

AC 7.450-1

Product Presentation





Highlights & Key Benefits

Specification

Travel Configurations

Lifting Capacity

Product Related Services

Applications

Summary

AC 7.450-1

Highlights & Key Benefits



Lifting your dreams



Longest reach of all 6- and 7-axle all terrain cranes



Outstanding lifting performance with and without SSL



As compact as 400t 6-axle all terrain cranes



Most efficient rigging processes, e.g. rigging of CWT base plate over driver cabin



IC-1 for best in class crane operation



Highlights & Key Benefits



Specification



Travel Configurations



Lifting Capacity



Product Related Services



Applications



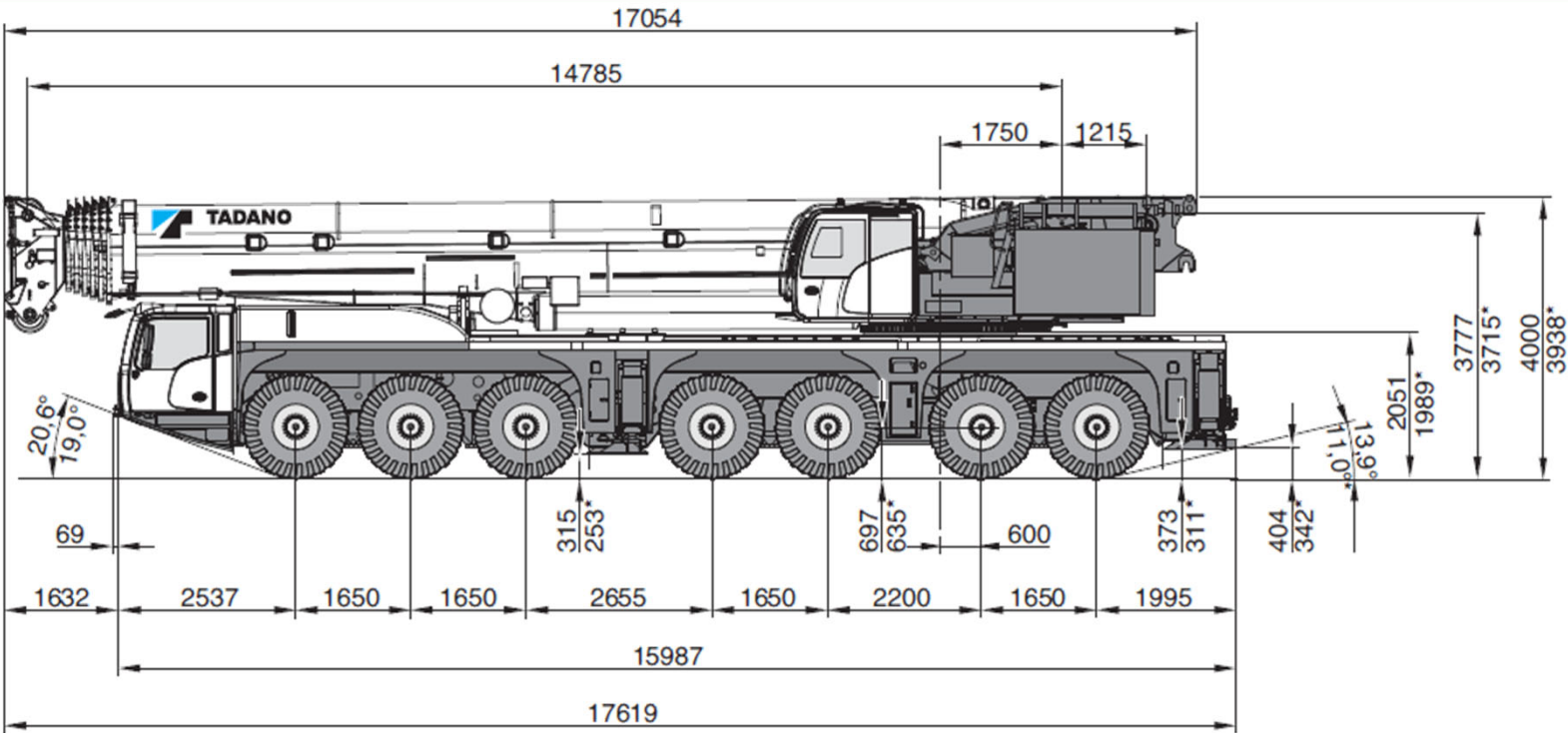
Summary

Specification

Dimensions



Lifting your dreams



As compact as 350t-400t 6-axle all terrain cranes

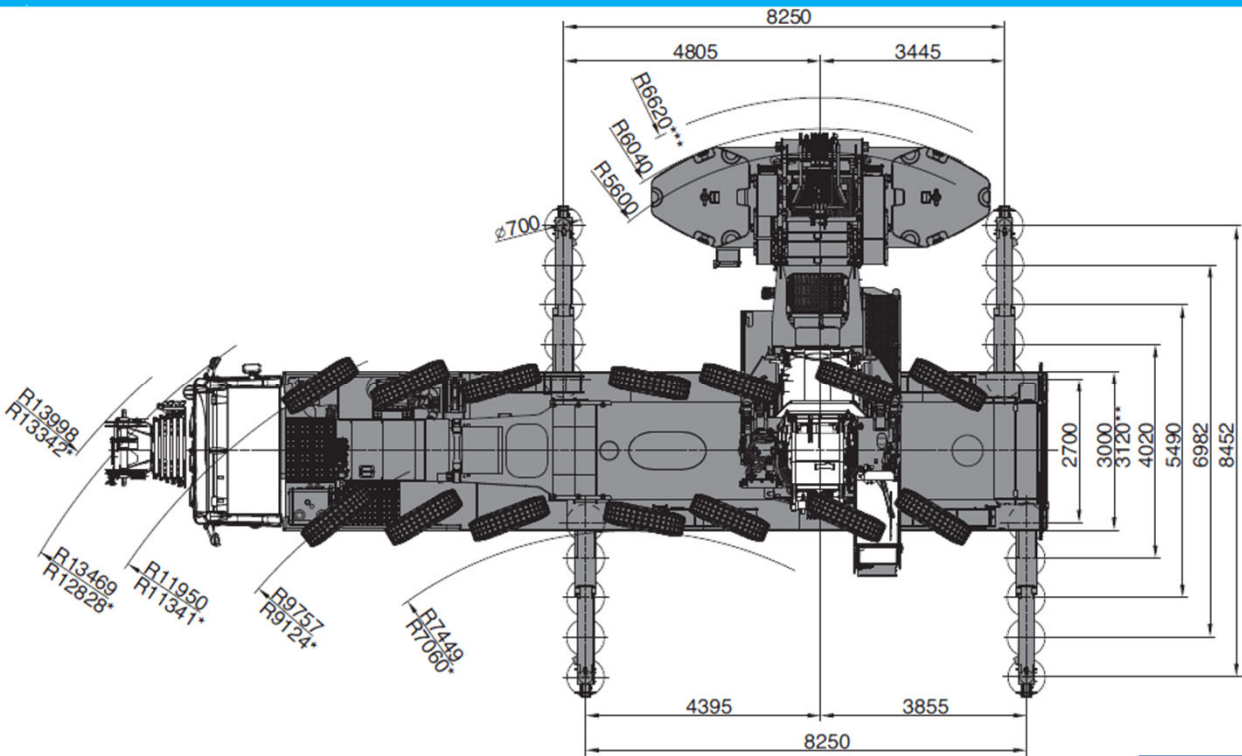
- Total length: 17.62m
- Carrier length: 15.99m
- Height: 4.0m

i		
GMK 6400	ATF 400G-6	LTM 1450-8.1
17.54m	17.96m	19.99m
15.73m	15.92m	18.48m
4.0m	4.0m	4.0m

Specification Dimensions



Lifting your dreams



Most compact and highest number of outrigger setups

- Width: 3.0m (3.12m with 20.5R25)
- Outrigger base: 8.25m x 8.45m
- 5 different outrigger setups
- CWT tailswing: 5.6m / 6.0m

i		
GMK 6400	ATF 400G-6	LTM 1450-8.1
8.7x8.5m	8.9x8.5m	10.4x9.6m
3	3	3
5.9m	5.7m	5-7m

■ Engine

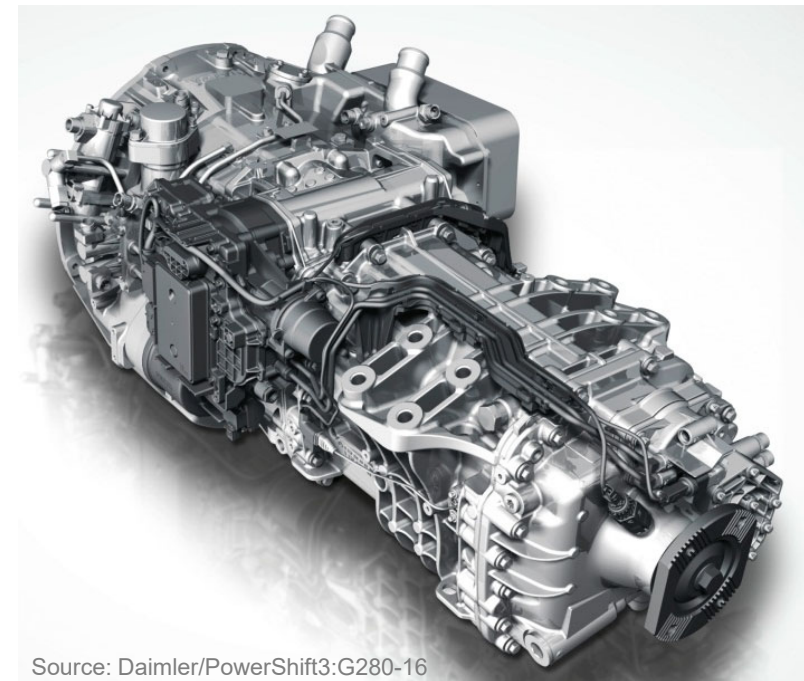
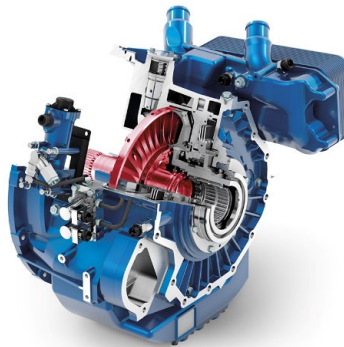
- Mercedes-Benz OM473L
- 460 kW (616 HP), torque 3000 Nm
- EU Stage V / Tier4F / ECE R96 (equivalent to former European regulation EU Stage IIIA)

■ Transmission

- Mercedes G280-16, 16 forward speeds and 2 reverse
- With turbo retarder clutch (TRC)

■ Brake system

- Disc brakes, hydraulic retarder integrated into transmission
- Additional exhaust brake

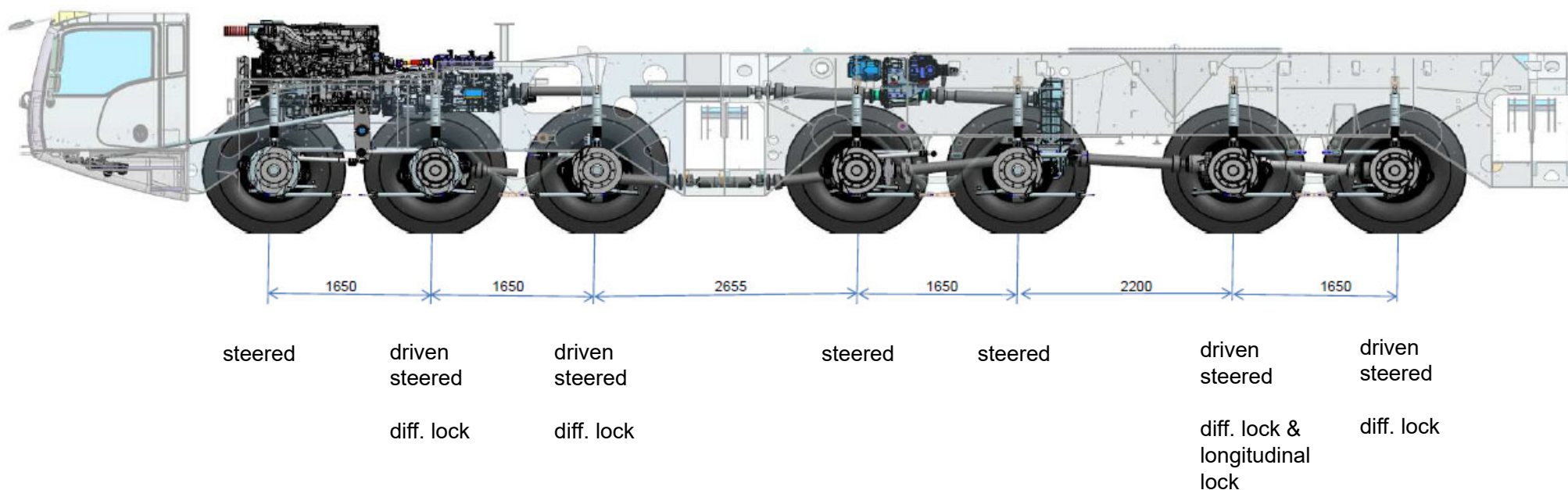


Source: Daimler/PowerShift3:G280-16

■ Drive 14 x 8 x 14

- All axles steered
- 4 axles driven
- Great maneuverability, more compact turning radii compared to other 6-axle cranes

Turning radius	AC 7.450-1	GMK 6400	ATF 400G-6	AC 350-6
Cabin	12.8m	13.9m	13.5m	13.6m
Boom	13.3m	14.5m	14.7m	13.9m

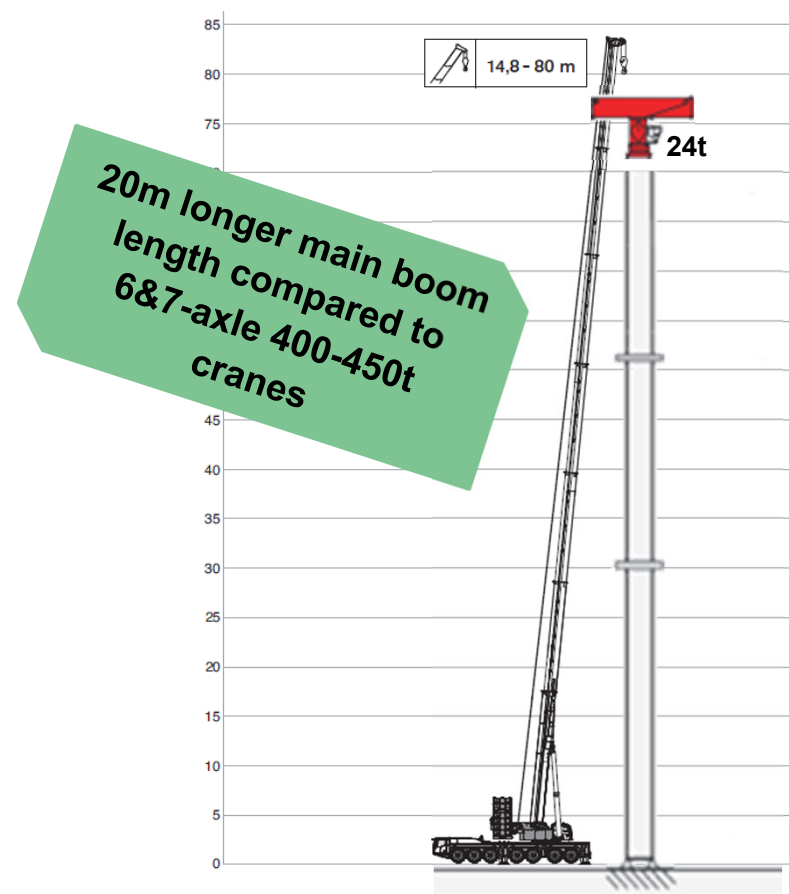


Specification

Main Boom

- 80m main boom – longest of all 350t-400t cranes
- Base section + 6 inner section
- Single cylinder telescoping system
- Pinning possible at 0% / 45% / 68% / 90% / 100% - new pinning position at 68% for higher number of telescoping sequences → higher lifting capacities
- 6-sheaves in main boom head for max. 134.3t lifting capacity
- Heavy-lift attachment available for max. lifting capacity of 195.5t

GMK 6400 60m	ATF 400G-6 60m	LTM 1400-7.1 60m
GMK 7450 60m	main boom length	



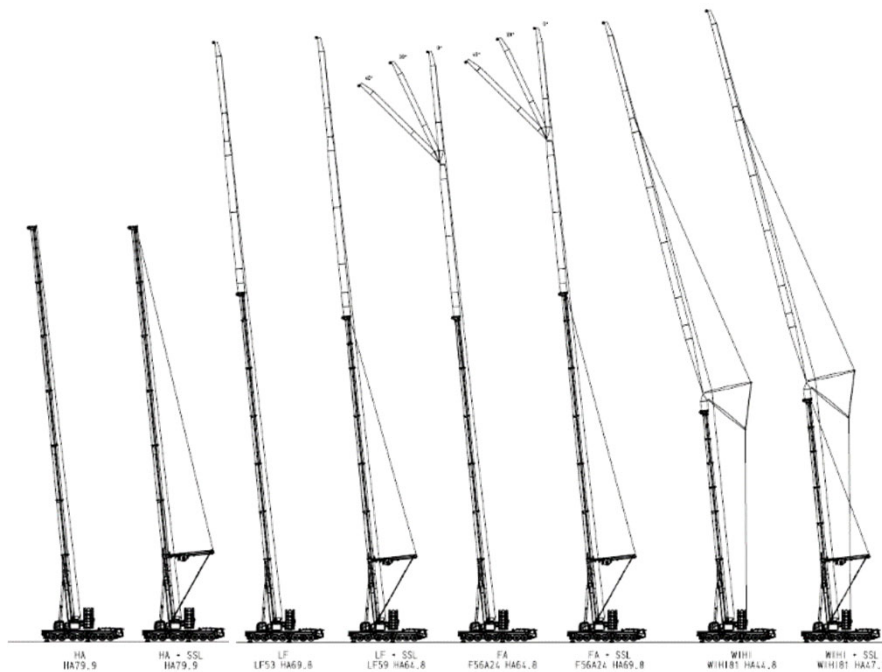
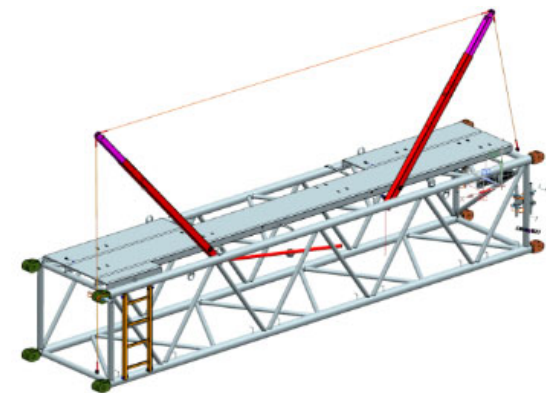
Specification

Sideways Superlift (SSL)

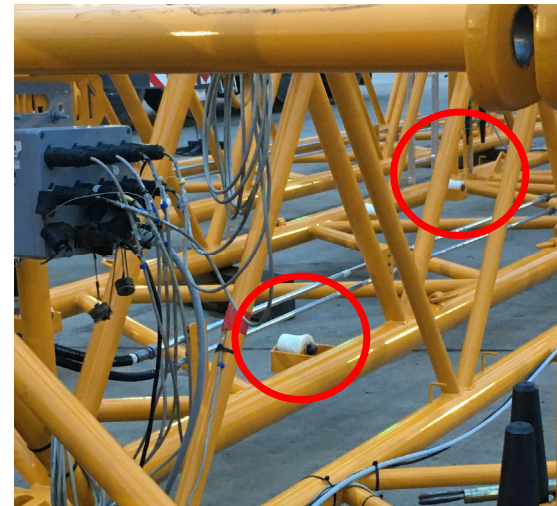
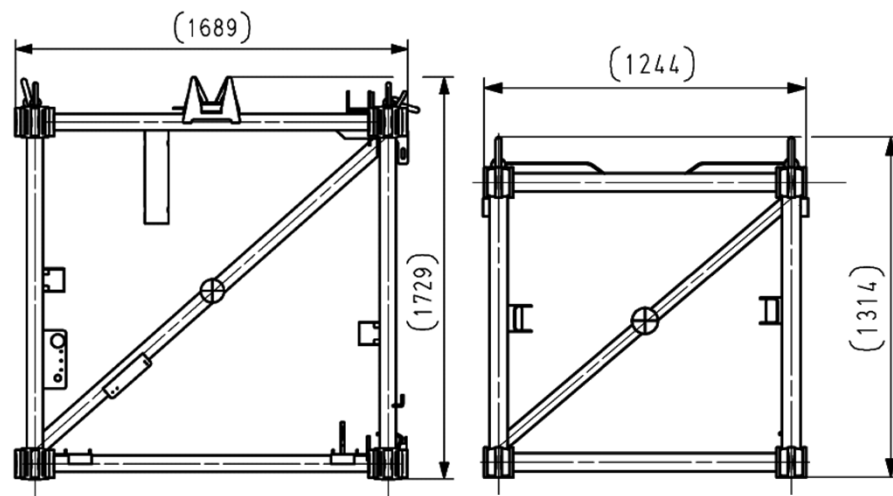
- Evolution of well-known Demag SSL
- Fixing at head of base section → longer SL arms → higher lifting performance
- Transport height 4.15m, weight 12.1t, width 3.00m
- Improved handling, rigging (e.g. hydraulic pinning of SSL arms to main boom) and reduced need for work at height



- Max. system length 131.8m (WIHI-SSL – HA 47.3m + 3.5m adapter + WIHI 81m)
- 3m setup of extensions for higher versatility
- MS for 2-hook operation on all extensions
- Fall protection system available for lattice parts



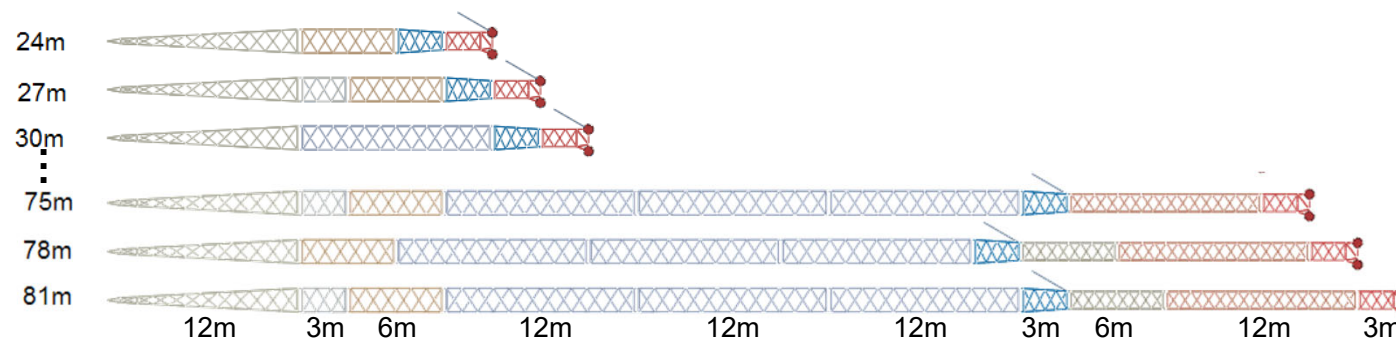
- 2 system measurements for optimized transport logistics
- Smaller sections can be slid into larger sections; larger sections equipped with rollers



Specification

Extensions – Luffing Jib (WIHI)

- WIHI 24m – 81m length – 20 different configurations
- HA 24.8m – 54.8m length
- Max. system length 131.8m (WIHI-SSL – HA 47.3m + 3.5m adapter + WIHI 81m)
- 3-sheave head for max. 61.4t capacity
- Same patented rigging procedure like AC 300-6, AC 350-6 and AC 1000-9



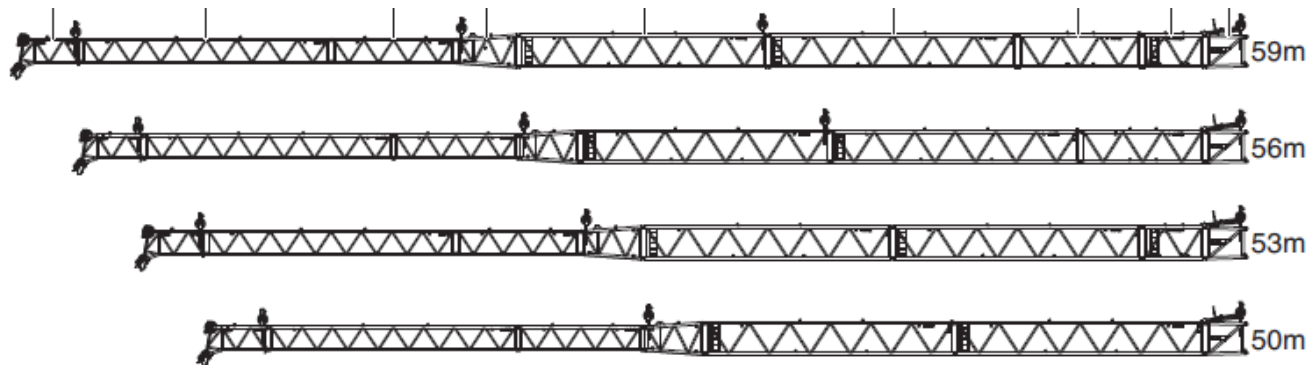
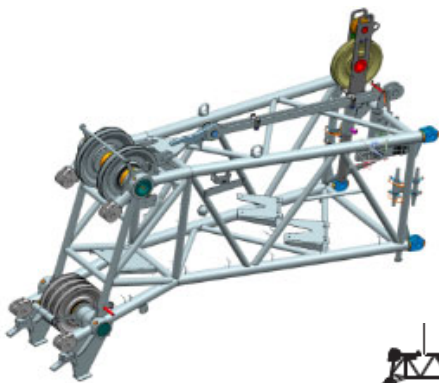
Specification

Extensions – Light Fixed Jib (LF)



Lifting your dreams

- 8m – 59m length – 18 different configurations
- Max. system length 123.8m (LF-SSL – HA 64.8m + LF 59m)
- 3-sheave head for max. 69.2t capacity



Specification

Extensions –Fixed Jib with Offset (F-A)

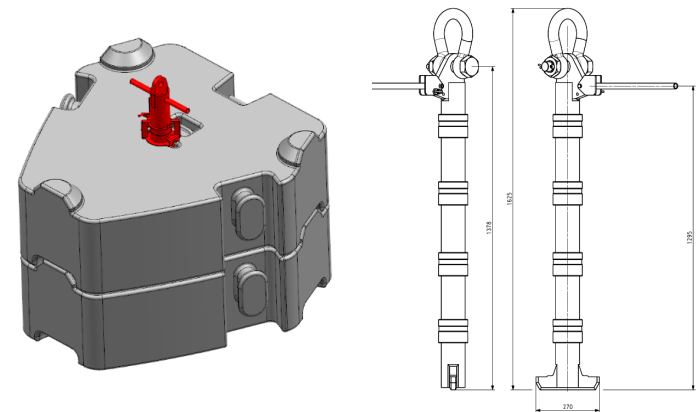


Lifting your dreams

- 11m – 56m length – 48 different configurations
- 6m – 24m offset able part
- Max. system length 125.8m (F-A-SSL – HA 69.8m + F-A 56m)
- 3-sheave head for max. 69.2t capacity
- Mechanical or hydraulically offset section available for offset of 0°, 20°, 40°



- Max. counterweight 150t
- Base plate 20t can be rigged over front
- 10t and 5t slabs available for optimized transport logistics
- Slabs with symmetric dimensions
- H2 and bridle for WIH1 can stay with base plate
- CWT-frame available for larger cwt tail swing → Increase of lifting capacity especially with SSL
- Different adapter for usage of existing AC or CC CWT
- CWT rigging device (central pin)













- Hoist 1 and 2 with identical line pull
- Hoist 2 integrated in CWT base plate
- HR (hydraulic reeving winch) available, removable, with quick connections



Hydraulic reeving winch



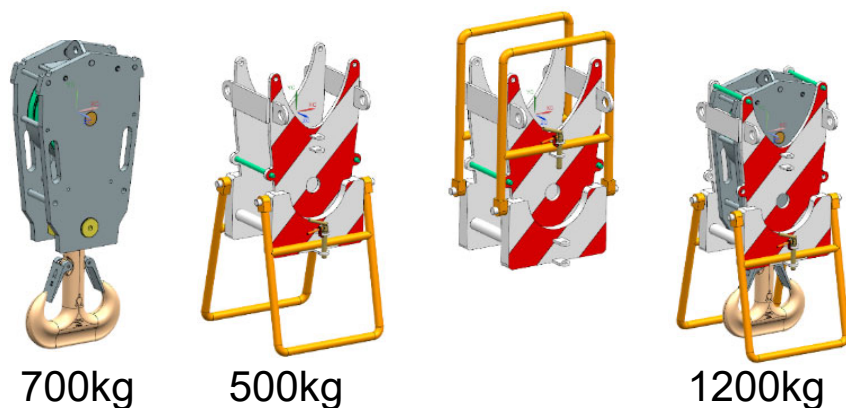
CWT base plate

					
1	130 m/min	116 kN	23 mm	435 m	
2	130 m/min	116 kN	23 mm	565 m	
					
12 t	11,8	6	1	500	2,00 m
40 t	23,5	6	2	900	2,70 m
40 t	35,1	6	3	900	2,70 m
80 t	46,6	6	4	1200	3,00 m
80 t	57,9	6	5	1200	3,00 m
80 t	69,2	6	6	1200	3,00 m
80 t	80,3	6	7	1200	3,00 m
125 t	91,3	6	8	1400	3,00 m
125 t	102,2	6	9	1400	3,00 m
125 t	113,0	6	10	1400	3,00 m
125 t	123,7	6	11	1400	3,00 m
160 t	134,3	6	12	1900	3,00 m
160 t	144,8	6 + 3	13	1900	3,00 m
160 t	155,1	6 + 3	14	1900	3,00 m
200 t	165,4	6 + 3	15	2000	3,00 m
200 t	175,6	6 + 3	16	2000	3,00 m
200 t	185,6	6 + 3	17	2000	3,00 m
200 t	195,5	6 + 3	18	2000	3,00 m

Specification

Hook Blocks

- 6 types of hook blocks available
- 5-, 3-sheave and 1-sheave hook block available with single hook or ramshorn hook
- Max. capacity with 3-sheave hook block 80.3t
- 3-sheave Vario hook block available → possible to travel with reeved hook block within 12t axle load



12 t	11,8	6	1	500	2,00 m
40 t	23,5	6	2	900	2,70 m
40 t	35,1	6	3	900	2,70 m
80 t	46,6	6	4	1200	3,00 m
80 t	57,9	6	5	1200	3,00 m
80 t	69,2	6	6	1200	3,00 m
80 t	80,3	6	7	1200	3,00 m
125 t	91,3	6	8	1400	3,00 m
125 t	102,2	6	9	1400	3,00 m
125 t	113,0	6	10	1400	3,00 m
125 t	123,7	6	11	1400	3,00 m
160 t	134,3	6	12	1900	3,00 m
160 t	144,8	6 + 3	13	1900	3,00 m
160 t	155,1	6 + 3	14	1900	3,00 m
200 t	165,4	6 + 3	15	2000	3,00 m
200 t	175,6	6 + 3	16	2000	3,00 m
200 t	185,6	6 + 3	17	2000	3,00 m
200 t	195,5	6 + 3	18	2000	3,00 m

Specification

Driver Cabin



Lifting your dreams

- 2.85m wide, spacious cabin with pass between driver and co-driver seat
- Adjustable driver seat with seat heating, armrests and pneumatic suspension
- Engine-dependent warm water heating with 12kW heating power
- Air-condition with 7kW rated cooling power
- Low beams, high beams, daytime running lights, fog and cornering lights
- Digital radio with cell phone hands-free profiles



Specification

Operator Cabin



Lifting your dreams

- 0.875m wide operator cabin
- Infinitely tilt variable 16°
- Sliding window rear and door, fold-out front window
- Adjustable operator seat with seat heating and integrated armrests
- Dashboard with integrated operating screen
- Engine-independent warm water heating with 5kW heating power
- Air-condition with 5kW rated cooling power
- Hoist monitoring included in standard configuration



- Engine-independent air-condition for operator cabin with auxiliary diesel power unit (HATZ diesel)
 - Air-condition and power supply for operator cabin
 - Reduction of idling time of main engine
 - Increase of fuel efficiency
 - Reduction of main engine hours



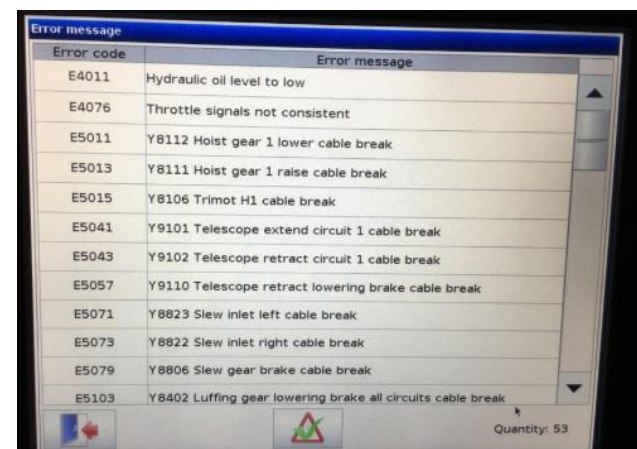
Proven TADANO IC-1 (*Intelligent Controls*) control system with integrated RCL (rated capacity limiter) according to EN13000

- Touchscreen operation
- Intuitive user guidance
- Advanced diagnostic capabilities



Benefits

- Ease of operation: With graphics placed on the crane setup screen for easy recognition, the IC-1 control system offers fast and intuitive setup with fewer touches required than with competitive control systems.
- Precise Control: The IC-1 control system delivers precise and smooth control of all movements.
- Advanced Diagnostics: Advanced on-board diagnosis offered by the IC-1 control system provide the ability to diagnose an issue by function, allowing the user to quickly pinpoint and fix the problem for maximum uptime.



The IC-1 Plus control system adds additional value to the crane as it increases flexibility and enables it to perform more jobs.

- Live determination of the crane capacities depending on the slewing angle of the superstructure, counterweight and outrigger setting
- Incl. automatic counterweight detection
- Asymmetric outrigger settings

IC-1 PLUS

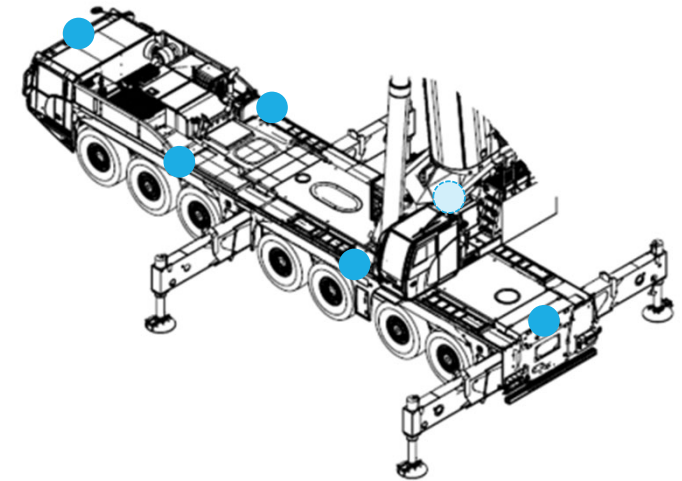


■ TADANO Surround View

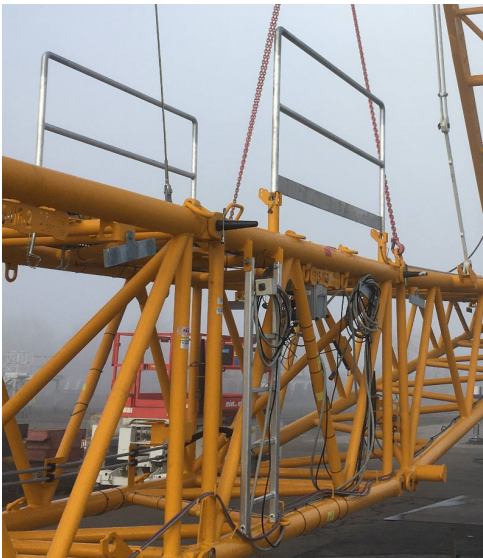
- Bird view camera for 360° view
- Shown on separate display in carrier cabin
- Usage also as supporting system when turning left or right, blind spots like cyclist, pedestrians or obstacles are shown in display
- Indication of outrigger positions to find the right spot when entering a construction site (patented system)
- 6 cameras positioned around the crane



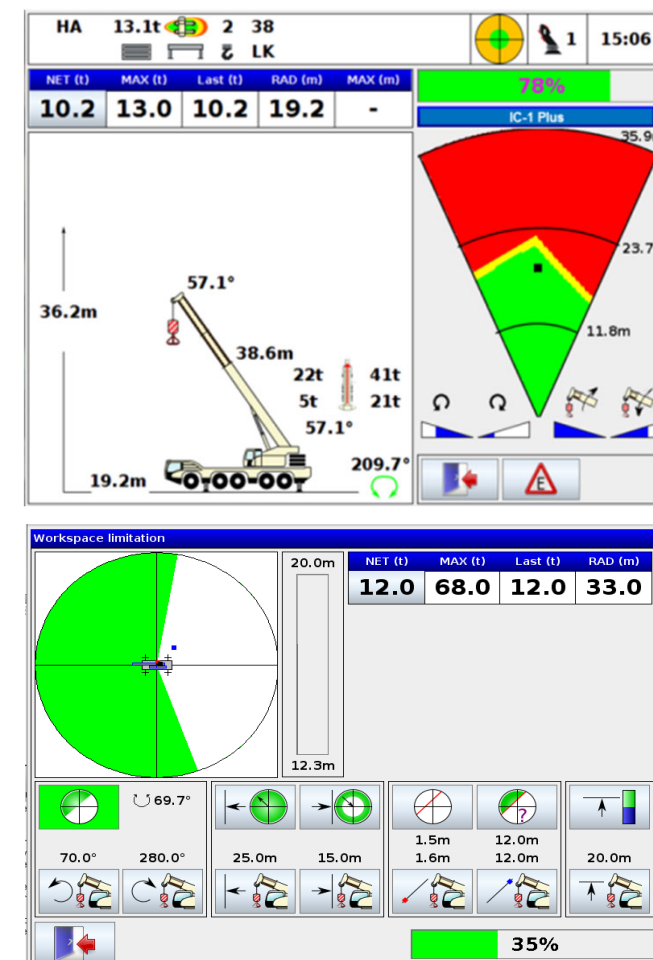
**TADANO
SURROUND VIEW**



- Handrails and integrated latter for safe access of superstructure
- Fall protection for CWT, superstructure, SSL and lattice parts



- Fog lights, cornering lights and daytime running lights
- Capacity radar (part of IC-1 Plus)
 - Intuitive and safe use when working with asymmetric outrigger set-ups
 - +/- 30° pre-calculation of working area visible on control screen
- Automatic CWT detection (part of IC-1 Plus)
 - No need to select cwt configuration
 - Only confirmation of crane operator needed → reduced risk of human error
- Working range limitation
 - Limitation of min/max radius, height and slewing angle
 - Simulation of virtual wall



- Automatic levelling
 - Easy and fast levelling of crane by just pushing two buttons
- Storage boxes to securely stow lifting accessories (tackles, chains, wood, etc.)
- Remote control in standard configuration for crane rigging and operation
 - 5inch display
 - Full crane operation possible
 - Rigging functions possible (e.g. outrigger positioning, levelling of crane, cwt rigging, reeving winch, ...)
 - Faster and safer handling of crane



■ Start / Stop function

- Reduced idle time by using start/stop button
- Reduced total engine hours

■ Axle load display

- Indication of actual axle loads
- Helps crane operator to be legal on the road

■ Camera systems

- Hoist monitoring H1 (standard) / H2 (together with H2)
- Load supervision camera (optional)
- Rear view camera (standard)
- Bird view camera (optional)
- Blind spot camera (optional)
- CWT tailswing camera (optional)





Highlights & Key Benefits



Specification



Travel Configurations



Lifting Capacity



Product Related Services



Applications



Summary

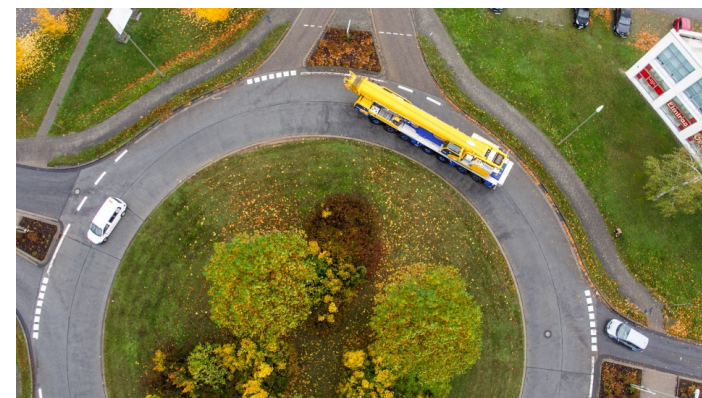
Travel Configurations

Travelling on Road

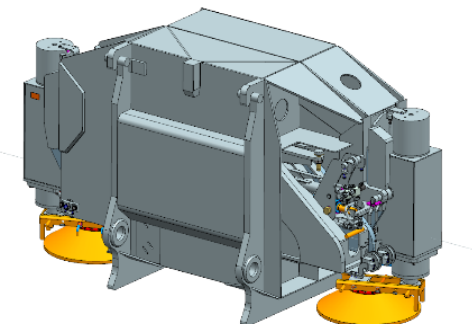
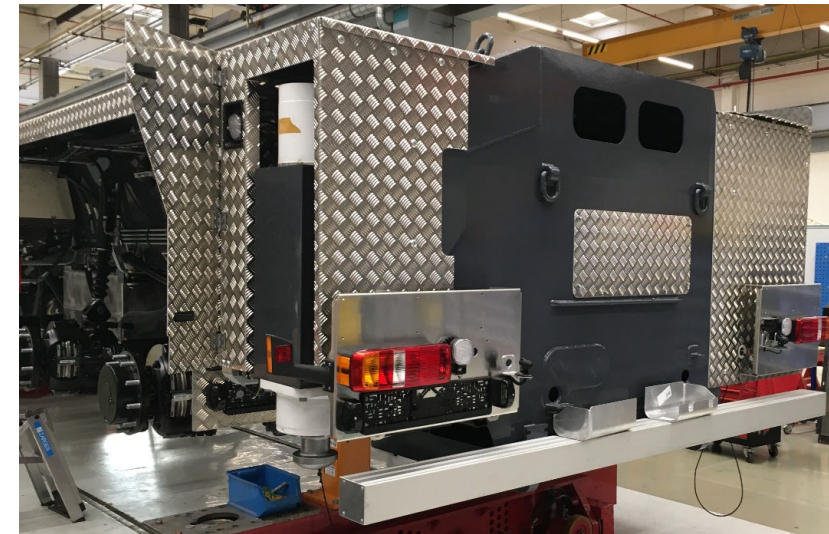
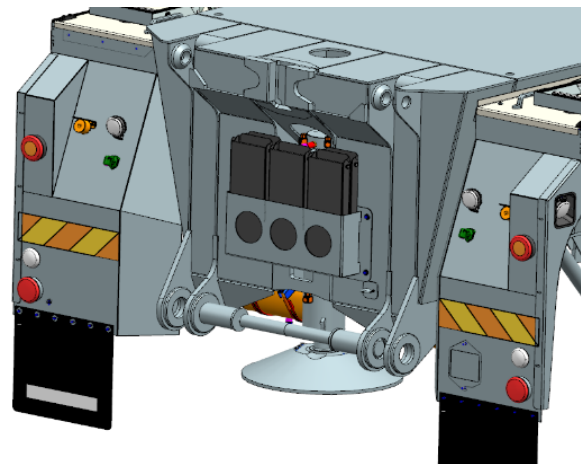
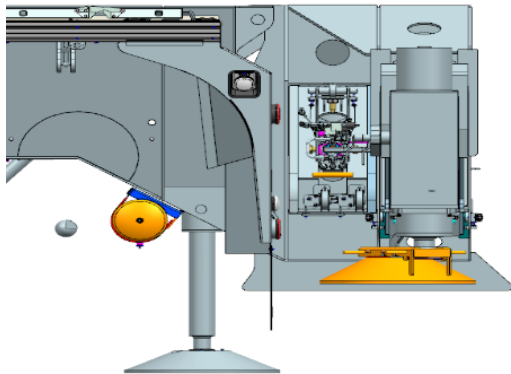
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< 12,0 t	On request and technical verification · Auf Anfrage und technische Klärung · Sur demande et explications techniques · Su richiesta e verifica tecnica · Bajo demanda y comprobación técnica · A pedido e mediante verificação técnica · По заявке и после проверки соответствия установленным требованиям							X
< 10,0 t	< 48,0 t	14 x 8 x 14	445/95R25	—	—	—	—	—
< 12,0 t	< 84,0 t	14 x 8 x 14	385/95R25	80 m	40 t	—	650 kg	—
< 12,0 t	< 84,0 t	14 x 8 x 14	445/95R25 (Al)	80 m	80 t Vario	—	—	—
< 12,0 t	< 84,0 t	14 x 8 x 14	445/95R25	80 m	12 t	—	350 kg	—
< 16,5 t	< 102,0 t	14 x 8 x 14	445/95R25	80 m	80 t	X	4500 kg	—

■ Various configuration options to fulfil road regulations of key markets

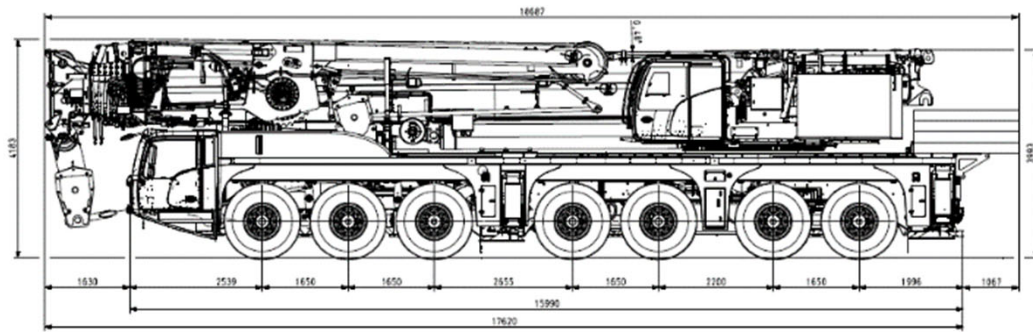
- Removable outrigger box rear
- 20.5 inch tires
- Aluminum rims (16.00R25 and 20.5R25)
- Boom off
- Dolly preparation
- Quick connection outrigger beams
- Quick connection luffing cylinder
- Vario hook block



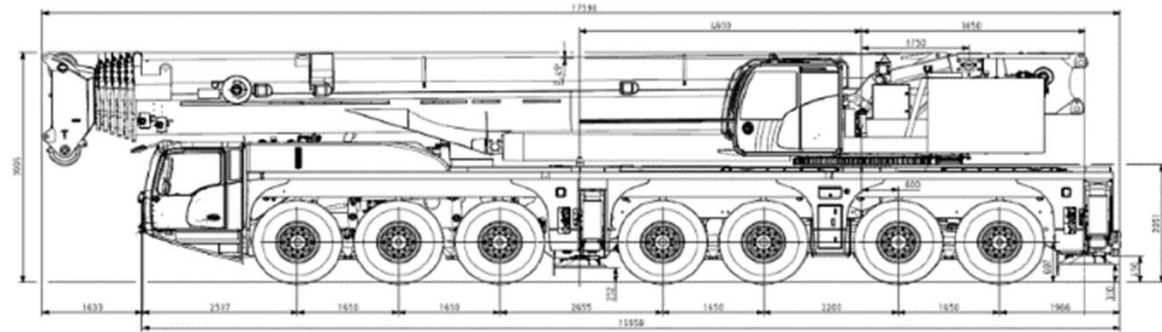
- Removable outrigger box rear
 - Special carrier variant
 - Reduction of GVW by 5300kg
 - Self-rigging possible due to additional central outrigger
 - Equipped with quick connections
 - Hydraulic pinning



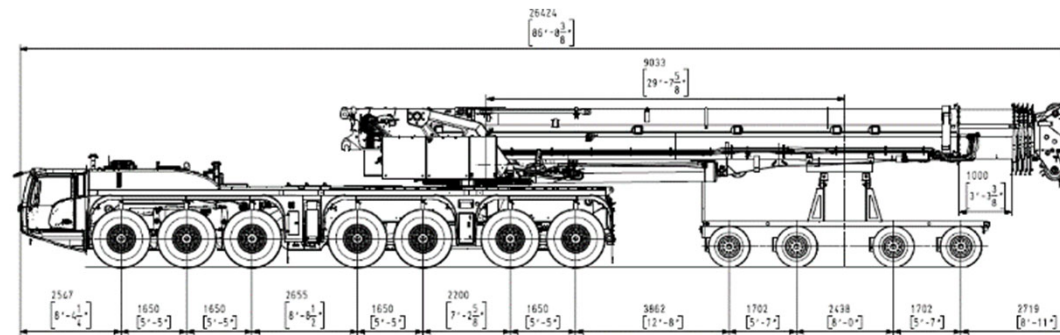
Examples



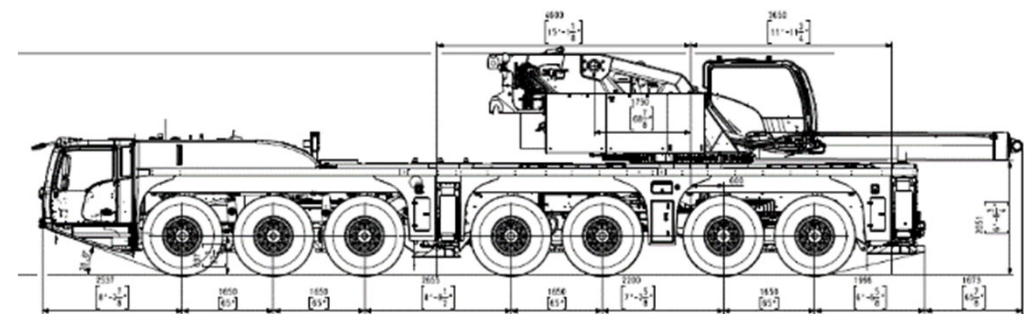
16.5t axle load – e.g. UK



12t axle load – e.g. DE, ES, FR



4-axle dolly – e.g. USA



w/o boom – e.g. JP

- Driving rigged on jobsite possible with max. 140t cwt (16.00R25 or 20.5R25 tires needed)
- Driving rigged on jobsite with 14.00R25 tires – max. 100t cwt possible
- Max. axle load in rigged configuration
 - Up to 32t with 16.00R25 and 20.5R25 tires
 - Up to 27t with 14.00R25 tires





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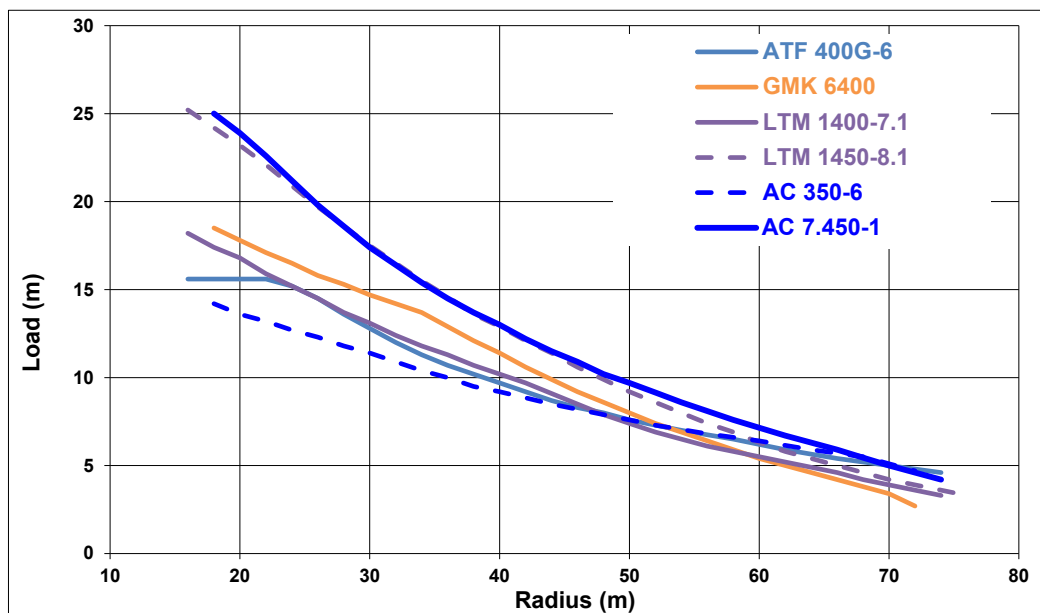
Summary

Lifting Capacity

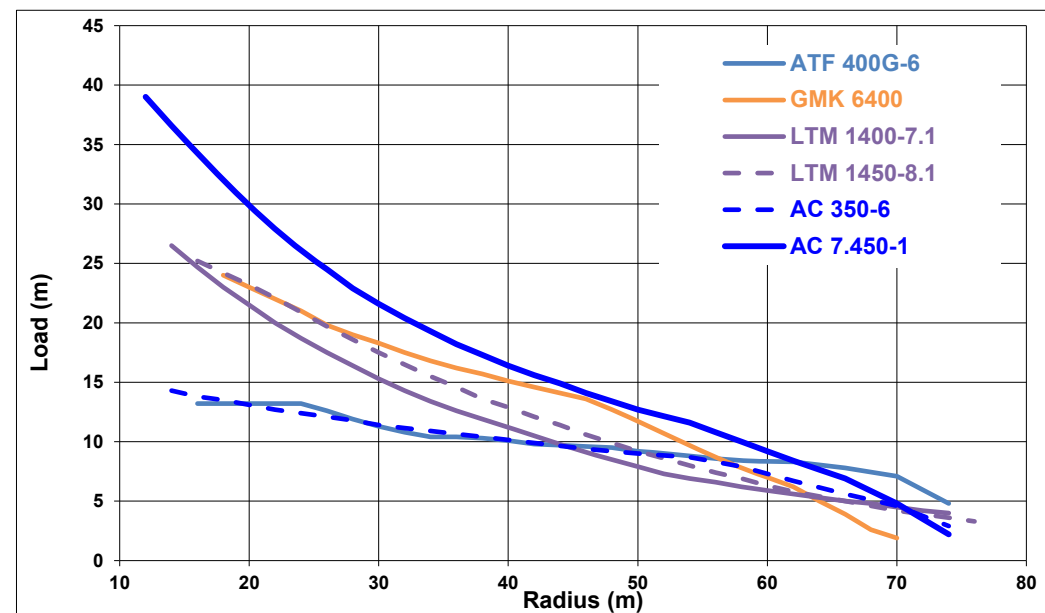
Main boom – max. cwt



Lifting your dreams



- 80m main boom length
- Best in class lifting capacity
- 23.7t lifting capacity on fully telescoped main boom
- 6- and 7-axis competitors need to work with fixed jib



- 80m main boom length
- Best in class lifting capacity
- 37.3t lifting capacity on fully telescoped main boom with SSL
- 6- and 7-axis competitors need to work with fixed jib



Highlights & Key Benefits



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Lifting Capacity



Product Related Services

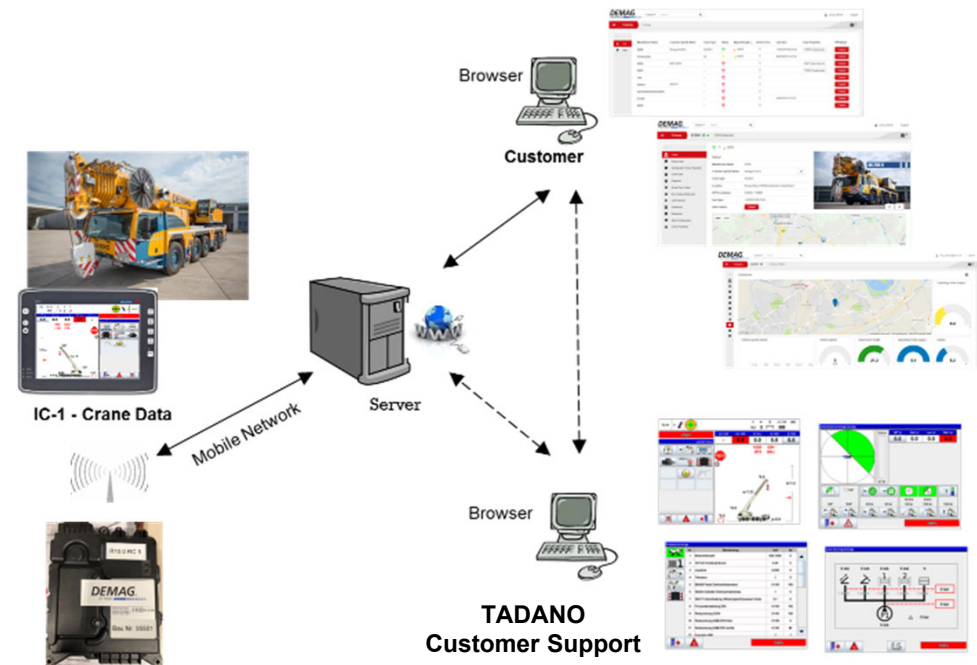


Applications



Summary

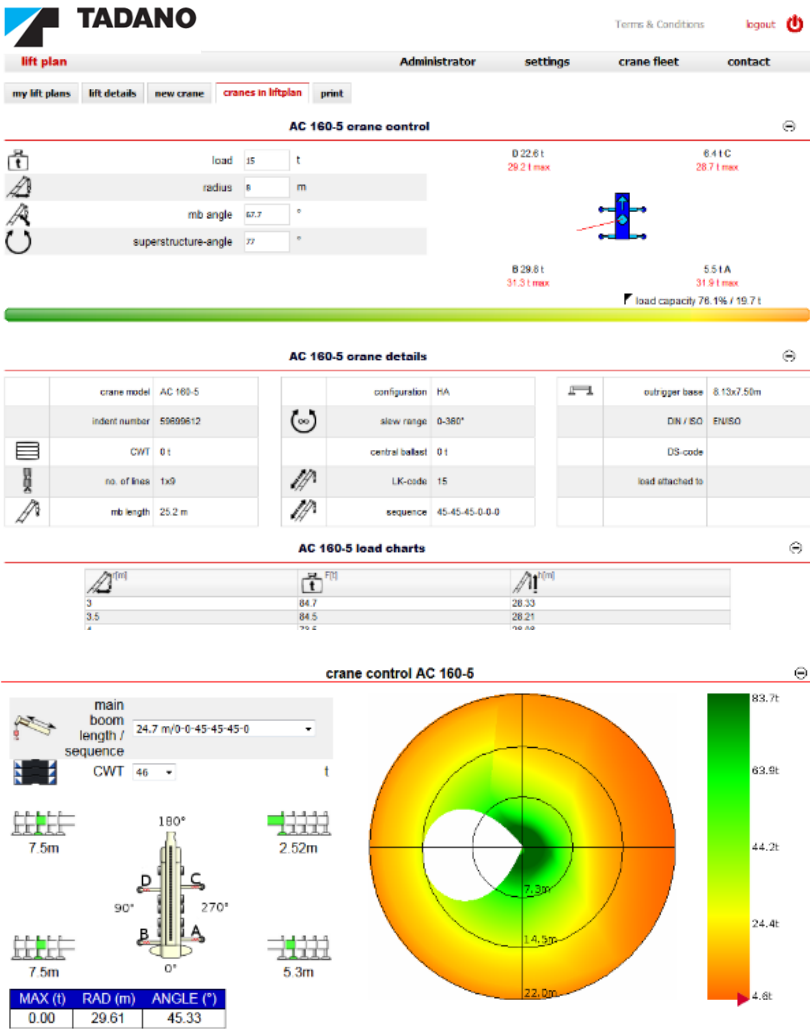
- Based on a cloud-server concept
- Extension of the IC-1 control system by mobile radio device with SIM card and antenna
- Connection via mobile network to central cloud
- Retrieve crane information via browser at any time
- TADANO Customer Support prepared to provide expert support
- Wide variety of data views



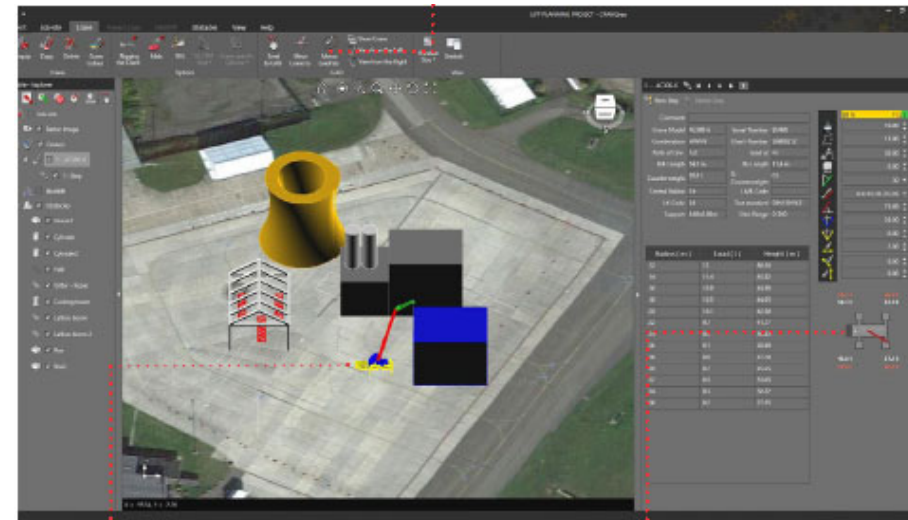
Product Related Services

IC-1 Lift Plan – Demag Lift Planning Website

- Online lift planning tool
- Features planning tool for IC-1 Plus
- Free of charge
- Easy to use intuitive interface
- Configured to meet specific needs and adaptable to personal preferences
- Available in 11 languages
- Provides a printout (pdf) of a lift plan



- Advanced lift planning software
- Accurate verification of load charts, degrees of freedom and calculation of outrigger loadings
- Optimized crane selection
- Crane control to runtime in CAD
- 3D vehicles and components with pin-point precision





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Summary

TOWER CRANE ERECTION

With up to 37.9t lifting capacity on 80m main boom with SSL the AC 7.450-1 is perfectly suited for tower crane erection and dismantling.

HEAVY LIFTING

With a lifting capacity of over 110t at 10m radius the AC 7.450-1 persuades in heavy lifting application, like port handling.

INFRASTRUCTURE

With strong capacities also on shorter main boom length the AC 7.450-1 convinces on infrastructure projects.

REFINERY REFURBISHMENT AND MAINTENANCE

With a 81m WIHl and its outstanding reach the AC 7.450-1 is the perfect fit for jobs in refineries.





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Longest reach of all 6- and 7-axle all terrain cranes



Outstanding lifting performance with and without SSL



As compact as 400t 6-axle all terrain cranes



Most efficient rigging processes, e.g. rigging of CWT base plate over driver cabin



IC-1 for best in class crane operation