

# TOWER CRANE

**OGAWA**

TOMBO

TURT

HONEY

PILQ

JIB

**OGAWA LTD.**

## Tower Cranes Developed through Advanced Technology

Ogawa was established in August, 1948, in the midst of the booming time of national land reconstruction, aiming at manufacture and sale of construction machinery. In the early stages, Ogawa engaged in reforming of existing guy derricks, tripod derricks and manual winches, and have contributed to the growth of construction technology through many ideas and developments. During that period, engineering staffs were also dispatched to overseas countries to study the latest technologies.

In 1960, Ogawa successfully developed the first tower cranes in Japan through their accumulated technologies, and the cranes have been using for the construction of the Kasumigaseki Building, Trading Center Building, Shinjuku Sumitomo Building, Hotel New Otani Building, etc.

The Ogawa's excellent technologies was appreciated with high reputation through the number of supply of their cranes. In 1971, Ogawa also developed horizontal type tower cranes which are now called as "TOMBO-OGAWA". Since then, Ogawa has built a firm position as a specialist of tower cranes in Japan, under the name of "OGAWA of Tower Crane".

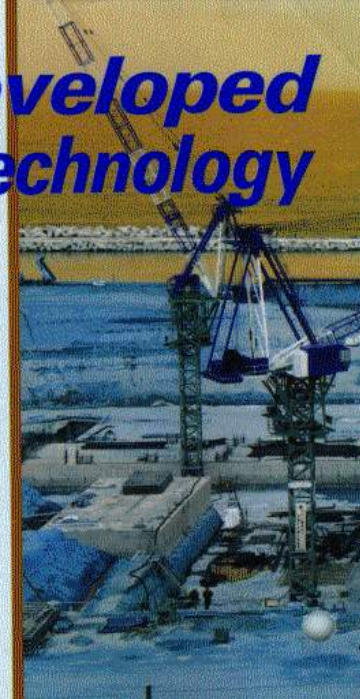
Ogawa has now extended its sales and service activities in overseas markets, the Republic of Korea, Hong Kong, Singapore and the Middle East Countries, supported by their many years of successful experience, a number of know-how and advanced technologies.

Ogawa is now ready to serve any variety of needs of customers.

- Establishment: August, 1948
- Capital: 35,000 (thousand yen)
- Employee: 60
- Sales: 1.5 billion yen (1982)

### PRODUCT DEVELOPMENT

- 1955: Two-gang skip hoist, construction elevator
- 1960: Tower crane (the first crane in Japan)
- 1963: High building self-climbing tower crane  
OT-type tower crane series
- 1965: Super high building long span lift  
OTA-type tower crane series
- 1970: High building long span lift
- 1971: OTS-type self climbing crane (TURT) series
- 1972: OTH type self climbing horizontal crane (TOMBO) series  
Technical cooperation with Pangon Co., of France for horizontal tower crane
- 1975: Rack type elevator
- 1981: Acquisition of patent of jib crane mast erection (climbing type) system
- 1982: Acquisition of patent of automatic type concrete bucket  
Concrete placement equipment using tower crane (patent pending)  
High self-standing tower crane (patent pending)  
Tower crane dismantling jib crane (patent pending)



**OGAWA'S** se  
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# High efficiency and safety supported accumulated experience

OGAWA is a leading manufacturer of tower cranes in Japan since the No.1 machine was put on sale over 20 years ago. High efficiency and excellent safety supported by many experience and reliable technologies cannot be duplicated by other manufacturers.

## USE OF HIGH TENSION STEEL

High tension steel is used for beams and other main materials, which materialized compact and light-weight design of crane, while providing sufficient strength as compared with other manufacturers products. Such design concept also facilitates transportation, assembly and disassembly.

## EASY OPERATION

The swivelling device is of a unit type compactly designed. It equips unique shock absorber for easy start and stop. The crane can be operated by a remote control device while confirming the hoisting condition.



## SAFETY OPERATION

The following safety devices are provided, through many years of experience and development of OGAWA.

- Over-winding protective device
- Anti-swinging device
- Swivel limiter
- Traverse limiter
- Over-load limiter
- Moment limiter

## PATENTED CLIMBING METHOD

Climbing can be performed by the patented hydraulic self-climbing device. It

assures safe operation and minimize working time and labor.

## WIDE APPLICATION

Tower is standardized to permit max. interchangeability, which created a wide application. Jib length is adjustable to cover the working area freely. Tower can equip concrete placement distributor, site travelling truck, etc.

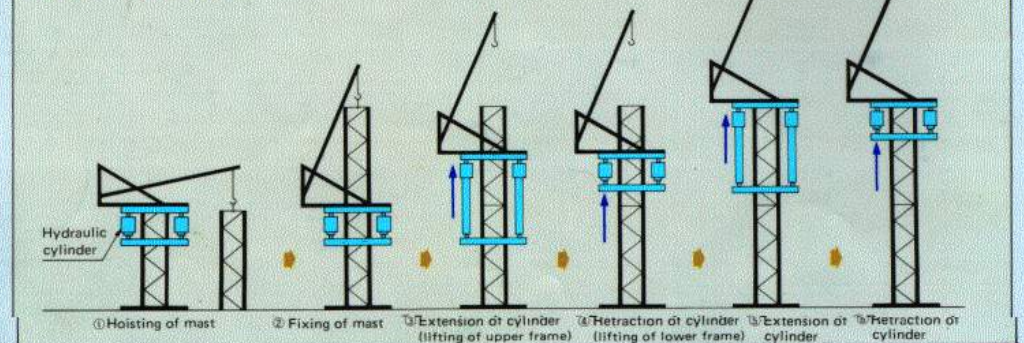
- Towers can self stand up to about 60 m high by using a special device, if requested.

service against a variety of needs according working & site condition **OGAWA**

### PRODUCTION ITEMS

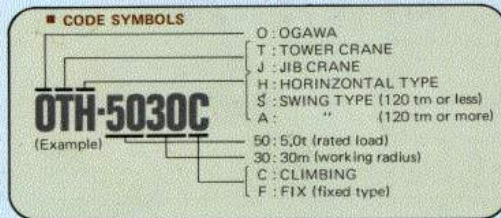
- Crane: Construction tower crane, ceiling crane, shipbuilding crane, gantry cranes, etc.
- Elevator: General construction, ship-building/factory elevator
- Lift: Cram shell hopper, unloader, skip hoist, concrete tower
- Derrick: Tripod derrick, various types of derricks
- Other: Painting scaffold for ship-building, slide bridge, power tower, steel construction, bridge
- Conveyor: Belt conveyor, bucket conveyor

### ■ CRIMBING METHOD





by



TYPE OF CRANE

Height under Hook	Self-standing height				Model	Max. load/working radius		Max. radius load/working radius		
	40m	30	20	10		10	20	30	40	50m
150m	36m				<b>OTH-11050C</b> TOMBO			20t/34m	17t/40m	11.0t/50m
150m	36m				<b>OTH-6050C</b> TOMBO			20t/19.5m	9.0t/40m	6.0t/50m
100m	36m				<b>OTH-5030C</b> TOMBO			8.0t/20m	5.0t/30m	
100m	36m				<b>OTH-2532C</b> TOMBO			4.5t/21m	3.4t/27m	
100m	36m				<b>OTH-2330C</b> TOMBO			4.5t/19.5m	2.5t/32m	
70m	30m				<b>OTH-2330C</b> TOMBO			4.5t/18m	2.0t/35m	
100m	36m				<b>OTS-4030C</b> TURT			4.0t/19.5m	2.3t/30m	
100m	36m				<b>OTS-2330C</b> TURT			4.0t/16m	1.5t/35m	
100m	36m				<b>OTS-1225C</b> TURT			10.0t/14m	5.3t/25m	
100m	36m				<b>OTS-1520C</b> TURT			10.0t/13m	4.0t/30m	
60m	27.5m				<b>OTS-1015C</b> HONEY			8.0t/12m	3.0t/35m	
60m	27.5m				<b>OTA-16050C</b> PILO			8.0t/13m	5.0t/20m	
62m	18m				<b>OTA-10030C</b> PILO			8.0t/10m	3.5t/25m	
150m	30m				<b>OTA-6032C</b> PILO			6.0t/12m	2.3t/30m	
150m	30m				<b>OJ-1005</b> JIB			3.5t/15m	2.0t/20m	
200m	30m							3.5t/13m	2.0t/20m	
55m								3.0t/10m	1.5t/20m	

HORIZONTAL TYPE TOWER CRANE

**OTH-11050C** TOMBO

**OTH-6050C** TOMBO

**OTH-5030C** TOMBO

**OTH-2532C** TOMBO

**OTH-2330C** TOMBO

**OTH-2030F** TOMBO

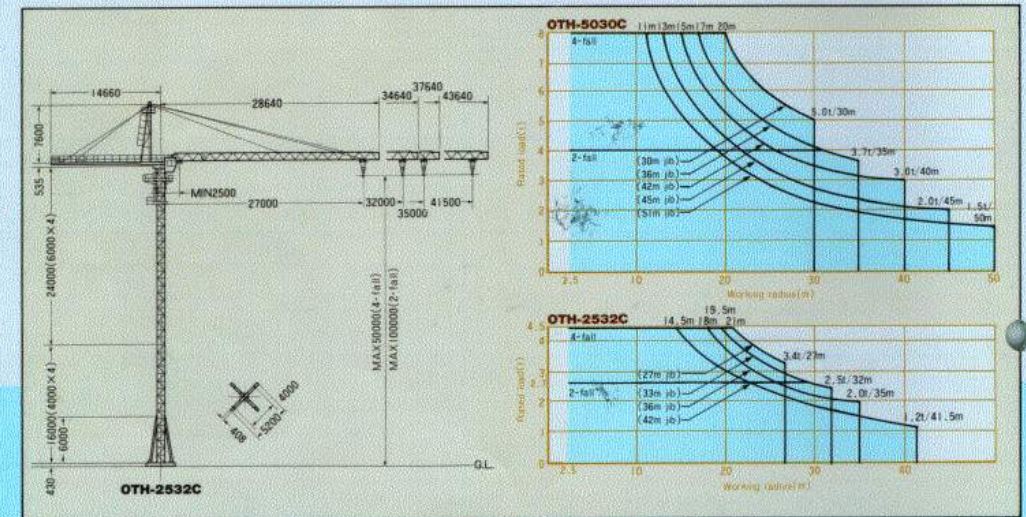
FEATURES

1. Jib is of a horizontal type. Cargo can be travelled horizontally with a rope trolley.
2. Swiveling device is of a compact unit type. Shock absorber is provided for smooth start and stop.
3. Crane is operated by remote control. When an operator cabin (option) is mounted, crane can be operated in all weather condition.
4. Horizontal type crane provides a good mechanical balance, which increases the self-standing height, and improve the working efficiency.

5. The standard series are unified in operation and maintenance, improving the working efficiency and facilitating inspection and repair work.
6. By using the standard mast, cranes can be interchanged for a wide application.
7. Hydraulic self-climbing system assures easy and safe climbing work.

APPLICATION

• General application construction site (high building, school, prefabricated constructions), & Factory. • Urbanization



Model	Load(t) X Radius(m)	Hoisting device	Hoisting speed(m/min)		Trolleying(m/min)		Slewing(rpm)		Climbing(m/min)		
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	
<b>OTH-11050C</b>	11.0 X 50	2-fall	High speed(2.5t or less)	92	110	17/8.5	20/10	0.42	0.5	0.3	0.36
<b>OTH-6050C</b>	20.0 X (3.2-27.0)		Low speed(10.0t or less)	23	28						
<b>OTH-5030C</b>	6.0 X 50	4-fall	High speed(10t or less)	46	55	30/15	36/18	0.54	0.65	0.53	0.64
	20.0 X (3.0-18)		Low speed(20t or less)	12	14						
<b>OTH-2532C</b>	5.0 X 30	2-fall	High speed(2.0t or less)	43.0	52.0	17.5	21.0	0.54	0.65	0.53	0.64
	8.0 X (2.5-20)		Low speed(4.0t or less)	21.6/3.9	26.0/4.7						
<b>OTH-2330C</b>	2.5 X 32	2-fall	High speed(1.5t or less)	56.0	66.0	17.5	21.0	0.54	0.65	0.53	0.64
	4.5 X (2.5-19.5)		Low speed(2.7t or less)	27.5/5.0	33.0/6.0						
<b>OTH-2030F</b>	2.3 X 30	2-fall	High speed(3.0t or less)	27.5	33.0	17.5	21.0	0.65	0.78	-	-
	3.5 X (2.5-19.5)		Low speed(4.5t or less)	13.7/2.5	16.5/3.0						

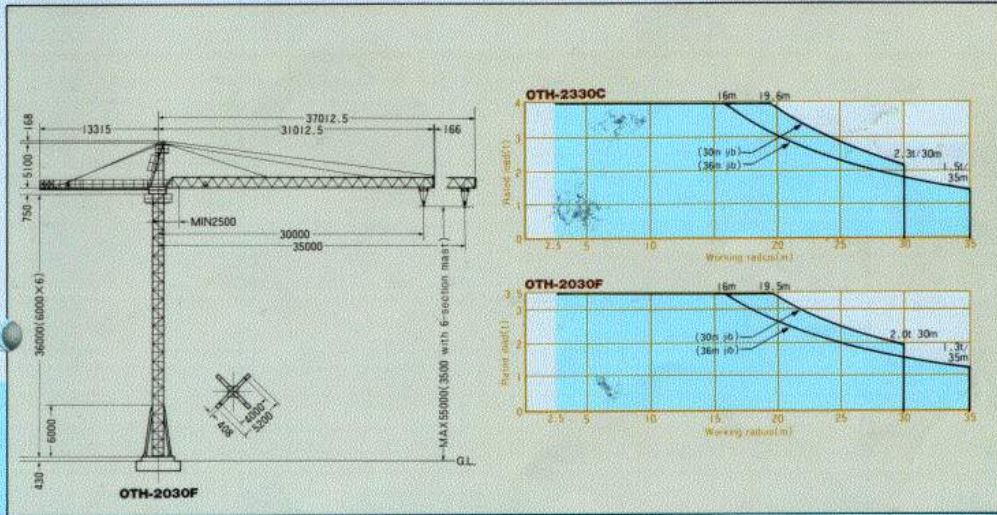
• OTH-11050C and OTH-6050C shown in the above table with bold lines are interchangeable.



OTH-2330C



OTH-2532C



Motor(kw)				Height under Hook(m)	Self-standing height(m X No.)	Power source	Operating system	Climbing system	Safety cylinder
Hoisting	Trolleying	Slewing	Climbing						
90	5.5	4.5 X 3	22	150	36 (6 X 6)	200/220V 50/60Hz	Operator's cabin	Hydraulic cylinder	Over-winding limiter Trolleying limiter Slewing limiter Moment limiter
26/ 26/ 4.5	3.7	4 X 2	5.5	100	36 (6 X 6)	200/220V 50/60Hz	Operator's cabin	Hydraulic cylinder	
26/ 26/ 4.5	1.5	4	5.5	100	40 (4 X 4) 6 X 4	200/220V 50/60Hz	Wired remote control lever switch (possible to be installed in operator's cabin)	Hydraulic cylinder	
25	1.5	4	5.5	70	30 (6 X 5)	200/220V 50/60Hz	Wired remote control lever switch (possible to be installed in operator's cabin)	Hydraulic cylinder	
18/2.2	1.5	4	—	55	36 (6 X 6)	200/220V 50/60Hz	Wired remote control pushbutton	—	

• Specifications are subject to change without notice for improvement.

SWING TYPE TOWER CRANE

**OTS-4030C** •TURT•  
**OTS-2330C** •TURT•

**OTS-1225C** •TURT•  
**OTS-1520C** •TURT•  
**OTS-1015C** •HONEY•

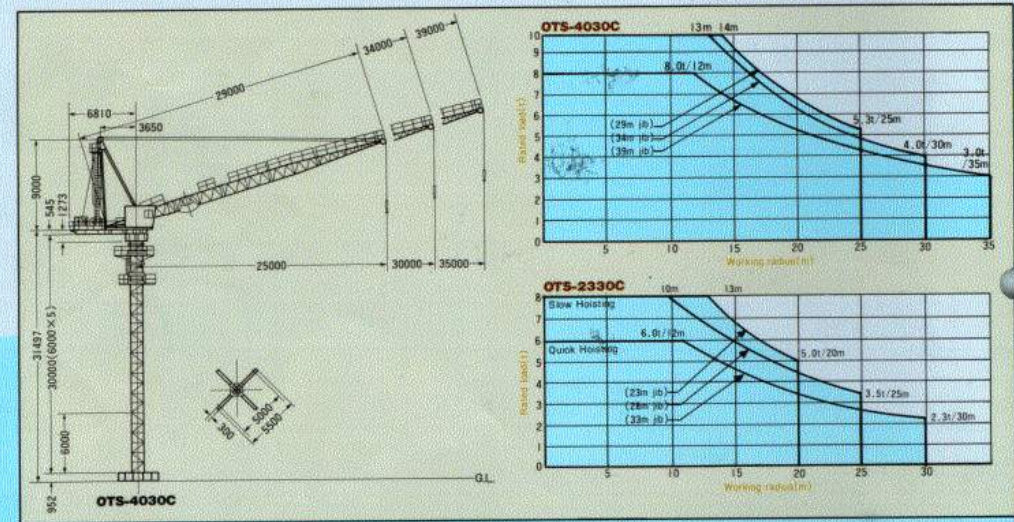
FEATURES

1. Jib is of a swing type and suitable for use in town areas.
2. Available in many types ranging from 15tm to 120tm classes.
3. Swivelling device is equipped with shock absorber to ensure smooth start and stop.
4. Standard series is unified to allow easy maintenance.

5. By using the standard mast, cranes can be interchanged for a wide application.
6. Hydraulic self-climbing system assures easy and safe climbing work.

APPLICATION

- General application at construction site (high building, school, prefabricated construction) & factory.
- Disassembly of existing cranes



Model	Load(t) X Radius(m)	Hoisting speed(m/min)				Swing(sec)		Slewing(rpm)		Climbing(m/min)	
		Hoisting device		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
<b>OTS-4030C</b>	4.0 X 30 10.0 X (0-13)	Auxiliary motor(0.5t or less)		27.5	33.0	100	83	0.54	0.65	0.53	0.64
		Main motor(10.0t or less)		14.6	17.5						
<b>OTS-2330C</b>	2.3 X 30 6.0 X (0-12)	Fast Hoisting(4.0t or less)		25.0	30.0	164	137	0.54	0.65	0.53	0.64
		Slow Hoisting(8.0t or less)		12.5	15.0						
<b>OTS-1520C</b>	1.5 X 20 3.0 X (0-10)	—		21.0/2.5	25.0/3.0	145	121	0.66	0.79	0.49	0.59
<b>OTS-1225C</b>	1.2 X 25 3.5 X (0-5)	—		21.0/2.5	25.0/3.0	171	142	0.66	0.79	0.49	0.59
<b>OTS-1015C</b>	1.0 X 10 1.5 X (0-10)	—		16.7	20.0	107	90	0.36	0.43	0.5	0.6

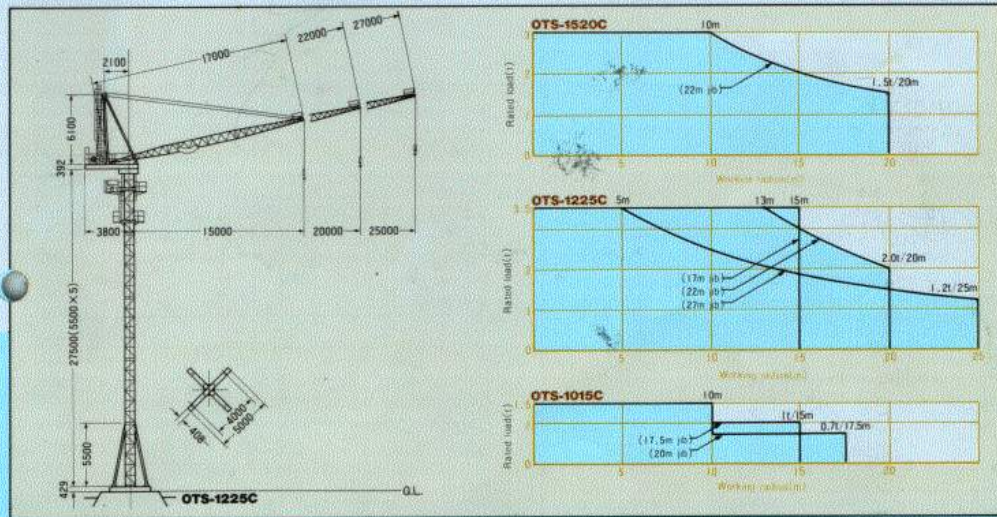




OTS-4030C



OTS-1225C



SWING TYPE TOWER CRANE

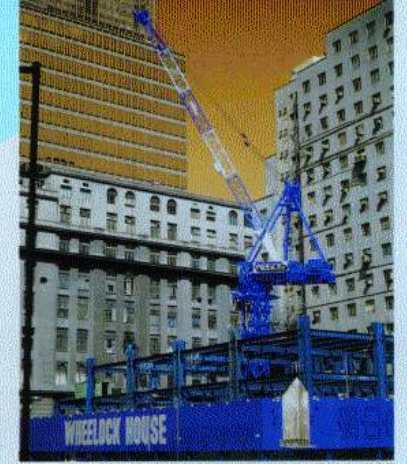
**OTA-16050C** -PILD-  
**OTA-10030C** -PILD-  
**OTA-6032C** -PILD-

FEATURES

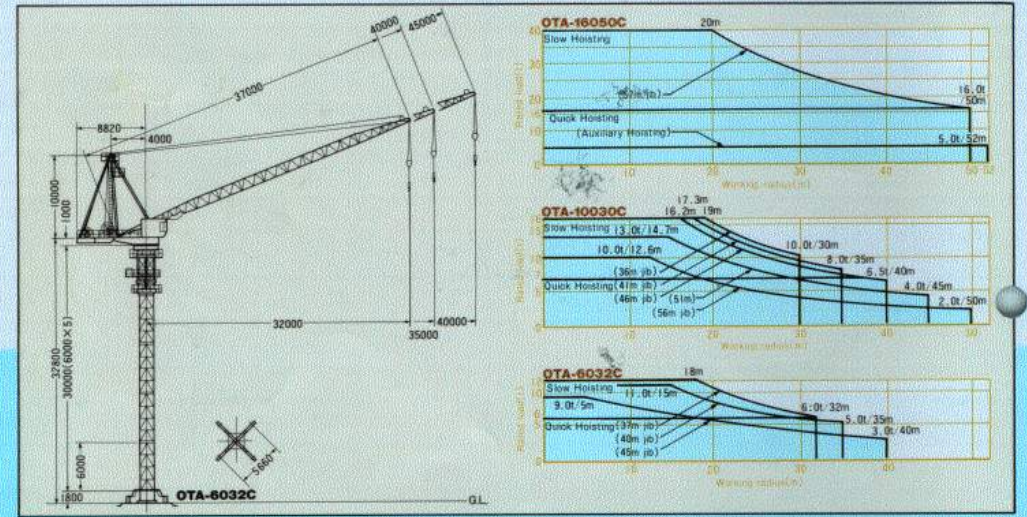
1. Main and auxiliary Hoisting motors are equipped for fast speed Hoisting work, which facilitate high head work with High efficiency.
2. Speed control is controlled by adjusting the primary voltage with thyristor. This method provides a stable low speed which is convenient for installation of steel structures.
3. Slewing speed is controlled smoothly by adjusting the primary voltage with variable resistor.
4. Hydraulic self-climbing system assures smooth and safe climbing work. Floor climbing increases the work efficiency and reduces the working period.
5. The operator cabin is designed according to human engineering and provide a wide field of view and easy operation.

APPLICATION

- Plant construction
- Dam construction
- Super-high building construction
- Nuclear and thermal power plant
- Construction of high chimneys



OTA-6032C



Hoisting	Motor (kw)			Height under Hook (m)	Self-standing height (m X No.)	Power source	Operating system	Climbing system	Safety device
	Swing	Slewing	Climbing						
22	25	4.5	5.5	100	36 (6×6)	200/220V 50/60Hz	Operator's cabin (Wired remote control may be mounted)	Hydraulic cylinder	Over-Hoisting limiter Swing limiter Slewing limiter Moment limiter
26/26	10	4	5.5	100	40 (4×4 / 6×4)	200/220V 50/60Hz	Wired remote control lever switch (possible to be mounted in operator's cabin)	Hydraulic cylinder	
15/1.9	5.5	1.5	3.7	60	27.5 (5.5×5)	200/220V 50/60Hz	Wired remote control lever switch	Hydraulic cylinder	
18/2.2	5.5	1.5	3.7	60	27.5 (5.5×5)	200/220V 50/60Hz	Wired remote control lever switch	Hydraulic cylinder	
6	2.5	0.75	1.5	62	18 (6×3)	200/220V 50/60Hz	Wired remote control pushbutton	Hydraulic cylinder	Over-Hoisting, over-load, swing and slewing limiters

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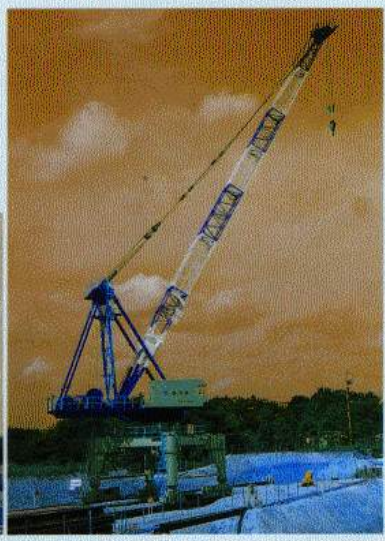
Model	Load(t) X Radius (m)	Hoisting speed (m/min)				Swing (sec)		Slewing (rpm)		Climbing (m/min)	
		Hoisting device		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
<b>OTA-16050C</b>	16.0 X 50 40.0 X (0-20)	Fast Hoisting	Auxiliary motor (0t or less)	33.6	40.8	282	235	0.29	0.35	0.3	0.36
		Slow Hoisting	Main motor (16.0t or less)	16.6	20.0						
<b>OTA-10030C</b>	10.0 X 30 16.0 X (0-19)	Fast Hoisting	Auxiliary motor (0t or less)	16.9	20.5	158	132	0.4	0.48	0.3	0.36
		Slow Hoisting	Main motor (10.0t or less)	8.3	10.0						
<b>OTA-6032C</b>	6.0 X 32 12.0 X (0-18)	Fast Hoisting	Auxiliary motor (0t or less)	66.6	80.0	127	106	0.4	0.48	0.3	0.36
		Slow Hoisting	Main motor (6.0t or less)	33.3	40.0						
<b>OJ-1005</b>	1 X (2.5-5)			16.5	20.0	17	14	0.47	0.56		



## WIDE APPLICATION

The standard tower cranes can be modified for various applications according to the work to be performed.

A OTA-10030C, high foot travelling crane  
B OTH-2330C with distributor



## SWING TYPE JIB CRANE

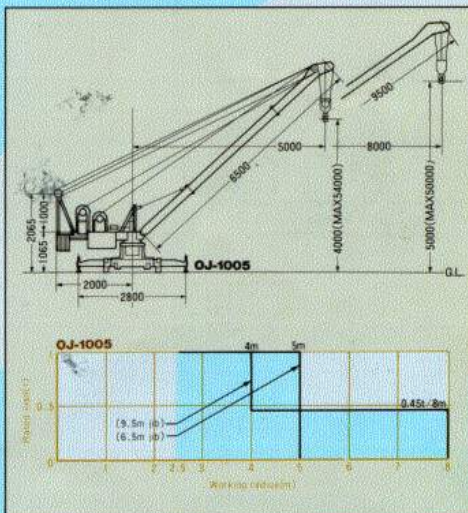
# OJ-1005 JIB

### FEATURES

1. This crane can be loaded to a truck (4t vehicle) under fully assembled condition.
2. This crane provides wheels for self moving and can move to any desired place.
3. Simple and light-weight design, permitting easy assembly and disassembly manually.
4. The crane can be operated by remote control system, allowing easy operation from any place.

### APPLICATION

- Assembly and disassembly of frames and scaffolds (roof installation)
- Material Handling in warehouse
- Disassembly of existing crane



80 type pile driver    Rack elevator    High foot travelling jib crane for shipbuilding

Tripod derrick    Caisson crane

Travelling jib crane for pier    Large size jib crane for shipbuilding    Fixed type jib crane

EXPORT  AGENT

## KANEMATSU-GOSHO LTD.

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MACHINERY DEPT.

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	Motor(kw)				Height under Hook(m)	Self-standing height(m X No.)	Power source	Operating system	Climbing system	Safety device
	Hoisting	Swing	Slewing	Climbing						
	37				150	30 (6×5)	400/440V 50/60Hz	Operator's cabin	Hydraulic cylinder	Over-Hoisting limiter Swing limiter Moment limiter
	90	50	25	15						
	37				150	30 (4.5×6 +3)	400/440V 50/60Hz	Operator's cabin	Hydraulic cylinder	Over-Hoisting limiter Swing limiter Moment limiter
	75	33	15	11						
	30				200	30 (6×5)	400/440V (200/220V) 50/60Hz	Operator's cabin	Hydraulic cylinder	Over-Hoisting, over-load, swing and slewing limiters
	55	25	8.5	11						
	4.3	2.5	0.2	—	55	—	200/220V 50/60Hz	Wired remote control pushbutton	—	

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