IHI

All-Purpose Telescopic Crane

CCH 550T-3

Extraordinary, Reliable Performance, For Lifting and Foundation Work.

Longest telescopic boom. Powerful winch. All-round glazing view.
CCH550T-3 offers a higher level of on-site usability.

CCH550T-3's 5 Major Features.

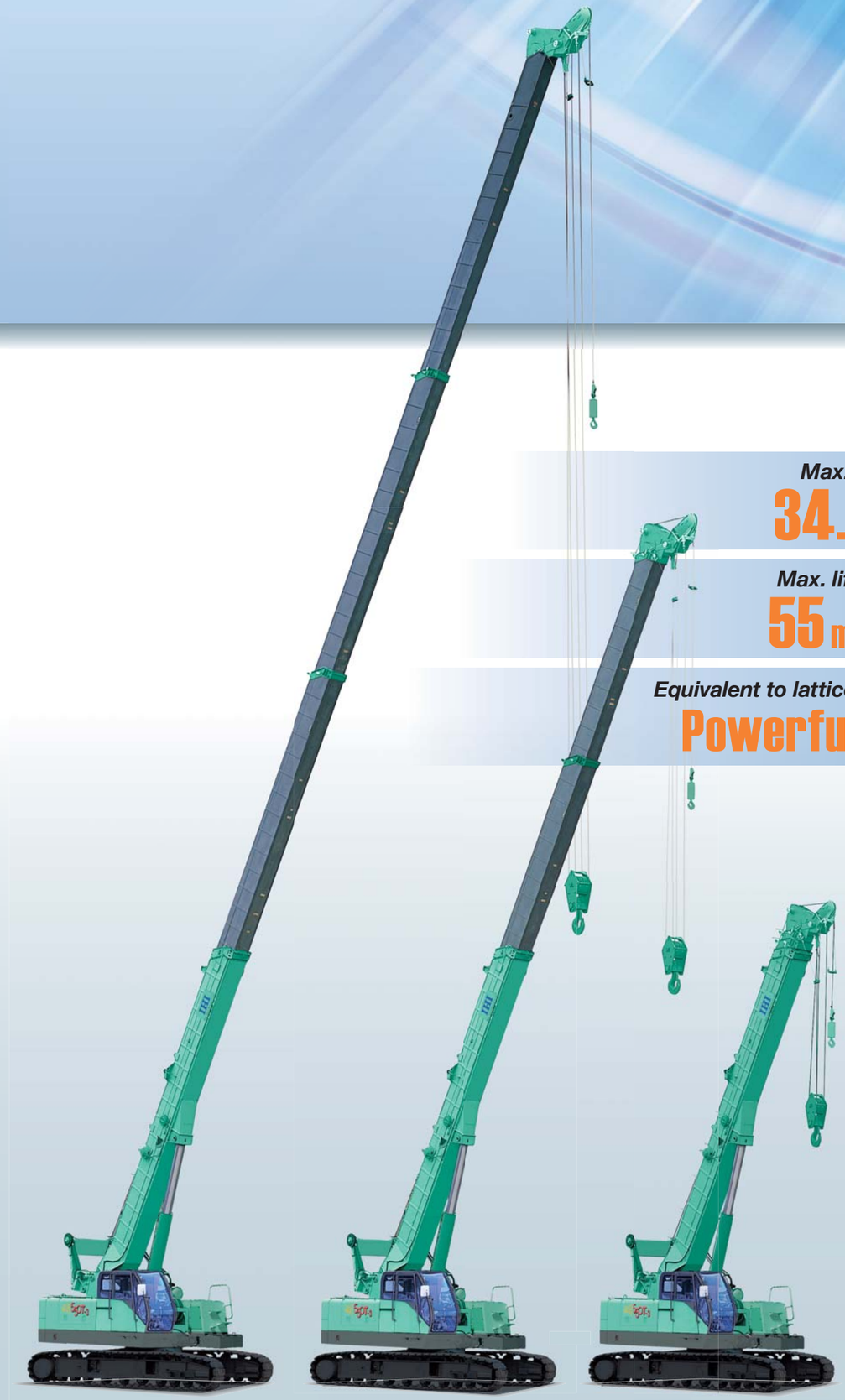
1 34.4m boom is the longest length among its class for foundation machine.
Telescopic boom can be adopted for wide range of working performance.

2 Achieved the minimized time and space requirements for on-site boom assembly and disassembly.
Self-removal counterweight is available by option.

3 Accomplished high speed and safety traveling as sell as robust crawler units provide stable traveling.

4 IHI hydraulic system enables independent operation of boom extension/retraction, hoisting/lowering with smooth movement, even for simultaneous operation.

5 Large capacity hydraulic PTO (Power Take Off) is capable for various working attachments,
such as vibro operation or auger operation.



Max. boom length
34.4 meters

Max. lifting capacity
55 metric tons

Equivalent to lattice boom crane
Powerful winch

Tough and Durable Design. Long Seller Confident Model.
CCH550T-3 is the Ideal Model for Your Foundation Work.

Operational Performance

Control system

Boom extension/retraction, hoisting/lowering can be operated separating from other movement. Since the capability of simultaneous operations is available for the extension/retraction, hoisting/lowering, the positions of front attachments can be set up easily and precisely. Boom hoisting can be operated both control lever and left foot pedal, complicated multiple operation can be possible easily.

Minimal fatigue Operation Position

Long hour operation can be accomplished with comfort posture by allocating swing lever in front of operator's seat, and it reduces tiredness. Engine throttle is selectable whichever operator likes either grip-throttle of swing lever or accelerating pedal on right side.

All-round glazing view

The front of the operator's cab features all-round curved glazing to ensure excellent visibility of the entire working area. As cab's height lowered, perfect vision can be maintained in the rear and the left side from the operator's seat.

Comfortable operator's cab

940mm wide cab makes comfortable in quiet spacious environment. Air conditioner with HCFC alternative refrigerants is standard equipment.

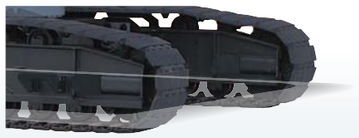
Working Performance

Top class of boom length

34.4m boom is the longest length among its class for foundation machine. Thanks to four-stage telescopic boom corresponding to the working situation, it achieves wide variety of working range.

Traveling stable and comfort

Traveling quick but stable on uneven ground thanks to the robust crawler unit. Incorporates spanner mechanism makes compact wide to 3200mm. The slim body, the minimum 3780mm rear swing radius, is suitable for narrow working site.



Powerful winch

Equipped with a powerful winch is equivalent to a lattice type of crane. High-output power provides heavy digging task. Engine output can be efficiently used by full horse power control.

Adaptable to versatile construction methods

Large capacity hydraulic PTO(24.5-16.1Mpa/228-444L/min) which can take out power from the top of 1st boom stage is capable of various working attachments like vibro hammer, auger for multi-purpose application. High-performance third winch drum with free fall function is available by option.

Efficient Transport

Advantage of telescopic boom

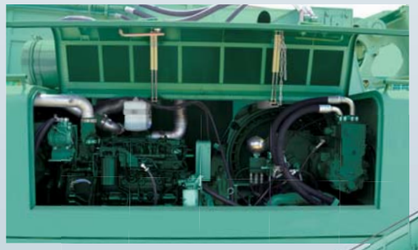
Four-section telescopic crawler crane is easy to handle assembly, disassembly at working site, and helps to minimize number of trailers for transportation from site to site.

Counterweight self-removal system(Option)

This system, equipped to the machine, easily and accurately enables to remove the counterweight itself even not use a support crane. Operator can load counterweight safely with visual confirmation using a pendant type electrical remote control.

Large sized hatch back door

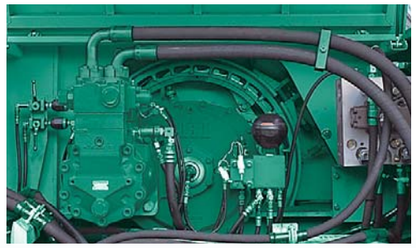
Large sized hatch back door has been designed for the room of engine and main components. Widely opened space has been secured for the maintenance purpose.



Safety

Winch brake select mode

Winch brake mode enables to select automatic mode or pedal manual mode by key switch. Take off a key for the safety in case of no free fall use. Even using free fall system with key, the brake circuit cannot be released unless treadling the brake pedal as interlock mechanism. Double safety measure has been executed.



Moment Limiter

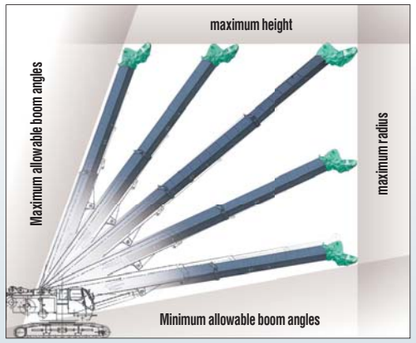
- It warns with alarm when the lifting weight surpasses 90% of maximum load, and automatically stops at 100%.
- Operating status is clearly displayed.
- Audible message alerts operational status. (Selectable to buzzer)
- Release key switch for automatic stop/ alarm while transporting for safety
- Selectable alarm for "Foundation Mode" by turning key switch

Audible alarm

Provide people's attention in the vicinity by effective alarm when starting engine, traveling and slewing. Buzzer alarm can be selected when traveling and slewing.
Swing flasher also alerts visibly while slewing.

Operational working limiter (Adaptable to Moment Limiter)

By setting the parameters of boom angle (upper and lower limits), boom top height and operating radius, a warning buzzer sounds and the machine stops automatically whenever those limits are approached. Only sound alarm can be set also. The system is more efficient at the jobsite which has height limits and obstacle.



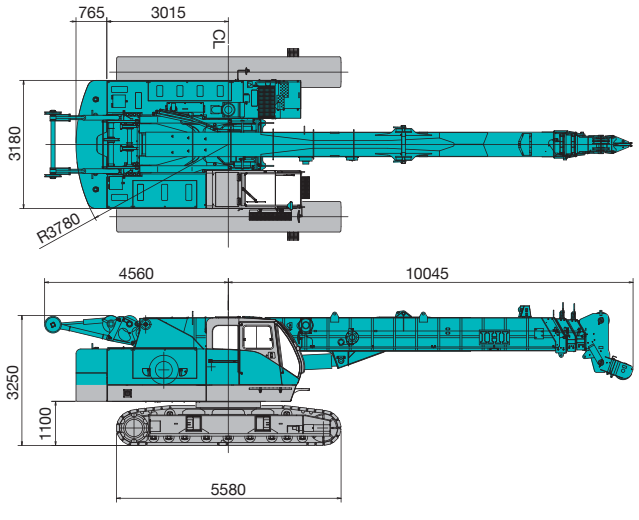
Seat lock system and auto-controlled drum lock

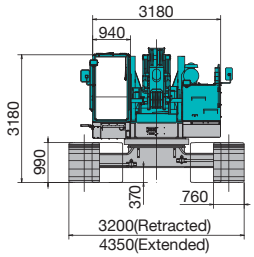
The seat lock senses the weight that the operator leaves from the seat, the limit switch turns off and all working operations are stopped. Drum can be automatically locked by turning OFF the engine starter key as the prevention of forgetting drum lock-up.

Eco-friendliness and safety

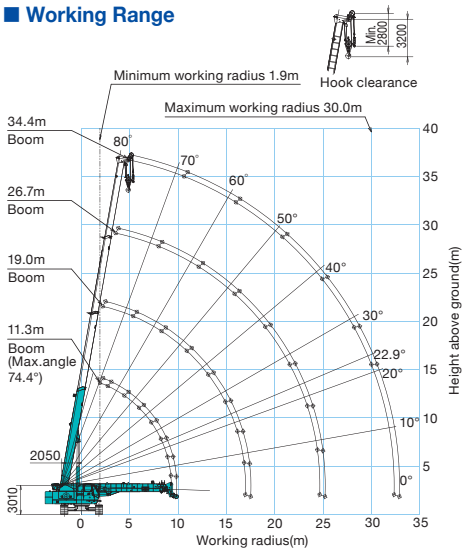
For a better work-site environment, the CCH550T-3 is designed to comply with low noise regulations for construction equipment specified by Japanese Ministry of Land, Infrastructure and Transport.

■ Dimensions(Unit : mm)





■ Working Range



■ Crawlers extended (With 15.7 ton counterweight)

Unit : t

Boom length(m)	11.3		19.0		26.7		34.4	
Working radius(m)	Load	Boom angle	Load	Boom angle	Load	Boom angle	Load	Boom angle
1.9	55.00	74.4						
2.2	55.00	72.5	30.00	79.9				
3.0	55.00	68.4	30.00	77.5				
3.5	50.00	65.5	30.00	75.9	3.55m× 22.00	79.9		
4.0	46.40	62.6	30.00	74.3	22.00	79.0		
4.5	42.00	59.5	30.00	72.7	22.00	77.9		
5.0	36.35	56.4	30.00	71.1	22.00	76.7	4.9m× 12.00	79.9
5.5	30.85	53.1	30.00	69.5	5.9m× 22.00	74.7	12.00	78.9
6.0	26.65	49.6	26.60	67.8	21.70	74.5	12.00	78.1
6.5	23.35	45.9	23.35	66.2	20.35	73.4	12.00	77.2
7.0	20.60	41.9	20.65	64.5	18.95	72.2	12.00	76.3
8.0	15.80	32.4	16.60	61.0	16.15	69.9	8.7m× 12.00	73.4
9.0	11.40	17.8	13.75	57.4	13.75	67.6	11.65	72.9
10.0	9.25m× 10.30	0	11.55	53.6	11.55	65.2	10.45	71.1
12.0			8.50	45.3	8.50	60.3	8.45	67.5
14.0			6.40	35.3	6.40	55.1	6.85	63.8
16.0			4.85	21.3	4.95	49.5	5.55	60.0
18.0			16.95m× 4.10	0	3.70	43.4	4.55	56.0
20.0					2.70	36.4	3.55	51.7
22.0					1.85	27.9	2.70	47.3
24.0					1.15	14.9	2.00	42.4
26.0					24.65m× 0.95	0	1.45	37.0
28.0							0.95	30.8
30.0							0.55	22.9

■ Crawlers retracted (With 15.7 ton counterweight)

Unit : t

Boom length(m)	11.3		19.0		26.7		34.4	
Working radius(m)	Load	Angle	Load	Angle	Load	Angle	Load	Angle
7.3	12.00	39.2	12.00	63.4	8.4m× 10.00	69.0		
8.0	12.00	32.4	12.00	61.0	8.9m× 10.00	67.8		
9.0	9.95	17.8	9.85	57.4	9.85	67.6	11.2m× 7.00	69.0
10.0	9.25m× 9.50	0.0	8.25	53.6	8.20	65.2	11.6m× 7.00	68.2
12.0			5.95	45.3	5.90	60.3	6.65	67.5
14.0			4.30	35.3	4.25	55.1	5.00	63.8
16.0			2.95	21.3	2.90	49.5	3.75	60.0
18.0			16.95m× 2.40	0.0	1.85	43.4	2.75	56.0
20.0					1.05	36.4	1.90	51.7
22.0							1.24	47.2
LIMIT ANGLE		0		0		15		30

Notes

1.All rated loads are based on the machine being operated on a firm, level, uniformly supporting surface ground, at any point of 360° around the machine within 78% of tipping load and forward stability factor over 1.15.

2.Working radius is the horizontal distance from the center of rotation to the vertical line through the center of gravity of the load.

3.To determine lifting capacities, the weight of all lifting devices such as hooks must be reduced from the rated loads. When both main hook and auxiliary hook are attached, the weight of both hooks must be reduced.

55 ton hook	0.80 ton
30 ton hook	0.34 ton
15 ton hook	0.30 ton
6 ton hook	0.12 ton

4.Depending on the number of part lines, rated loads are limited as follows.

1 part line	6.0 ton	6 part lines	33.0 ton
2 part lines	12.0 ton	7 part lines	38.5 ton
3 part lines	16.5 ton	8 part lines	44.0 ton
4 part lines	22.0 ton	9 part lines	49.5 ton
5 part lines	27.5 ton	10 part lines	55.0 ton

5.The standard number of part lines for each boom length is as follows.

Boom length (m)	11.3	19.0	26.7	34.4	Top sheave
No. of part lines	10	6	4	4	1

■ Specifications

Main specification	
Slewing speed	2.3min^{-1}
Travel speed	1.9/1.3 km/hr
Gradeability	40% (22°)
Lifting performance	
Max. lifting capacity x working radius	55t x 3.0m
Max. lifting height	33.0m
Rope speed (Main & Aux. drums)	100/70 m/min
Rated line pull	58.8kN (6t)
Free fall system	Standard (Third drum : Optional)
Boom length	11.3 - 34.4m
Boom extension speed	125 sec.
Boom angle	-2° - 80°
Boom hoisting speed	60 sec.

Superstructure	
Drive system	Hydraulic
Hydraulic pump	3 axial piston pumps, 3 gear pumps
Counterweight	15.7t
Total operating weight	55.5t
Average ground bearing pressure	71kPa (0.72kgf/cm^2)
Engine	
Manufacturer	Cummins Inc.
Emission certification	U.S.EPA Tier 3, CARB Tier 3, EU Stage ⅢA
Model	QSB6.7
Type	4-cycle, water-cooled, turbocharged and charge air cooled
Rated output	179kW/2,000min^{-1}
Total displacement	6.7L
Hydraulic power system	
Power take off	24.5Mpa (250kgf/cm^2) x 228L/min 16.1Mpa (164kgf/cm^2) x 444L/min

- Please carefully read the manual before operating machines, and please use it correctly and safely.
- Photographs appearing in the catalog were taken for publication and may differ in some cases from actual objects. Specifications are subject to change without notice due to technical improvements or modifications.

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Distributed by

QUALITY ASSURANCE JIC REGISTERED ORGANIZATION NO.0124-ISO9001

www.ihi-kenki.co.jp/english/

Printed in Japan IK1316B1611DPP10