

R SERIES TOWER CRANE

BUILD FOR BETTER LIVES



ZOOMLION

TOWER CRANE BUSINESS UNIT PROFILE



Introduction

ZOOMLION Construction Hoisting Machinery Company is a subsidiary of ZOOMLION Heavy Industry Science & Technology Co., Ltd. and is mainly engaged in the design and development, manufacturing and sales services of tower cranes and construction hoists, with a modern plant of over 300,000 square meters and more than 3,000 employees. It is a pioneer in the industry of super-large tower cranes, with global leading technical strength and complete equipment spectrum to meet various construction needs, and performs well in the fields of housing, stadiums, bridges, thermal power and nuclear power. Through global operations, ZOOMLION has ranked No.1 in global tower crane manufacturers list for many consecutive years, and is now the global leader in brand value, market share and sales revenue.

100+

Countries
Service platform

100+

Countries
Subsidiaries



ADVANCED MANUFACTURE

Advanced processing method

- Green factory with low emission and low pollution
- High level automated production lines
- Electrophoretic primer & water based paint

Reliable Quality Assurance

- TUV accredited management system
- Strict enterprise standards
- Multiple effective inspection & test methods

Unparalleled huge production of tower crane

- Annual capacity nearly 20,000 units
- 9 manufacturing bases all over the world



German factory

- Professional experience
 - More than 85 years of experience in construction industry
- Reliable quality assurance
 - TUV-accredited management system



ZOOMLION CIFA Europe

- A new 10,000sqm plant and distribution center in Solferino (province of Mantova, Italy) been built for local assembly, customization and PDI of Zoomlion Lifting Products
- For the distribution and development of Zoomlion branded lifting machinery



Changde factory

- Green factory with low emission and low pollution
- High-level automated production lines (contain a lot of welding robot, AGV, RGV, sensors etc.)



Jiangyin factory

- An established factory proximity to Shanghai port for easy loading and transportation of goods

📍 Changde, China

CORE FEATURES

High conformity, 30+ years service life, user-friendly and high efficiency. All efforts about product innovation is driven only by the eagerness of customers to build better lives.

Leveraging a know-how of more than 60 years in the industry, ZOOMLION has built the brand-new R series flat-top tower crane for the world.

High conformity

- Newly designed round/square tube tower
- Comply with EN standards

User-friendly

- Easy to operate featured functions
- Ergonomic driver's cabin
- Accident preventions

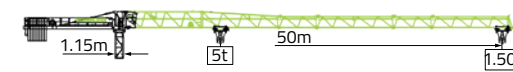
30+ years service life

- Ultra simplified structure
- Various reliability simulations and experiments

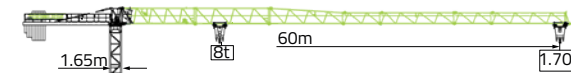
High efficiency

- Efficient assembly and disassembly
- Various optional accessories to facilitate construction

R90-5



R135-8



R165-8



R220-10



R245-12



R275-12



R335-16



R370-20



R500-25



R630-32



R800-40



R1000-50

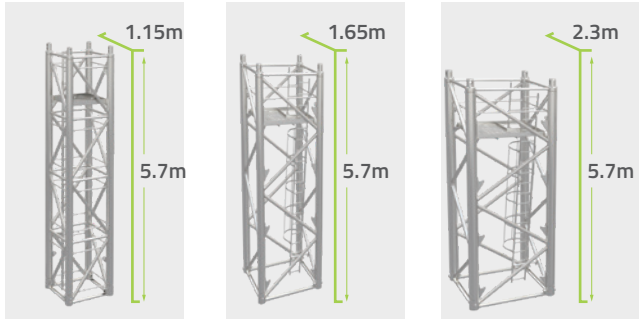


ROUND/SQUARE TENON TOWER



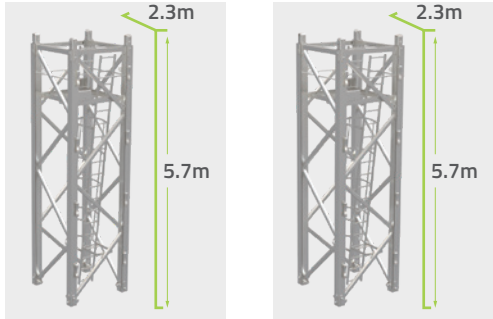
MAST SECTION

Round Tenon Tower



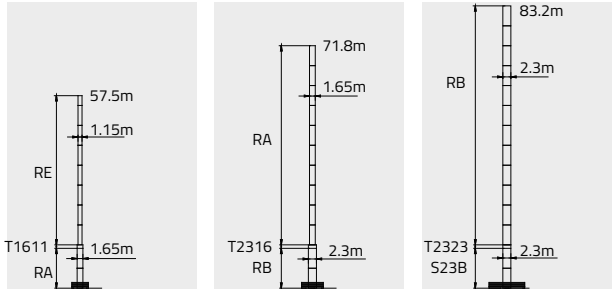
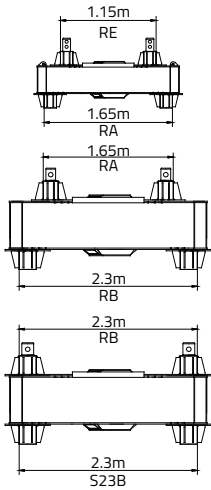
- RE
 - R90
- RA
 - R135
 - R165
 - R220
- RB
 - R245
 - R275
 - R335
 - R370

Square Tenon Tower



- S23A
 - R500
 - R630
- S23B
 - R800
 - R1000

Solution for Higher FSH



- R90
- R135
 - R165
 - R220
- R245
 - R275
 - R335
 - R370

*For extra height please contact us at tc_marketing@zoomlion.com

EUROPEAN STANDARD

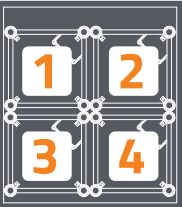
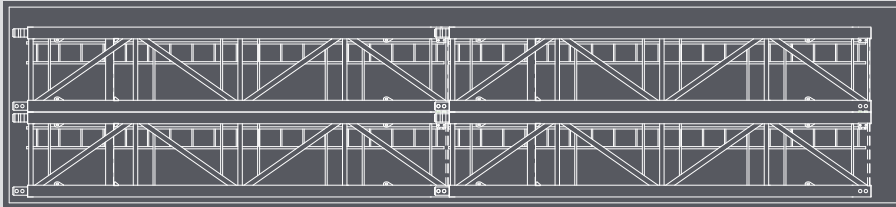


EN Standard

- Overload testing for structure
 - Static 1.4 times, higher than EN/DIN
 - Dynamic 1.25times, higher than EN/DIN
- Classification: A3-A4
 - 356400 circles = 30 years× 330 days × 12 hrs x 3circle/hr
 - Higher than A3 requirements
 - More than 100,000 circles testing with 100% rated moment

- Controls comply with EN 60204-32
- Crane safety PLd / PLc
- C25 for out of service

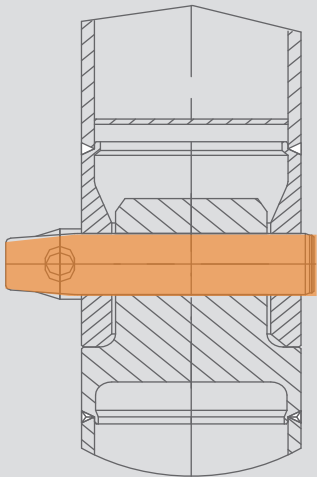
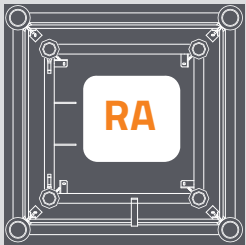
RE



40HQ

RB

RA



- High performance
 - Stronger wind-resistant
 - Higher free-standing height

- Easy assembly and quick disassembly
 - Less pins connection
 - Pressure on the end faces
 - Prevent the pins tampering

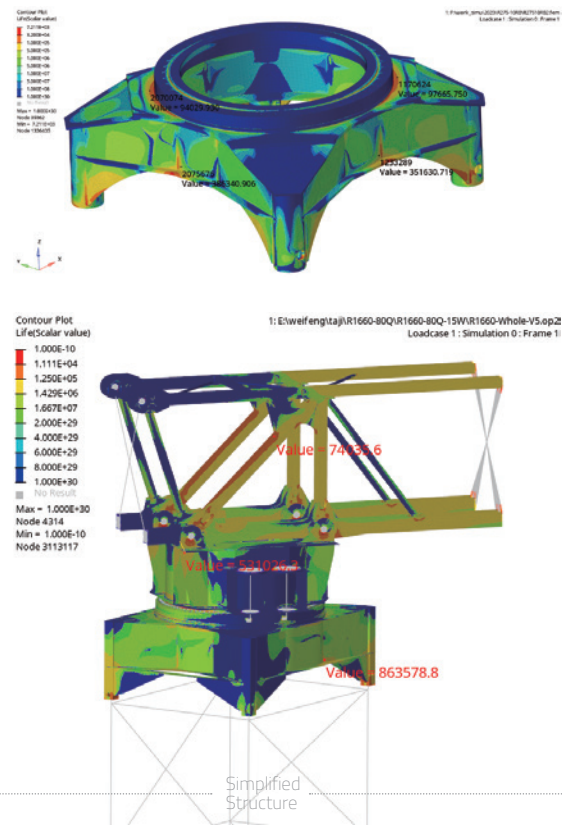
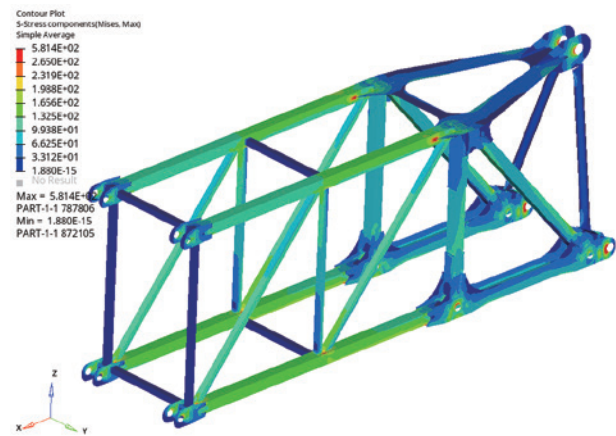
- Optimized for transportation
 - 8*RE in 40 HQ, full FSH
 - RA inside RB for transportation

SIMPLIFIED & SAFE STRUCTURE

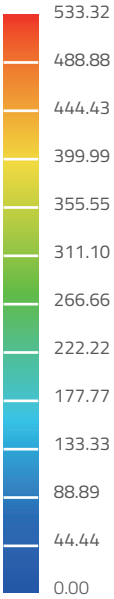


Ultra simplified structure

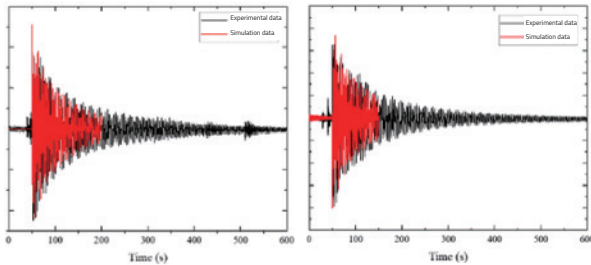
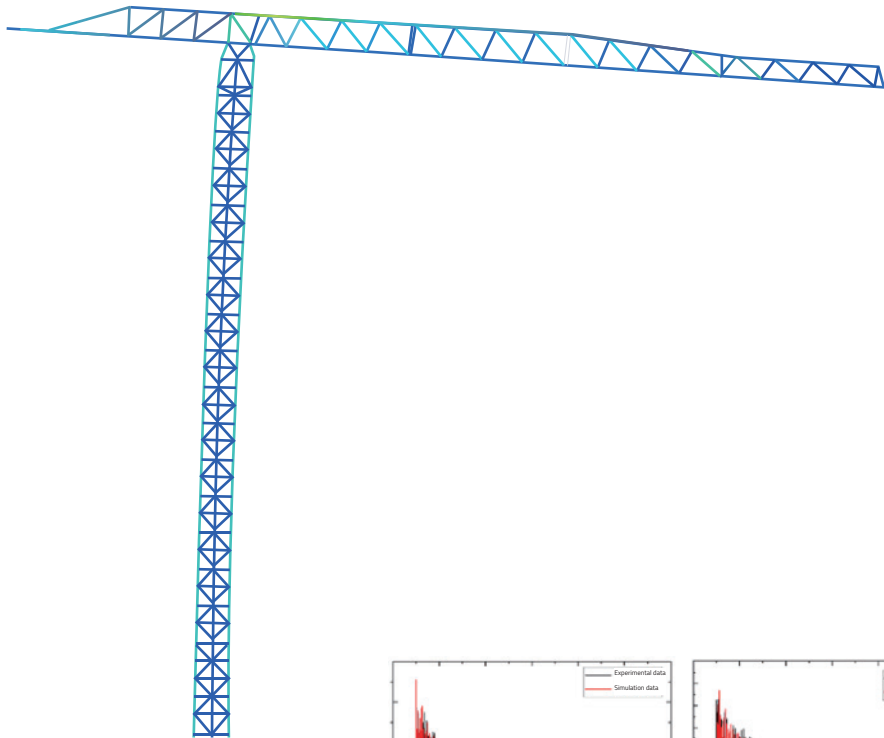
- Safe, high-efficiency
- Low stress flow design with optimal fatigue resistance prolonging the working life of the equipment
- 30+ years fatigue life



R165 Show Tuesdav2 : A8
Subcase = Direct Transient 1. 2990,298.90s
-- „Von-Mises
: 0.00, :533.32, = MPa
: 1 81



[MPa]

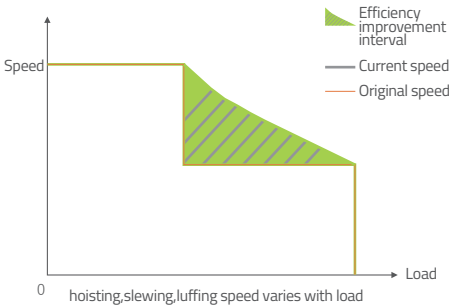
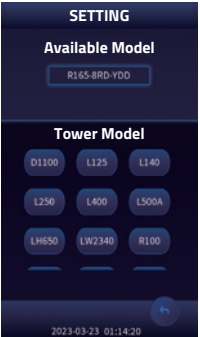
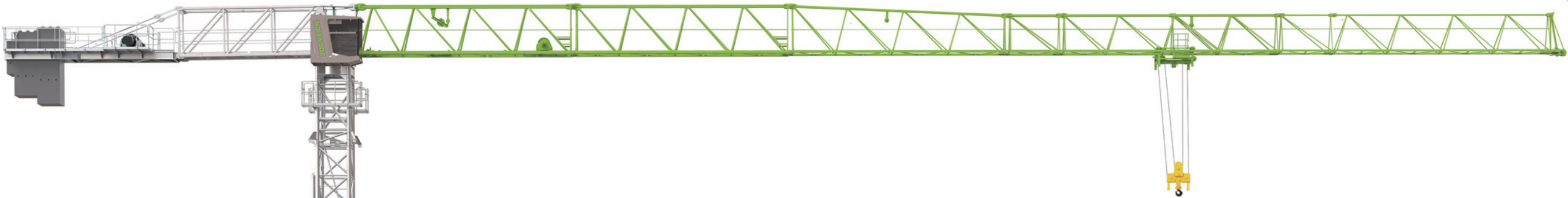


Extreme conditions testing

- Damage rope testing
- Maximum free standing height, maximum tip load testing with rope damage
- High agreement between calculation and test results
- The tower crane was verified to withstand the huge impact of sudden rope breakage



FEATURED FUNCTIONS



One-click calibration

- Allow you to calibrate hook and trolley limit switches through a few simple steps on the calibration interface of the display screen.

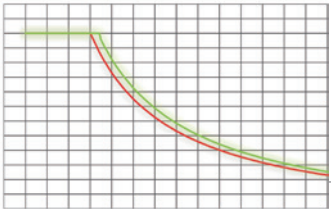
Dynamic deceleration

- When the mechanism reaches the deceleration limit point it won't immediately decelerate to the first gear, but will decelerate linear, applying the stepwise deceleration technology.

Zero speed hover

- In case of fault this control system can detect the downward sliding of the hook, and quickly output torque to ensure the safe operation of the system.

ZOOM PLUS



One key press, the load curve increased by up to 10%

Accurate operation



- Minimum locating speed<5mm/s
- Smooth moving for slewing due to high-tech inverter control system

ERGONOMIC CABIN



Ergonomic cabin

- 2.5m×1.6m size
- Ultra vision
- Flat window
- Air conditioned
- Heating system
- Adjustable and comfortable seats

Highly-integrated, active danger-avoiding safety monitoring system

- A safety monitoring system integrated into a single display: recording of lifting, weight and height data and management of prohibited areas
- New modular electric control cabinet
- New comfortable cabin

HUMANIZATION DESIGN

Data logger

- Possibility of controlling x prohibited overflight zones and defined by y points each

Efficient maintenance

- Automatic greasing system for the slewing ring
- Service hoist (some model optional) easy maintenance

Hook video system (optional)

- Realize real-time video tracking of the hook and ensure the operation safety in lifting areas with limited sight



Zoning system & Anti-collision system (optional)

- Management of any interference between 6 cranes with jib horizontal or fletching
- Possibility of installing third party / supplier collision avoidance systems via App

Wireless control system (optional)

- Equipped with a black box to record important information and support multi-transmitter operation
- Remote control via 5G suitcase (Available)

EFFICIENT ASSEMBLY

Efficient assembly and disassembly

- Jib is connected with quick couplers
- All aviation plugs are equipped with water & dust protection



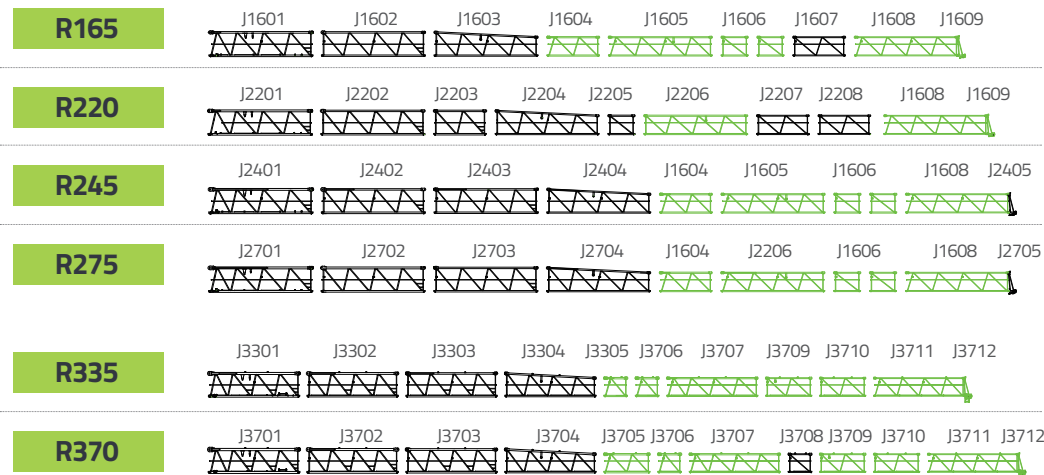
- Big hoist drum with double broken line groove completely resolves rope arrangement problems
- Easy move-in & move-out



MODULARIZED SYSTEM

Jib Sections

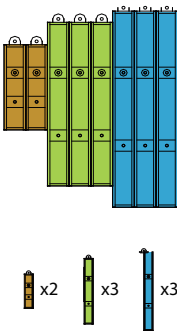
- Exchange rate of jibs is higher than 40%
- Jib length configuration can be changed every 2.5m



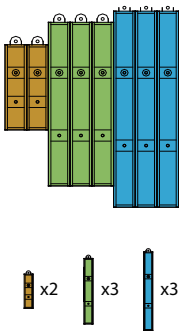
*Model R165-R370 for example

Counter Weights

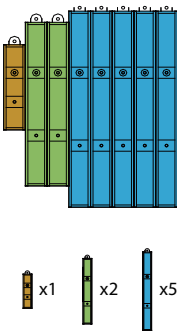
- The configuration below is for the full jib length
- Less ballast blocks for shorter jib length



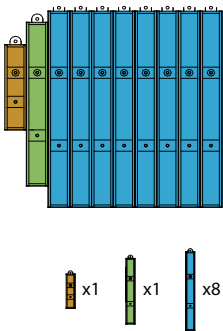
R165



R220



R245



R275

*Model R165-R275 for example

Standard models

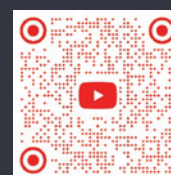
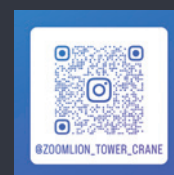
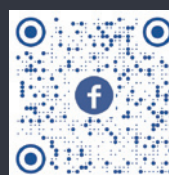
No.	Model	Max Jib Length (m)	Tip Load (t)	Max Load	Free Standing Height(m)		Drum capacity (m)
					Outrigger Stationary	Chassis Stationary	
1	R90-5RE	50	1.5	5	42	44	440
2	R90-6RA	50	1.5	5	55.7	57.5	440
3	R135-8RA	60	1.7	8	55.7	57.5	440
4	R165-8RA	65	1.7	8	50	51.8	440
5	R165-10RA	65	1.7	10	50	51.8	530
6	R220-10RA	65	2.2	10	44.3	46.1	530
7	R245-10RB	70	2	10	70	60.4	530
8	R245-12RB	70	2	12	70	60.4	690
9	R275-10RB	70	2.7	10	70	60.4	530
10	R275-12RB	70	2.7	12	70	60.4	690
11	R335-12RB	75	3.2	12	70	60.4	690
12	R335-16RB	75	3	16	70	60.4	680
13	R370-16RB	80	2.5	16	70	60.4	680
14	R370-20RB	80	2.5	20	70	60.4	700
15	R500-20QX	80	2.5	20	61.2	61.8	700
16	R500-25QX	80	2.5	25	61.2	61.8	720
17	R630-20QX	85	2.6	25	61.2	61.8	700
18	R630-32QX	85	2.6	32	61.2	61.8	720
19	R800-32WX	80	6	40	78.7	-	1110
20	R800-40WX	80	6	40	78.7	-	1110
21	R1000-40WX	80	9.7	40	60.5	coming soon	1110
22	R1000-50WX	80	9.7	50	60.5	-	1020

HUH w/o climbing system,with no transition section system.



VISION CREATES FUTURE

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