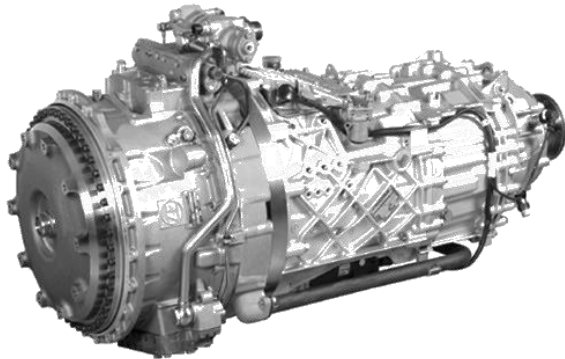
AS-Tronic



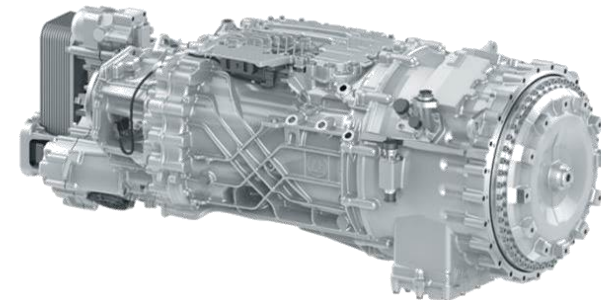
**TRAXON**



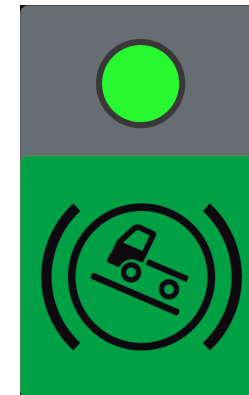
TC-Tronic



**TRAXON - Torque**



# TraXon

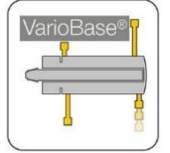


€COdrive

„Hill Start Aid“

3 – 5 axle crane

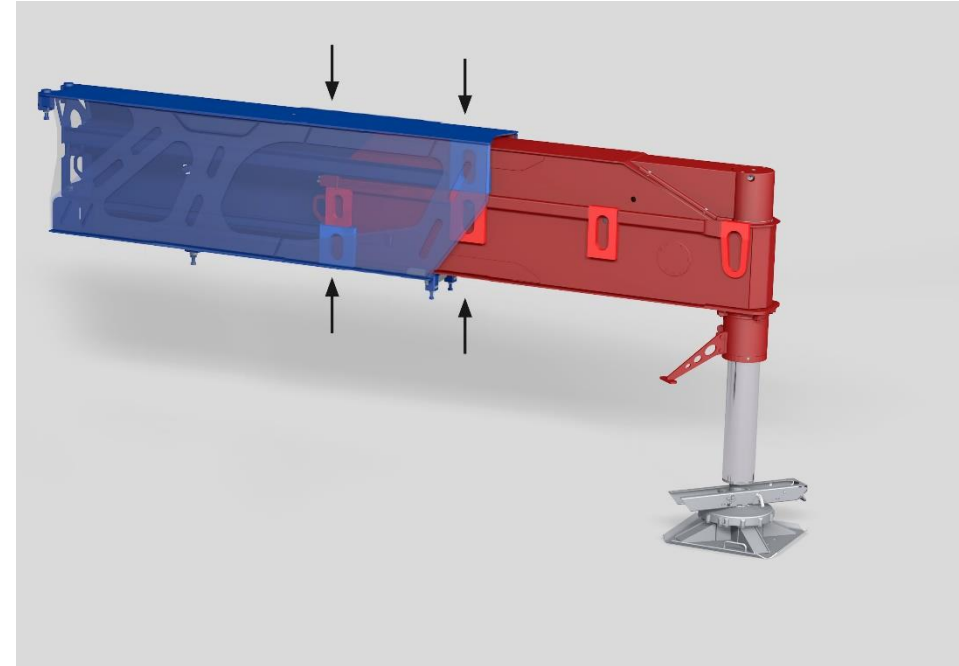
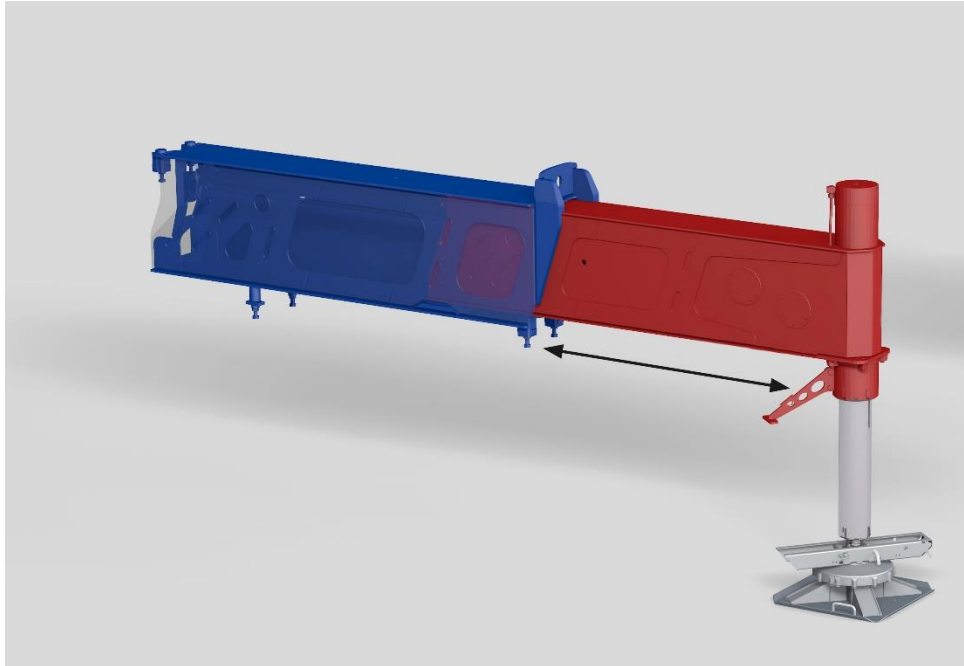
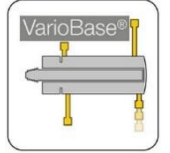
**LIEBHERR**



## Innovative measuring technology

- Length measurement
- Precise pressure measurement
- Automatic detection of the centre of gravity and tipping limits in the crane control with the calculation of the load capacity

# VarioBase®



## Consistent load carrying capacity

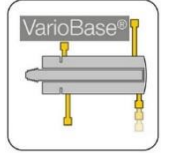
- LTM-cranes up to 5 axles and LTC-cranes
- Outrigger beams can be extended to completely arbitrary positions

## With pinning positions

- Larger LTM-cranes and LTF-cranes
- Beams without consistent load carrying capacity
- Several existing pinning positions at the outrigger beams

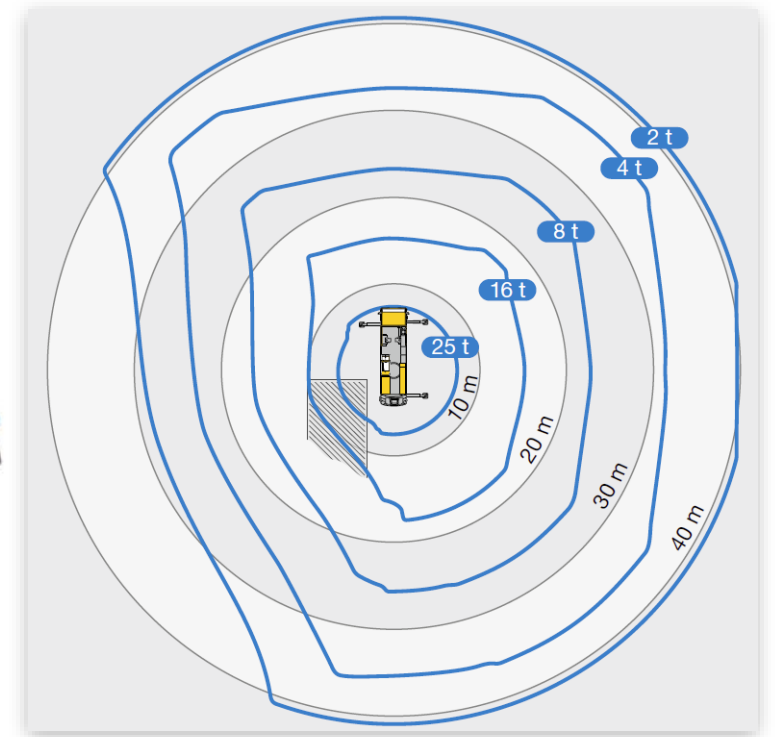


# VarioBase®



## More Safety

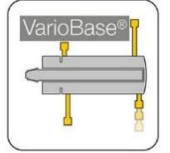
- The support base cannot be set up incorrectly by the crane operator
- Monitoring through load moment limiter and automatic reduction of the working speed before the shut-off point
- The increased safety and easy of use takes the strain of the crane driver



LTM 1130-5.1

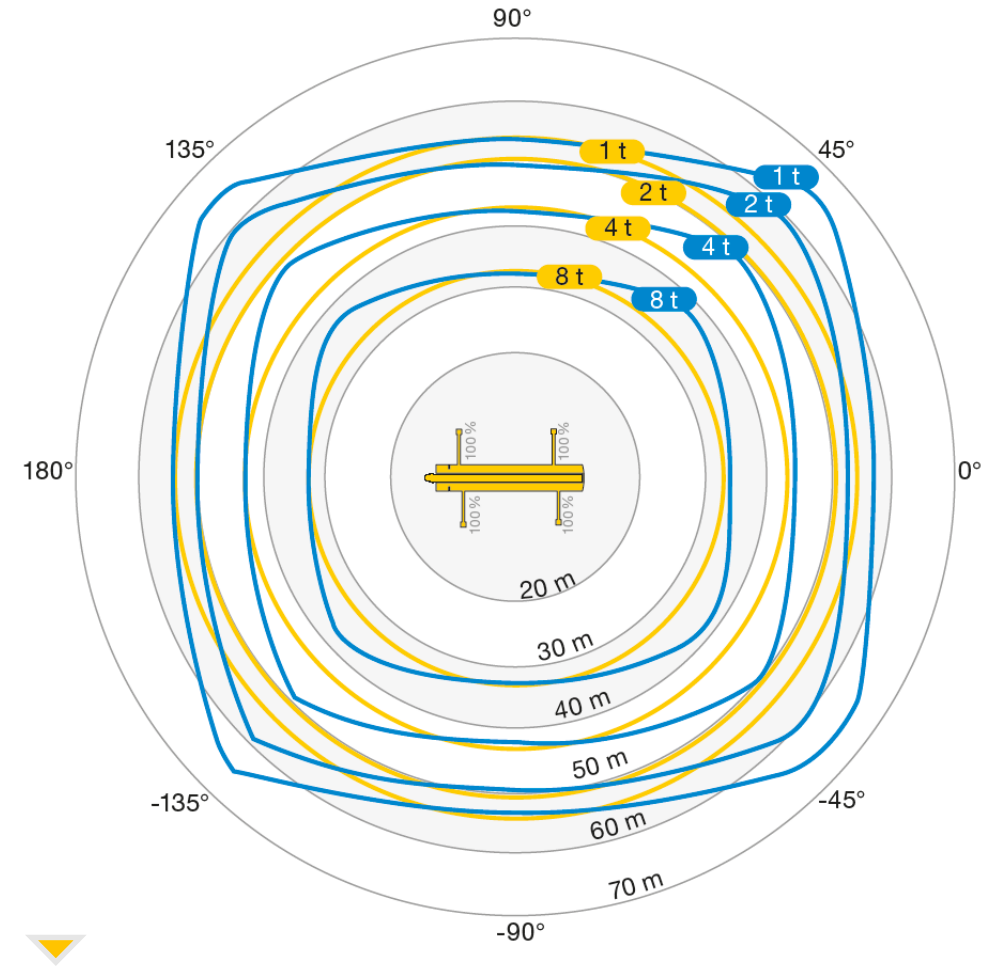


# VarioBase®



## More Capacity

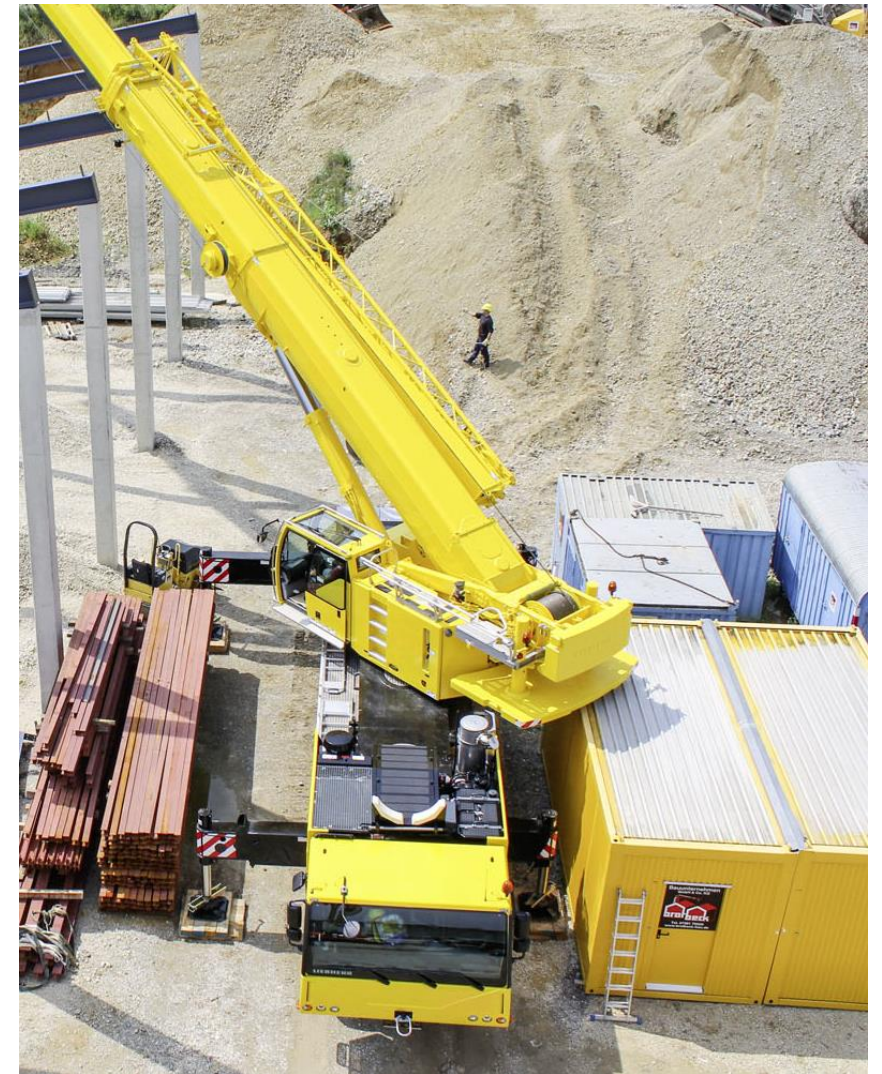
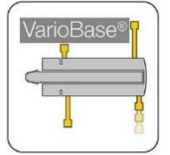
- Even with a maximum support base, VarioBase® can offer higher lifting capacities and a larger working area
- The greatest increase is achieved with partial counterweight



Example: LTM 1300-6.2; yellow: 360°-load chart, blue: VarioBase®



# VarioBase®



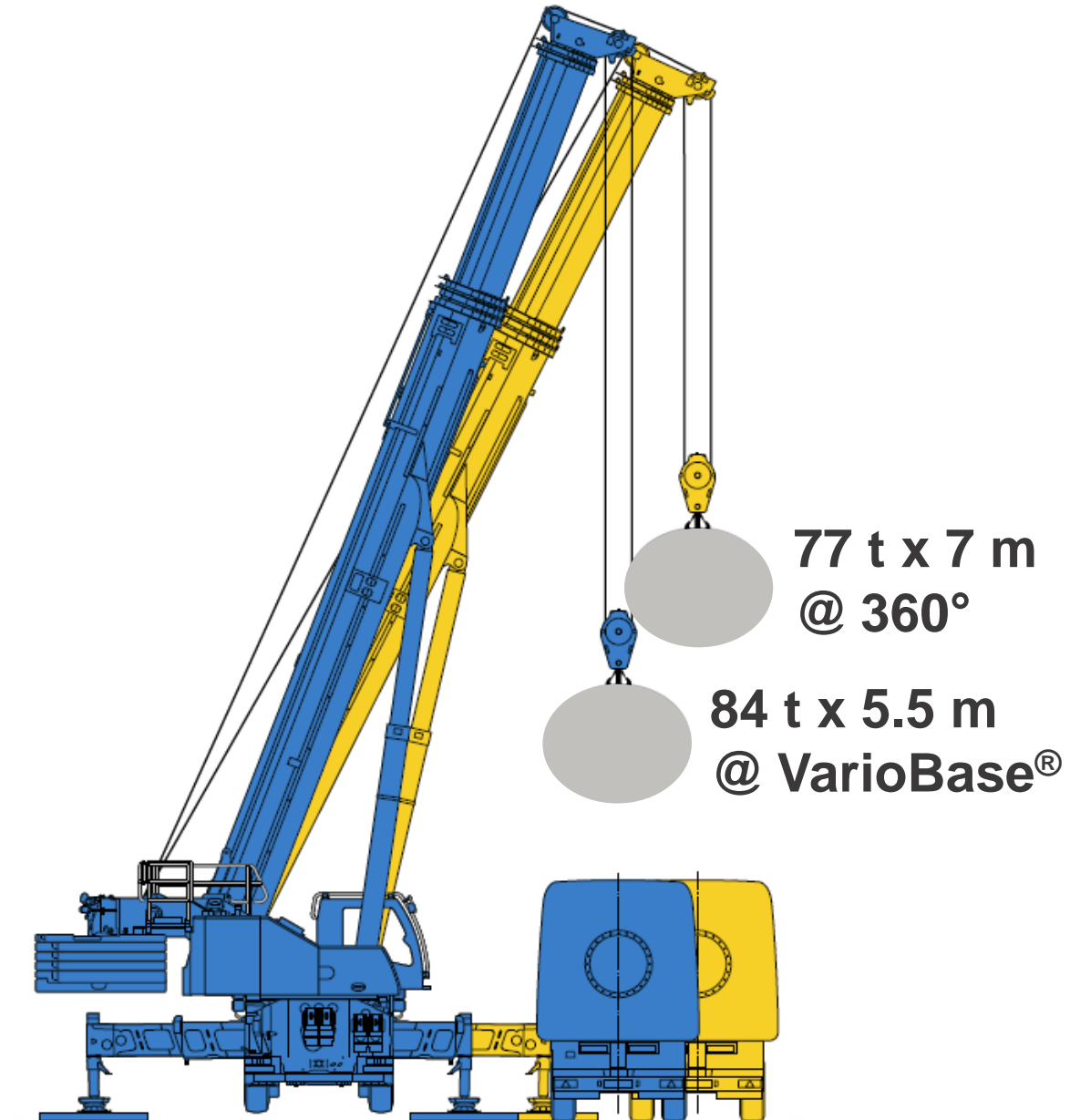


# VarioBase®



Shorter distance to the load

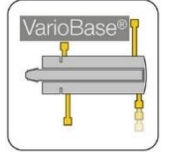
➔ Higher load capacities



Example: LTM 1160-5.2

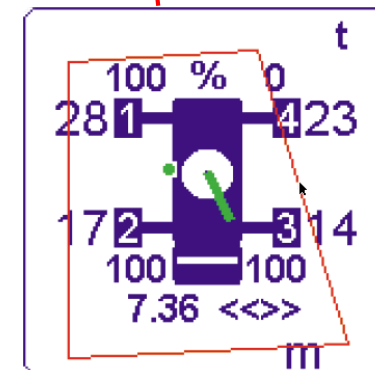
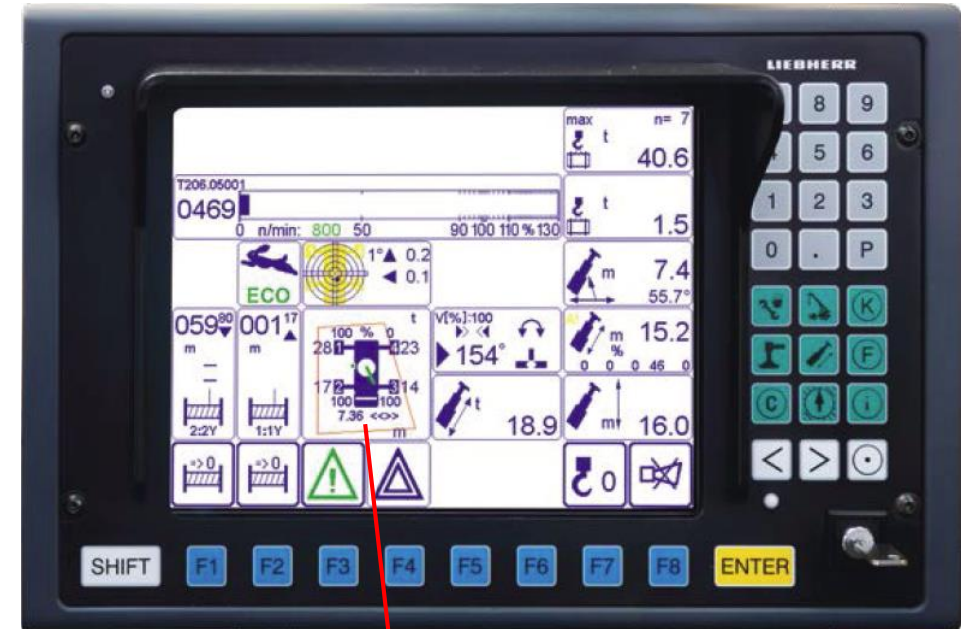


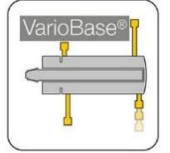
# VarioBase®



## Intelligent crane control

- Current support position with extension length and support force
- Crane's tipping edge and overall centre of gravity



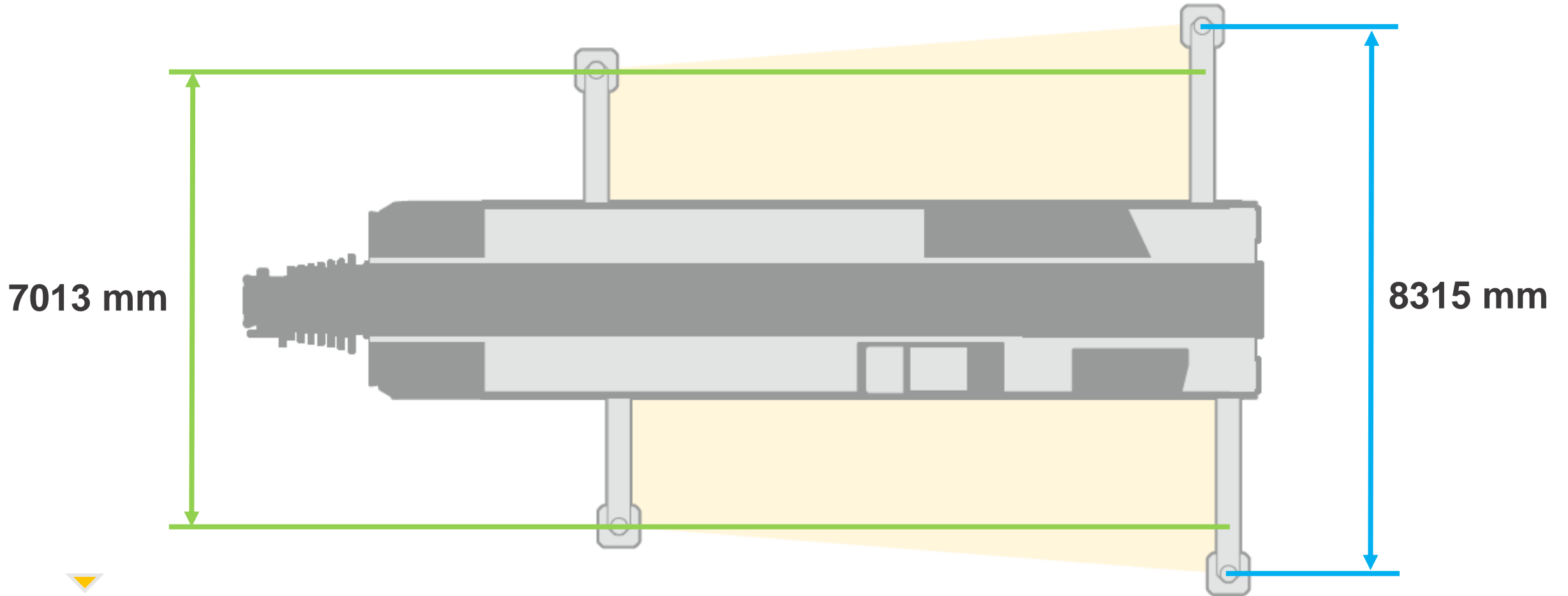
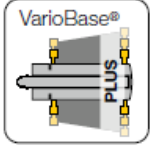


## Integrated work planner

- The LICCON work planner is included in the crane control
- Lifts can be simulated directly on site
- The PC version allows to plan crane jobs with VarioBase® in advance



# VarioBase® Plus

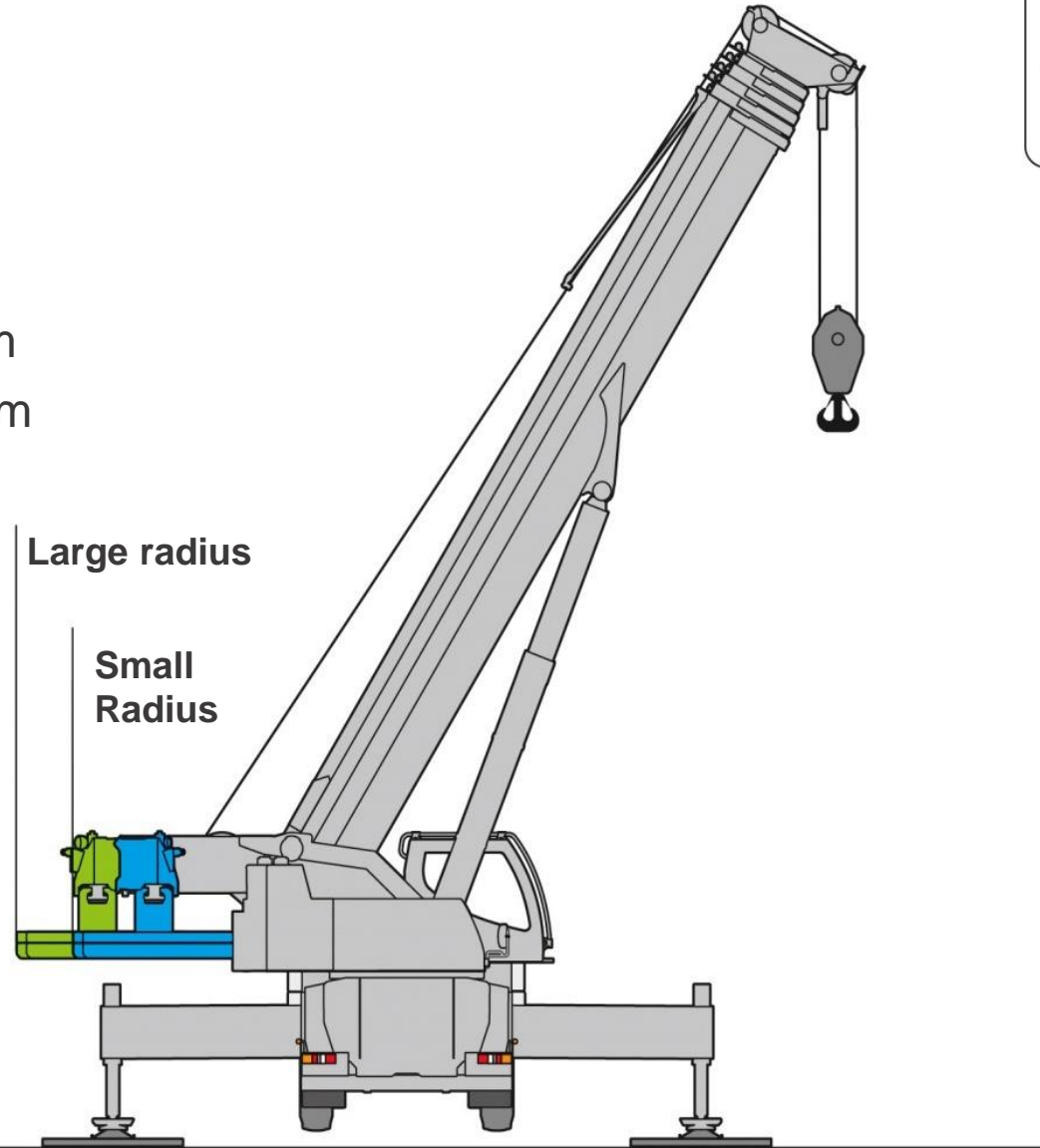


Example: LTM 1110-5.1

# VarioBallast®

## Simple mechanical adjustment

- Small radius for constricted job sites: 3.77 m
- Large radius for maximum capacities: 4.71 m



Example: LTM 1090-4.2



# VarioBallast®



# VarioBallast®



917169708



With small radius the ballast radius is within the supporting base



# VarioBallast®



5 m



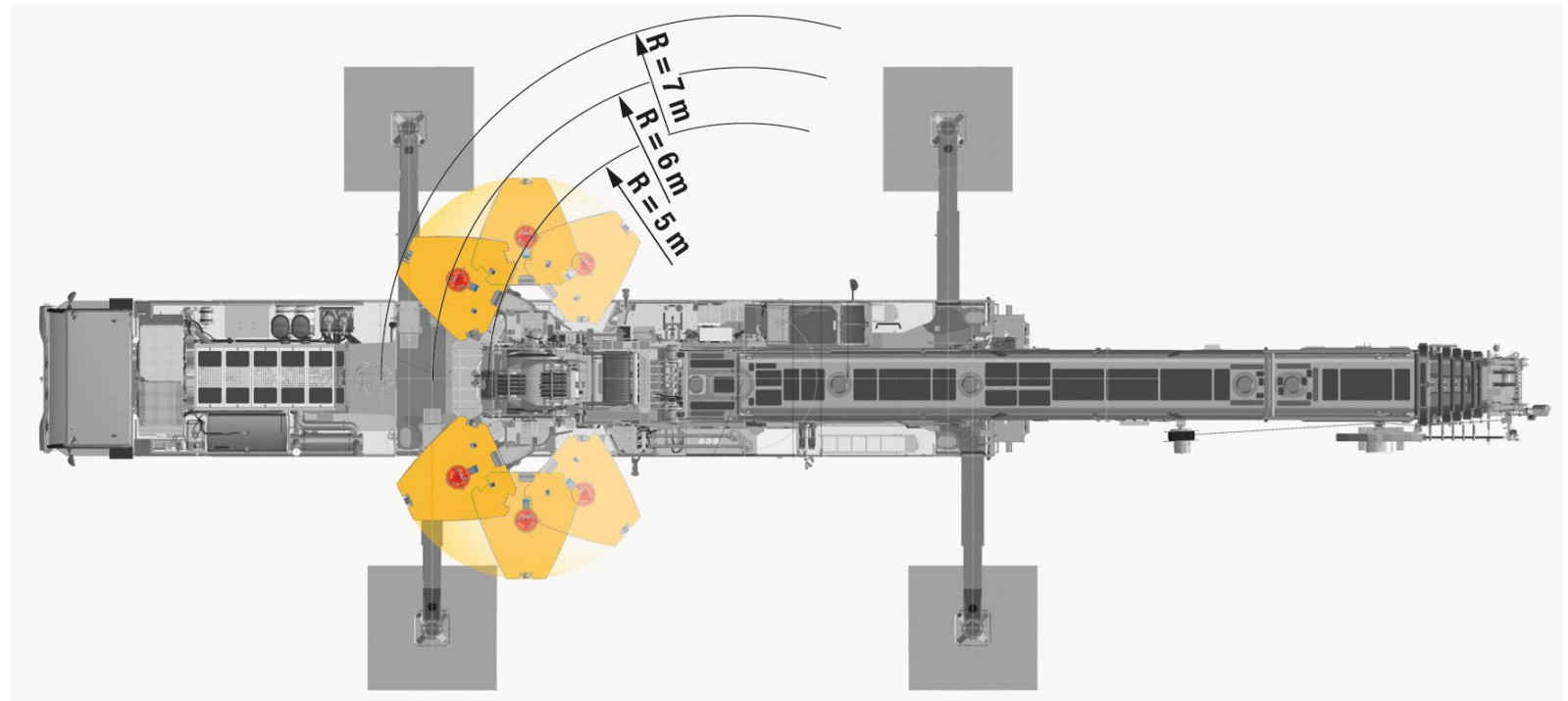
6 m



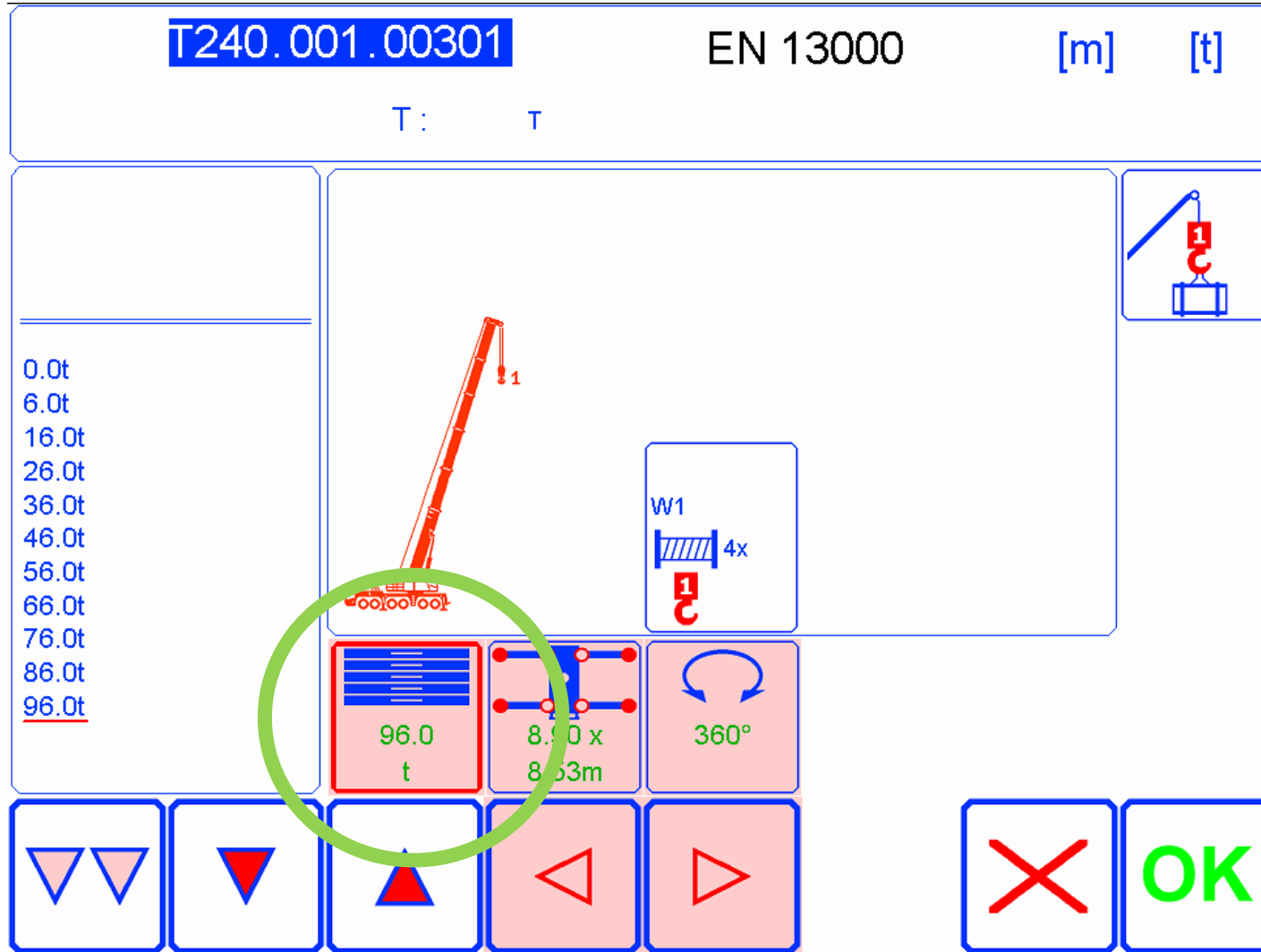
7 m

## Simple hydraulic swivel mechanism

- infinite adjustment from 7 to 5 m
- Large radius for maximum load capacities and small radius for constricted sites

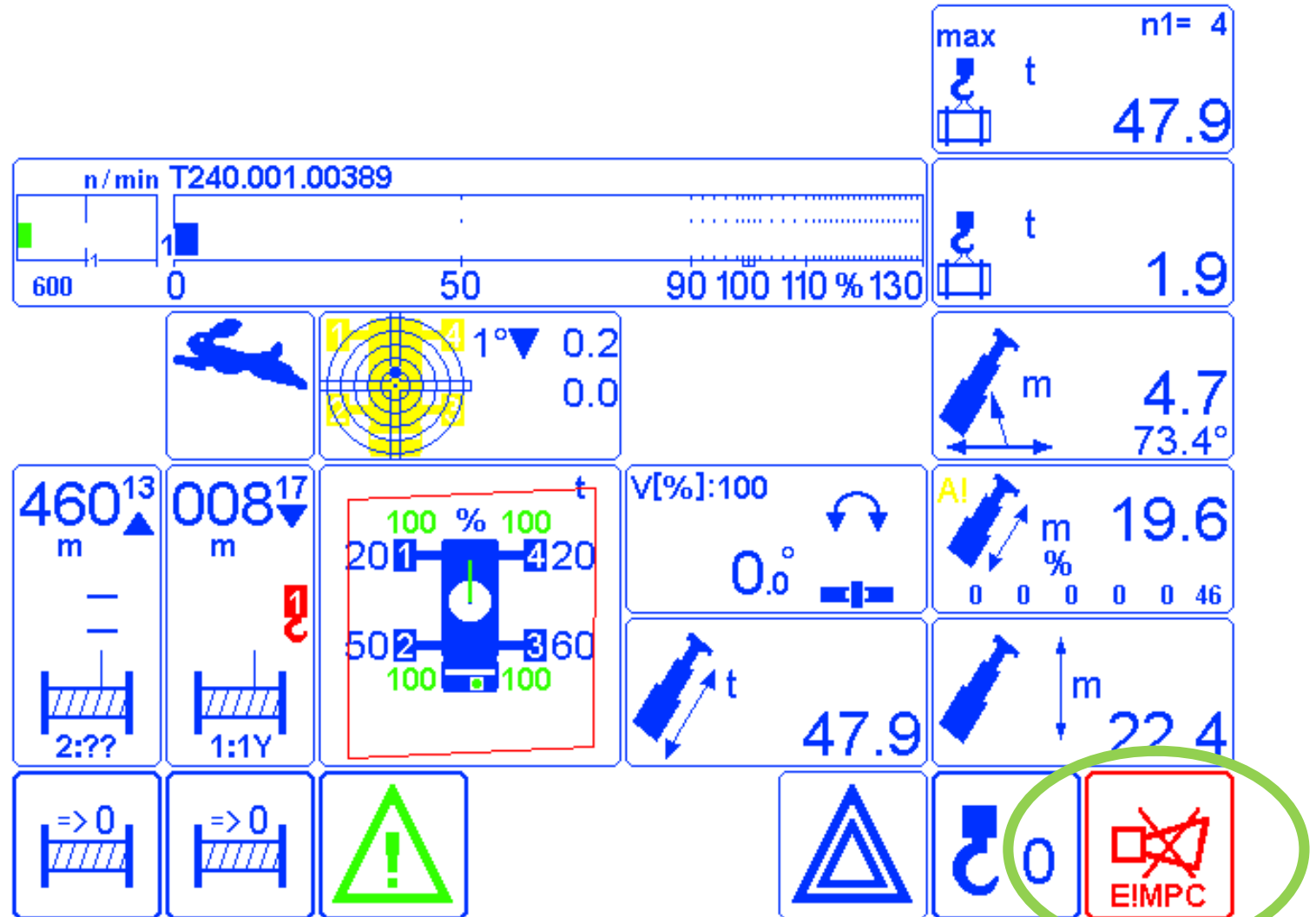


# Counterweight monitoring system





# Counterweight monitoring system



# Counterweight monitoring system

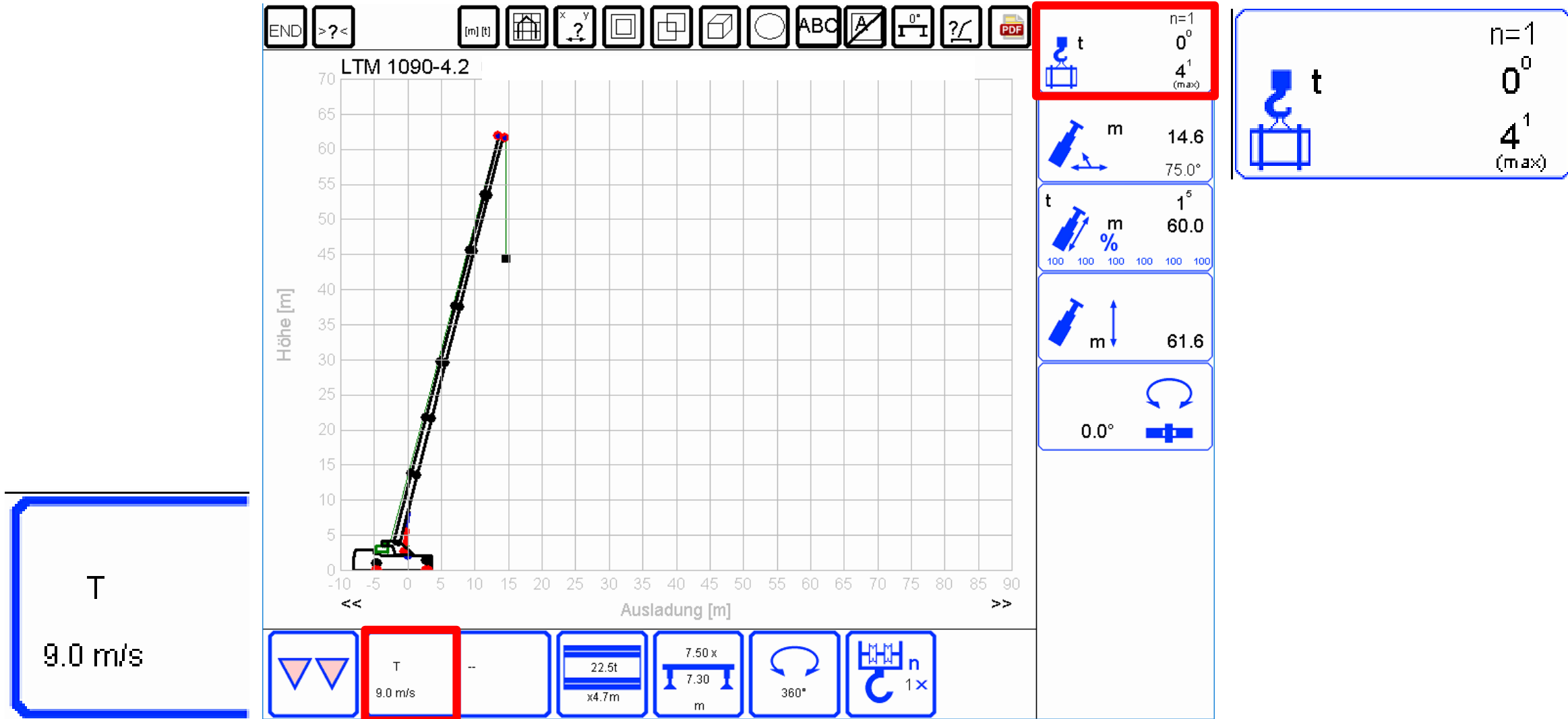
L I C C O N		MPC - 01/01
ERROR-DETECTION		1 / 1
ERROR	DESCRIPTION	
+E1D02C0	LSB-BSE1:LMB	
10:10/16	STOP, ballast detection: ballast not as set up	



# Loadcharts for different permissible wind speeds

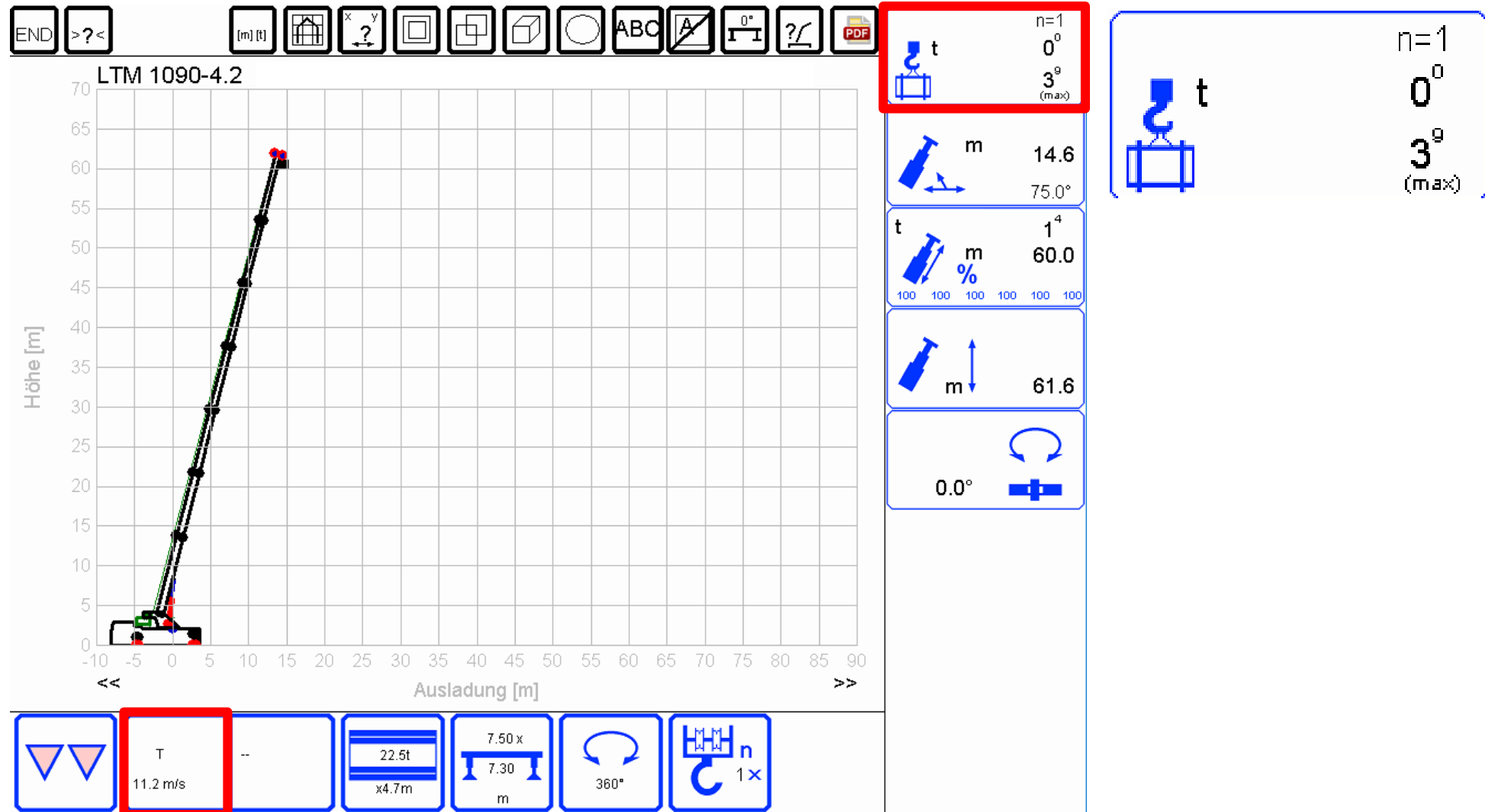


# Loadcharts for different permissible wind speeds

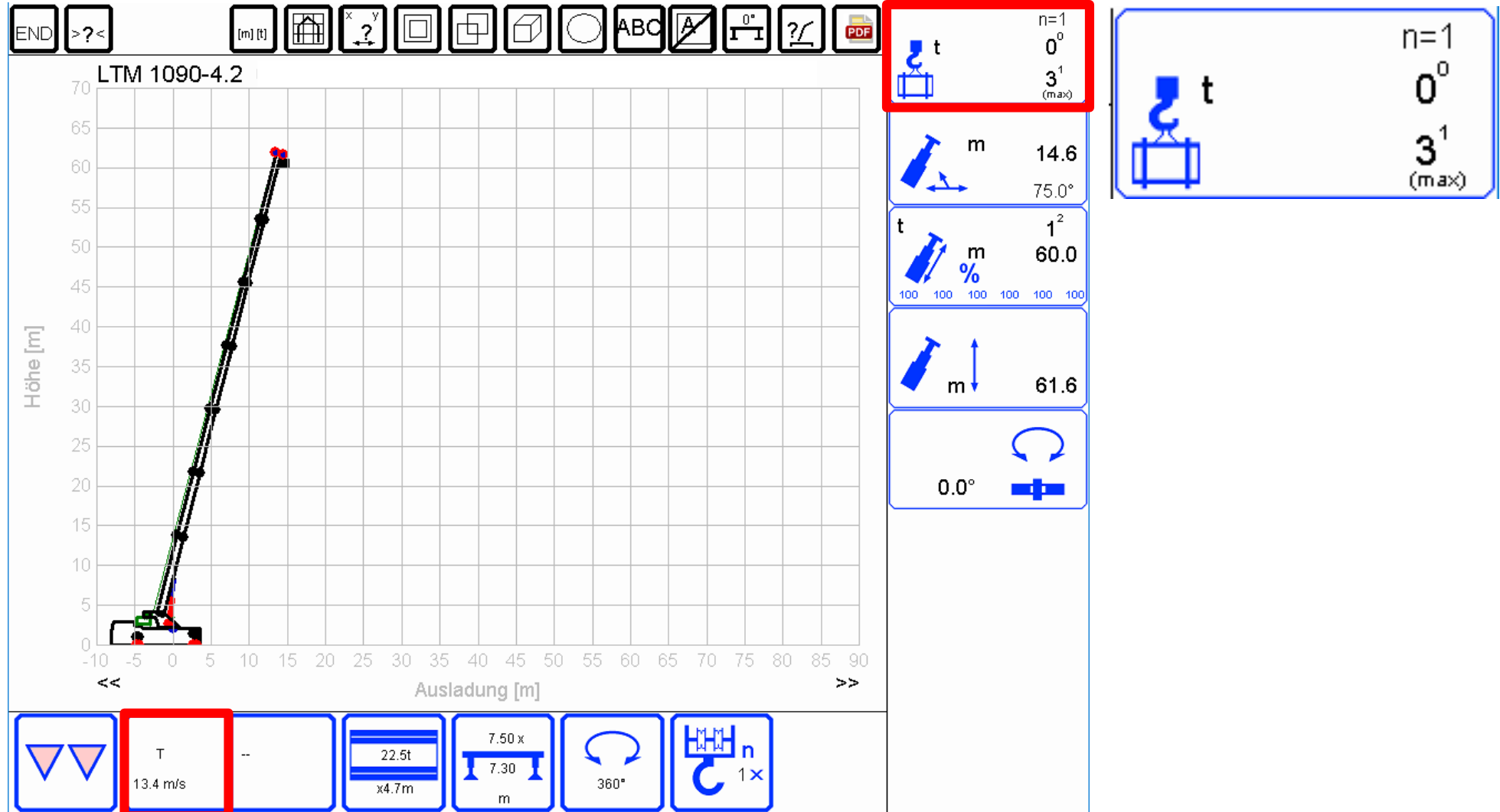




# Loadcharts for different permissible wind speeds

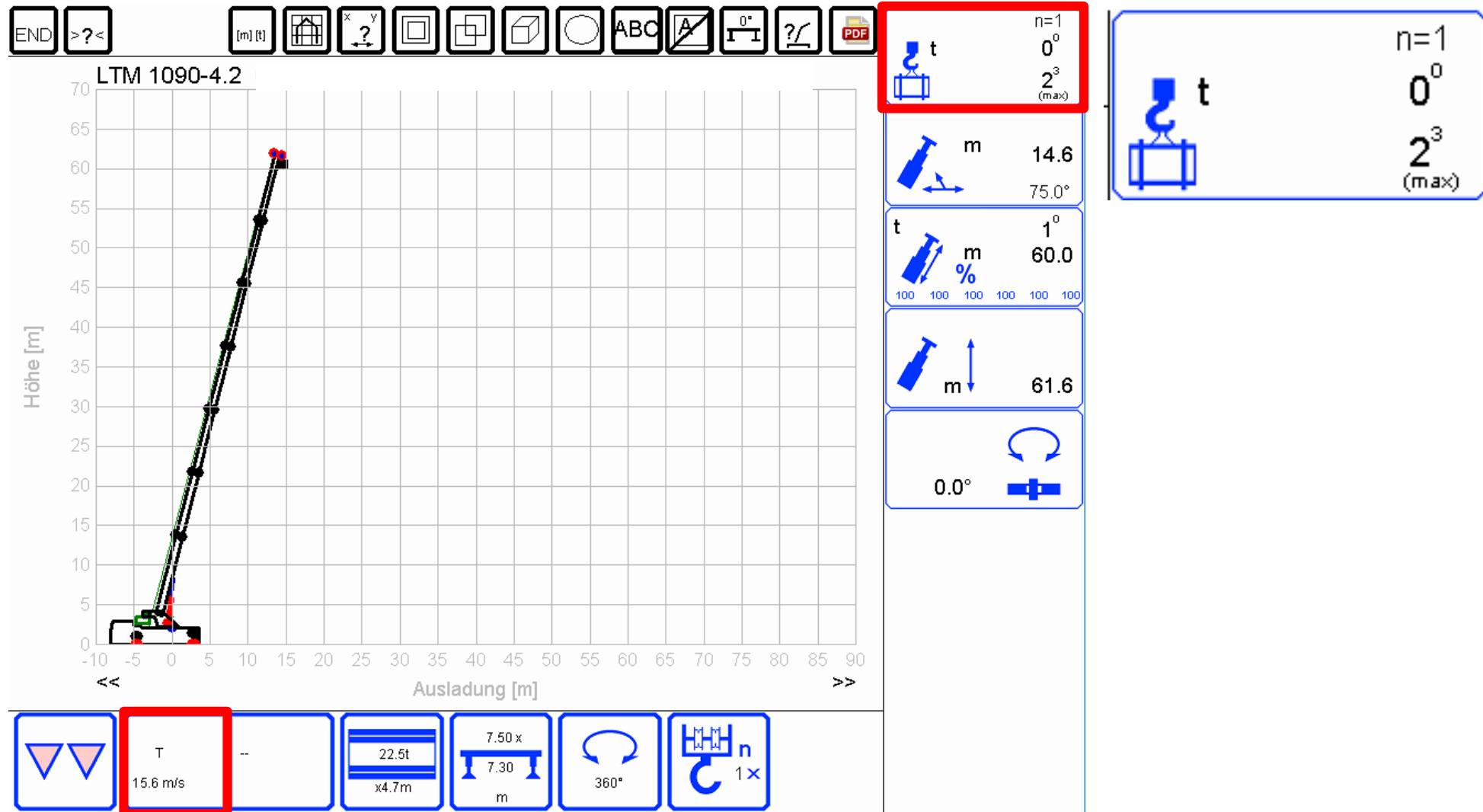


# Loadcharts for different permissible wind speeds



T  
13.4 m/s

# Loadcharts for different permissible wind speeds



# Loadcharts for different permissible wind speeds







Thank you!