With a great dream towards a brighter future And for your success the journey continues



Domestic

Oriental Precision & Engineering Co., Ltd.

Busan Factory

1614-1, Songjeong-dong, Gangseo-gu, Busan, Korea Tel. +82-51-202-0101 Fax. +82-51-831-3306

Jinhae Shipyard

575-1, Myeong-dong, Jinhae-gu, Changwon-si, Gyeongsangnam-do,

Tel. +82-55-545-8300 Fax. +82-55-545-4144

Oriental Heavy Industries Co.,Ltd.

Jingyo Factory

802, Baengnyeon-ri, Jingyo-myeon, hadong-gun, Gyeongsangnam-do,

Tel. +82-55-880-5800 Fax. +82-55-880-5888

Kwangyang Shipyard

1676-3, Taein-dong, Kwangyang-si, Jeollanam-do, Korea Tel. +82-61-798-6600 Fax. +82-61-795-6661

Oriental Precision Machinery Co., Ltd.

130-2, Songjeong-dong, Gangseo-gu, Busan, Korea

Tel. +82-51-831-8899 Fax. +82-51-832-1504

Oriental Inspection & Service Co., Ltd.

25-1187, Shinho-dong, Gangseo-gu, Busan, Korea

Tel. +82-51-831-2747 Fax. +82-51-831-6260

Overseas

Dalian Oriental Marine & Heavy Industry Co.,Ltd.No.92 East Street Gushan Development Zone Dalian City Liaoning Province China

Tel. +86-411-3920-8888 Fax. +86-411-3922-3999

Oriental Precision (Dalian) & Technical Service Co.,Ltd.

No.92 East Street Gushan Development Zone Dalian City Liaoning Province China

Tel. +86-411-3922-3805 Fax. +86-411-3922-4000

Yantai Oriental Precision & Engineering Co.,Ltd.

No.2 Qingdao Street, B-17 District, Yantai Economic Development Zone, Shandong Province, China

Tel. +86-535-6953-701 Fax. +86-535-6953-699

Oriental Vietnam Precision & Engineering Co., Ltd.

01 My Giang, Ninh Phuoc commune, Ninh Hoa District, Khanh Hoa province, Vietnam

Tel. +84-58-3622 722 Fax. +84-58-3622 721

Oriental Precision & Engineering(Singapore) Co.,Ltd.

No.3 International Business Park #04-02 Nordic European Centre

Tel. +65-6569-5005 Fax. +65-6560-3797

OPCO JAPAN Co.,Ltd.

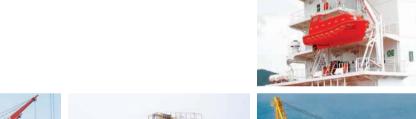
1-8-6-201 Ebisu Śhibuya-ku Tokyo Japan

Tel. +81-03-5798-3324 Fax. +81-03-3446-0946

Customer-First

The best Master in Shipbuilding & Marine

SHIP MACHINERY



















Main Item Machinery Land 23,731m² **Building Area** 13,595 m²

Manufacturing Products

Deck Crane Hose Handling Crane Knuckle Crane Monorail Crane Provision Crane Engine Room Crane

Life Boat Davit Free Fall Davit Life Raft & Rescue Davit Layout

1. Head Office

2. Cutting Shop

3. Fabrication Shop 4. Crane Assembly Shop 5. Crane Test Area 6. Painting Shop

7. Stock Area

Certification

Quality Assurance

Quality policy of OPCO is to realize customer satisfaction by supplying products that meet customer requirements and lawful regulations and by continuously improving and effectively applying quality management system including processor in order to guarantee compliance to customer requests.

Quality









ISO 9001:2008 (LRQA)

ISO 9001:2008 (API)

API SPEC Q1 (API)

ISO/TS 29001 (API)

MED









API SPEC 2C

ASME "U" STAMP

ASME "S" STAMP

Quality System Approval

Environment

MED









Davit EC Type Approval

Winch EC Type Approval

OHSAS 18001:2007 (LRQA)

ISO 14001:2004 (LRQA)

Products

Lifting Appliances (Marine Cranes)

PROVISION JIB CRANE (Electro-Hydrau	ılic Driven)	10page
PROVISION CRANE (Electric Driven)		12page
HOSE HANDLING CRANE		14page
JIB CRANE (Knuckle Boom Type)		16page
JIB CRANE (Telescopic Boom Type)		18page
DECK CRANE (Cargo Crane)		20page
DECK CRANE (Lattice Boom Type)		22page
SLEWING JIB CRANE (Electric Motor D	riven)	24page
COMBINED CRANE (HYD. Provision, Rese	cue Boat & Life Raft)	26page
MONO-RAIL HOIST		28page

Deck Machineries

DECK MACHINERY (High-Pressure Motor Driven)	30page
DECK MACHINERY (Electric Motor Driven)	32page
DECK MACHINERY (Self Contained Hydraulic Power Unit)	34page
POSITIONING MOORING WINCH	36nane

Engine room Cranes

ENGINE ROOM CRANE (Normal Head Type)	38pag
ENGINE ROOM CRANE (Low Head Type)	40pag
ENGINE ROOM CRANE (2 Hook & 2 Trolley Type, Chain Hoist)	42page

Lift Saving Appliances

HINGED GRAVITY LIFE BOAT DAVIT & WINCH	44page
FREE FALL LIFE BOAT DAVIT & WINCH	46page
RESCUE BOAT DAVIT & WINCH	48page

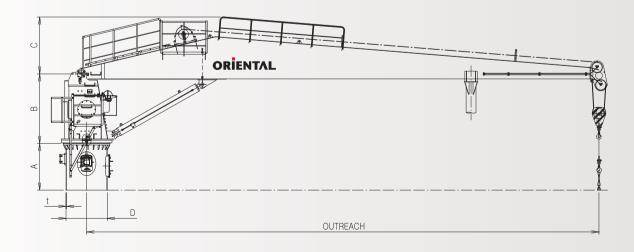




PROVISION JIB CRANE (Electro-Hydraulic Driven)

This crane is electro-hydraulic driven self contained power pack, cylinder luffing type, and used generally for the handling provisions and engine spares for most ships, and manufactured & tested in compliance with requirements of lifting appliances. The OPCO's hydraulic provision crane is available with lifting capacity up to 12.5 tons and out reach up to 22 meters.

OUT SIDE DIMENSIONS



SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include foundation post) and manufacturing. Crane house complete set equipped with winch, power pack, slewing bearing, slewing reducers, and accessories
- Crane jib complete set with sheave units
- Wire rope for hoisting
- Fasteners (bolts/washers/nuts) for slewing bearing
- Spare parts and accessories
- Lashing piece of hook or shackle (EYE PLATE + WIRE ASS'Y)
- Test run and performance test at shop
- Inspection by class or shipyard's inspector at shop

OPTIONAL ITEMS

- Remote control
- Personnel transfer

- Slip ring with fittings

- Control cabin
- Jib rest
- Flood light on the crane jib
- Stainless steel wire rope
- Oil heating device
- Explosion-proof motor
- Certificate by classification society: LR. ABS. DNV. GL. KR. CR and others

STANDARD DATA FOR PROVISION JIB CRANE(Electro-Hydraulic Driven)

SWL	OUTREACH	CRANE	WORKING	HOISTING	LUFFING	SLEW	E.POWER						
		SIZE	PRESSURE	SPEED	TIME	SPEED	S6, 40%	۸	В	С	D		
(ton)	(m)		(bar)	(m/min)	(sec)	(rpm)	(kW)	Α	D	U	О	t	
	-11	35	250	10	32	0.9	14.3	1400	1400	1200	780	12	
2	11.1 - 15	50	250	10	46	0.8	14.3	1400	1600	1300	970	12	
	15.1 - 18	70	250	10	63	0.6	14.3	1400	1700	1300	1060	12	
	-10	50	250	10	40	0.9	19.5	1400	1600	1300	970	12	
	10.1 - 14.4	70	250	10	55	0.6	19.5	1400	1700	1300	1060	12	
3.2	14.5 - 16	90	250	10	58	0.6	19.5	1400	1950	1400	1190	15	
	16.1 - 18	100	250	10	58	0.6	19.5	1400	1950	1400	1190	15	
	18.1 - 20	120	250	10	77	0.5	19.5	1400	1950	1400	1250	15	
	-7.9	50	250	10	34	0.9	24	1400	1600	1300	970	12	
	8 - 11.9	70	250	10	46	0.7	24	1400	1700	1300	1060	12	
4	12.0 - 14	90	250	10	58	0.6	24	1400	1950	1400	1190	15	
•	14.1 - 16	100	250	10	58	0.6	24	1400	1950	1400	1190	15	
	16.1 - 18	120	250	10	65	0.6	24	1400	1950	1400	1250	15	
	18.1 - 20	140	250	10	75	0.5	24	1400	2100	1450	1330	15	
	-9	70	250	10	39	0.7	24	1400	1700	1300	1060	12	
	9.1 - 12	90	250	10	49	0.7	24	1400	1950	1400	1190	15	
5	12.1 - 13	100	250	10	49	0.7	24	1400	1950	1400	1190	15	
	13.1 - 16	120	250	10	55	0.6	24	1400	1950	1400	1250	15	
	16.1 - 18	140	250	10	63	0.6	24	1400	2100	1450	1330	15	
	18.1 - 20.5	170	250	10	78	0.5	24	1400	2280	1450	1330	15	
	-11 11.1 - 13	100 120	260 260	10	60	0.7 0.7	24	1400 1400	1950	1400 1400	1190 1250	15	
6.3	13.1 - 15	140	260	10 10	66 75	0.7	24 24	1400	1950 2100	1450	1330	15 15	
0.3	15.1 - 15	170	260	10	93	0.5	24	1400	2280	1450	1330	15	
	17.1 - 20	200	260	10	108	0.5	24	1400	2400	1550	1330	15	
	-9.9	120	260	10	56	0.6	39	1500	2100	1450	1330	15	
	10.1 - 11	140	260	10	56	0.6	39	1500	2100	1450	1330	15	
	11.1 - 13	170	260	10	69	0.6	39	1500	2280	1450	1330	15	
9(8)	13.1 - 15.9	200	260	10	80	0.6	39	1500	2280	1450	1330	15	
	16.0 - 17.4	220	260	10	95	0.5	39	1500	2430	1550	1460	15	
	17.5 - 19	250	260	10	109	0.5	39	1500	2550	1550	1460	16	
	-10.4	140	260	10	56	0.6	39	1500	2100	1450	1330	15	
	10.5 - 12.4	170	260	10	69	0.6	39	1500	2280	1450	1330	15	
	12.5 - 14.4	200	260	10	80	0.6	39	1500	2280	1450	1330	15	
10	14.5 - 15.4	220	260	10	95	0.5	39	1500	2430	1550	1460	15	
	15.5 - 17.4	250	260	10	109	0.5	39	1500	2550	1550	1460	16	
	17.5 - 18.9	280	260	10	121	0.5	39	1500	2550	1600	1520	16	
	19.0 - 21	320	260	10	140	0.5	39	1500	2650	1600	1640	16	
	-10.4	170	260	10	48	0.8	48	1500	2280	1450	1330	15	
	10.5 - 12.9	220	260	10	66	0.7	48	1500	2430	1550	1460	15	
12.5	13.0 - 14.4	250	260	10	76	0.6	48	1500	2550	1550	1460	16	
12.5	14.5 - 15.9	280	260	10	84	0.6	48	1500	2550	1600	1520	16	
	16 - 17.9	320	260	10	97	0.5	48	1500	2650	1600	1640	16	
	18.0 - 19	350	260	10	107	0.5	48	1500	2760	1650	1710	19	

- * 1. Other size and parameters are possible by request
- 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



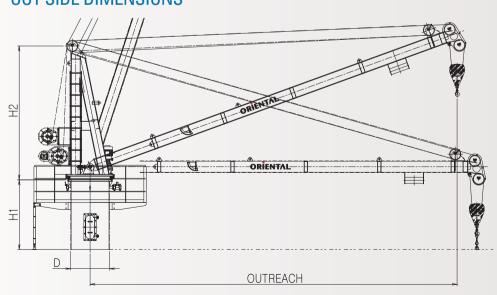
PROVISION CRANE (Electric Driven)

This electric driven, wire luffing jib crane is manufactured and tested in compliance with rules of lifting appliance, and used for handling of provision and engine spares for all kind of ships generally.

The OPCO's provision crane is available with lifting capacity up to 12.5 tons and out reach up to 22 meters, and the crane slewing post is mounted to the fixed post (pedestal) by means of fasteners with ball bearing slewing ring, fixed slewing gear and pinion.

All other fittings are designed and manufactured in accordance with OPCO's standard.

OUT SIDE DIMENSIONS



SCOPE OF SUPPLY

STANDARD ITEMS

- Complete set of crane including slewing post, jib, hoisting/luffing winch, steel wire rope with fitting for hoisting/luffing, load block with hook, slewing reducer gear slewing bearing, etc.
- Fixed post (Pedestal) with securing bolts, nuts and washer
- Group starter panel (enclosure : IP23)
- Junction box (enclosure : IP56)
- Push button switch box with plug and cable (enclosure: IP23)
- Receptacle with storage box
- Hook lashing device
- Spare parts and tools
- Test run and performance test at shop

OPTIONAL ITEMS

- Extension height of pedestal (STD: 2000)
- Jib movement (luffing or fixed)
- Change for lifting height
- Change for speed (hoisting, slewing and luffing)
- Additional slew sector (STD : max. 1 sector)
- Endless slewing with slip ring
- Additional receptacle and control switch box

MAINI DIMENICIONI (mane

- Wireless control (Radio control)
- Special electric voltage
- Jib rest with fittings
- Certificate by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR PROVISION CRANE(Electric Driven)

SWL	OUTREACH	CRANE	MAX	WIRE ROPE	HOISTING LUFF		LUFFING SLEWING		WING MAIN		IN DIMENSION	N DIMENSION (mm)	
		SIZE	LIFT	DIA.	SPEED	MOTOR	TIME	MOTOR	SPEED	MOTOR	D	H1	H2
(ton)	(m)		(m)	(mm)	(m/min)	(kW)	(sec)	(kW)	(m/min)	(kW)	Ь	""	112
2	-11	35	30	ø14	10	5.5	~100	3.7	0.5	2.2	780	2000	3505
۷	11.1 - 15	50	30	ø14	10	5.5	~100	11	0.5	3.7	980	2000	3625
	-10	50	30	Ø12	10	7.5	~100	11	0.5	3.7	980	2000	3625
3	10.1 - 14.4	70	30	ø12	10	7.5	~100	15	0.5	5.5	1060	2000	3647
	14.5 - 16	90	30	ø12	10	7.5	~110	11	0.5	7.5	1190	2000	4100
	-7.9	50	30	ø14	10	11	~100	11	0.5	3.7	980	2000	3625
4	8 - 11.9	70	30	ø14	10	11	~100	15	0.5	5.5	1060	2000	3647
	12.0 - 14	90	30	ø14	10	11	~110	11	0.5	7.5	1190	2000	4100
	-9	70	30	ø14	10	15	~100	15	0.5	5.5	1060	2000	3647
5	9.1 - 12	90	30	Ø14	10	15	~110	11	0.5	7.5	1190	2000	4100
	12 - 16	120	30	ø14	10	15	~110	15	0.45	7.5	1250	2000	5050
	-10	90	40	ø16	10	18.5	~110	11	0.5	7.5	1190	2000	4100
6.3	10.1 - 13	120	40	ø16	10	18.5	~110	15	0.45	7.5	1250	2000	5050
	13.1 - 15	140	40	ø16	10	18.5	~110	15	0.5	11	1330	2000	4945
	-11	140	40	ø18	10	18.5	~110	15	0.5	11	1330	2000	4945
9(8)	11.1 - 13	170	40	ø18	10	18.5	~100	18.5	0.5	11	1330	2000	4955
	13.1 - 15.9	200	40	ø18	10	18.5	~100	22	0.5	15	1330	2000	5300
	-12.4	170	40	ø18	10	27	~100	18.5	0.5	11	1330	2000	4955
10	12.5 - 14.4	200	40	ø18	10	27	~120	22	0.5	15	1330	2000	5300
	14.5 - 15.4	220	40	ø18	10	27	~120	22	0.5	18.5	1460	2000	5400
	-10.4	170	40	ø20	10	30	~100	18.5	0.5	11	1330	2000	4955
12.5	10.5 - 12.9	220	40	ø20	10	30	~120	22	0.5	18.5	1460	2000	5400
	13.0 - 14.4	250	40	ø20	10	30	~120	30	0.5	22	1470	2000	5500

- * 1. Other size and parameters are possible by request
- 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



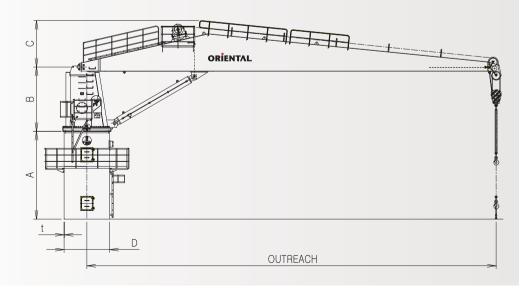
HOSE HANDLING CRANE

This electro-hydraulic driven hose handling crane is manufactured and tested in compliance with the requirement of "OCIMF" and "Lifting Appliance".

The OPCO's hose handling crane designed by compact and durable construction has the best advantage of handling oil hose for the ships of tanker, VLCC, ULCC, LNG and LPG

The lifting capacity is available up to 25 tons and max.30m jib length, and slewing angle is available "Endless".

OUT SIDE DIMENSIONS



SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include foundation post) and manufacturing. Crane house complete set equipped with winch, power pack, slewing bearing, slewing reducers, and accessories
- Crane jib complete set with sheave units
- Wire rope for hoisting
- Fasteners (bolts/washers/nuts) for slewing bearing
- Spare parts and accessories
- Lashing piece of hook or shackle (EYE PLATE + WIRE ASS'Y)
- Painting works
- Test run and performance test at shop
- Inspection by class or shipyard's inspector at shop

SIMI DITREACH CRANE WORKING HOISTING LITERING

OPTIONAL ITEMS

- Remote control
- Personnel transfer
- Control cabin
- Slip ring with fittings
- Jib rest
- Flood light on the crane jib
- Stainless steel wire rope
- Oil heating device
- Explosion-proof motor
- Certificate by classification society: LR, ABS, DNV, GL, KR, CR and others

MAINI DIMENICIONI (mano

STANDARD DATA FOR HOSE HANDLING CRANE

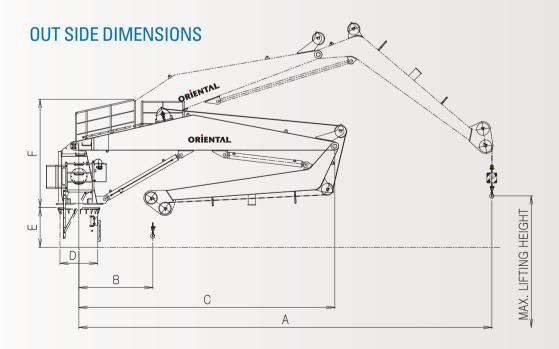
SW	OUTREACH	CRANE	WORKING	HOISTING	LUFFING	SLEW	E.POWER	MAIN DIMENSION (mm)		I (mm)			
(ton	(m)	SIZE	PRESSURE (bar)	SPEED (m/min)	TIME (sec)	SPEED (rpm)	S6, 40% (kW)	А	В	С	D	t	
	18.5 - 20.9	170	250	10	80	0.5	24(27.6)	4500	2250	1600	1330	15	
	21 - 22.4	200	250	10	92	0.5	24(27.6)	4500	2250	1600	1330	15	
5	22.5 - 23.4	220	250	10	105	0.5	24(27.6)	4500	2460	1630	1460	15	
	23.5 - 27	250	250	10	120	0.5	24(27.6)	4500	2460	1650	1460	16	
	17.5 - 19.4	220	260	10	105	0.5	28.6(33)	4500	2460	1630	1460	15	
	195 - 214	250	260	10	120	0.5	28.6(33)	4500	2460	1650	1460	16	
7.5	21.5 - 24.4	280	260	10	135	0.5	28.6(33)	4500	2550	1680	1520	16	
	24.5 - 26	320	260	10	155	0.5	28.6(33)	4500	2650	1700	1630	16	
	15.5 - 17	250	260	10/20	90	0.7	39(45)	4500	2550	1650	1470	16	
	17.1 - 18.9	280	260	10/20	100	0.6	39(45)	4500	2550	1680	1520	16	
10	19 - 21.4	320	260	10/20	113	0.5	39(45)	4500	2650	1700	1630	16	
	21.5 - 23.4	350	260	10/20	125	0.5	39(45)	4500	2760	1800	1920	15	
	23.5 - 25.5	420	260	10/20	140	0.5	39(45)	4500	2807	1980	2090	15	
	15.5 - 17.4	350	260	10/20	90	0.6	58.5(63)	4500	2760	1800	1920	15	
	17.5 - 19.4	420	260	10/20	102	0.6	58.5(63)	4500	2460	1980	2090	15	
	19.5 - 22.4	500	260	10/20	125	0.5	58.5(63)	4500	3050	2250	2180	15	
15	22.5 - 24.9	580	260	10/20	145	0.5	58.5(63)	4500	3050	2250	2180	15	
	25 - 26.4	640	260	10/20	155	0.5	58.5(63)	4500	3300	2380	2340	18	
	26.5 - 28.4	700	260	10/20	170	0.4	58.5(63)	4500	3440	2480	2200	20	
	28.5 - 30	750	260	10/20	190	0.4	58.5(63)	4500	3575	2530	2290	20	
	15.5 - 18.9	500	260	10/20	108	0.6	71.5(67)	4500	3050	2250	2180	15	
	19 - 20.4	580	260	10/20	108	0.6	71.5(67)	4500	3050	2250	2180	15	
20	20.5 - 22.4	640	260	10/20	125	0.6	71.5(67)	4500	3300	2380	2340	18	
20	22.5 - 24.4	700	260	10/20	135	0.5	71.5(67)	4500	3440	2480	2200	20	
	24.5 - 25.9	750	260	10/20	150	0.5	71.5(67)	4500	3575	2530	2290	20	
	26 - 28	830	260	10/20	160	0.4	71.5(67)	4500	3718	2570	2400	20	
	16 - 18.4	640	260	10/20	113	0.6	90	4500	3300	2380	2340	18	
25	18.5 - 20.4	700	260	10/20	121	0.5	90	4500	3440	2480	2200	20	
20	20.5 - 21.9	750	260	10/20	138	0.5	90	4500	3575	2530	2290	20	
	22 - 24	830	260	10/20	143	0.5	90	4500	3718	2570	2400	20	

- * 1. Other size and parameters are possible by request
- 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



JIB CRANE (Knuckle Boom Type)

Knuckle crane is special crane which is composed of 2Jibs and the Hinge Part, so it can operate in the narrow space. It is installed on the special ship complexed upper deck, such as drillship, FPSO.



SCOPE OF SUPPLY

STANDARD ITEMS

- Crane complete set (jib, upper post, hoisting winch, luffing cylinder#1, #2, steel wire rope, load block ass'y, slewing device with slewing bearing, limit switch etc.)
- Pedestal with electric motor
- Control platform & vertical ladder
- Starter panel (enclosure : IP23)
- Stowage box with on/off switch box
- Lashing rope for hook
- Spare parts of our standard 1 year onboard operation
- Fasteners (bolts/washers/nuts) for slewing bearing
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Ice class application
- Stainless steel wire rope
- Oil heating device
- Explosion-proof motor
- Remote control Receptacle / Wireless type

and putting into operation

- Assembly (after the works endurance test, the crane is dismantled for shipment)
- Dispatch; Service engineering such as supervisions during installation work inboard, instruction to vessel's crew, adjusting and attendance to on board test, etc
- Certification by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR JIB CRANE(Knuckle Boom Type)

(CRANE SAFTY WORKING RAD. (mr		RAD. (mm)		AVINI DINAE	NSION (mm		HOISTING	MAIN	KNUCKLE	SLEWING		
	TYPE	WORKING LOAD	MAX.	MIN.	IV.	/IAIN DIIVIE	INSTUIN (ITIII)	IJ	SPEED	LUFFING TIME	LUFFING TIME	SPEED	
		(ton)	Α	В	С	D	E	F	(m/min)	(sec)	(sec)	(rpm)	
K	(C0108	1	8,000	1,600	5,000	780	1,400	2,650	0 ~ 10	35	35	0.9	
K	(C0210	1.5	10,000	1,800	6,500	780	1,400	2,650	0 ~ 10	35	35	0.9	
K	(C0311	3	11,000	2,200	6,300	1,060	1,400	3,450	0 ~ 10	70	70	0.6	
K	(C0316	3	16,000	2,500	9,800	1,250	1,400	3,600	0 ~ 10	80	70	0.5	
K	CO415	4	15,000	3,000	9,500	1,250	1,400	3,600	0 ~ 10	70	70	0.6	
K	(C0520	5	20,000	3,000	11,500	1,330	1,400	4,150	0 ~ 10	110	90	0.5	
K	(C1014	10	14,000	4,100	9,000	1,460	1,400	3,500	0 ~ 10	95	90	0.5	
K	C2025	10	25,000	7,200	17,500	2,530	4,500	4,700	0 ~ 10	110	100	0.6	
K	C2522	25	22,000	7,500	15,500	2,650	4,500	5,500	0 ~ 10	145	120	0.5	
K	(C3030	30	30,000	7,800	20,000	2,750	4,500	6,000	0 ~ 10	160	140	0.6	
K	(C3530	35	30,000	8,800	20,000	2,850	4,500	6,200	0 ~ 10	180	160	0.5	
V	(C8519	85	19,000	9,000	32,000	2,900	4,500	6,200	0 ~ 10	190	130	0.7	
K	(00013	25	45,000	3,000	32,000	2,300	4,300	0,200	0 10	130	130	0.7	

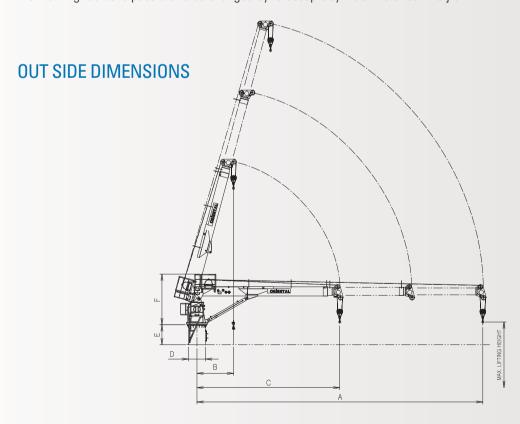
^{* 1.} Other size and parameters are possible by request
2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.
3. Application for shipboard or offshore



JIB CRANE (Telescopic Boom Type)

Telescopic jib crane is a kind of common provision cranes handling provisions and engine spares for most ships.

Telescopic jib crane have the advantage compared to the common provision crane because the working radius is possible to be changed by telescopic cylinder installed into jib.



www.opco.co.kr / customer first oriental 18+19

SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include foundation post) and manufacturing. Crane house complete set equipped with hyd. power unit and fittings, slewing bearing, slewing reducers, control platform and accessories
- Crane jib complete set with hoisting winch, telescopic cylinder, related elec. box and equipments.
- Luffing cylinder
- Wire rope for hoisting
- Control station installed in deck by shipyard's opinion
- Foundation post including design with Elec. motor
- Fasteners (bolts/washers/nuts) for slewing bearing
- Spare parts and accessories
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Ice class application
- Stainless steel wire rope
- Oil heating device
- Explosion-proof motor
- Jib rest
- Cable and connection work
- Assembly (after the works endurance test, the crane is dismantled for shipment) and putting into operation
- Dispatch; Service engineering such as supervisions during installation work inboard, instruction to vessel's crew, adjusting and attendance to on board test, etc
- Certification by classification society:
 LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR JIB CRANE(Telescopic Boom Type)

CRANE	SAFTY	WORKING	RAD. (mm)		AAINI DIME	NSION (mm	N	HOISTING	LUFFING	TELESCOPIC	SLEWING	
TYPE	WORKING LOAD	MAX.	MIN.	ľ	VIAIIN DIIVIE	IIII) MOION	I)	SPEED	TIME	TIME	SPEED	
	(ton)	Α	В	С	D	Е	F	(m/min)	(sec)	(sec)	(rpm)	
TC0210	1.5	10,000	1,900	6,500	780	1,400	2,650	0 ~ 10	40	70	0.9	
TC0405	4 2.5	5,000 8,000	1,900	5,000	780	1,400	2,650	0 ~ 10	35	80	0.9	
TC0503	5 1	3,000 14,000	2,000	6,500	970	1,400	3,000	0 ~ 10	55	80	0.6	
TC0510	5 2.5	10,000 20,000	2,800	10,000	1,190	1,400	3,500	0 ~ 10	60	150	0.7	
TC0513	5	13,000	2,000	6,000	1,250	1,400	3,500	0 ~ 10	50	120	0.7	
TC0807	7.5 3	7,000 12,000	2,200	7,000	1,190	1,400	3,500	0 ~ 10	65	100	0.7	
TC0810	7.5 4	10,000 15,000	3,500	10,000	1,330	1,400	4,000	0 ~ 10	70	100	0.7	

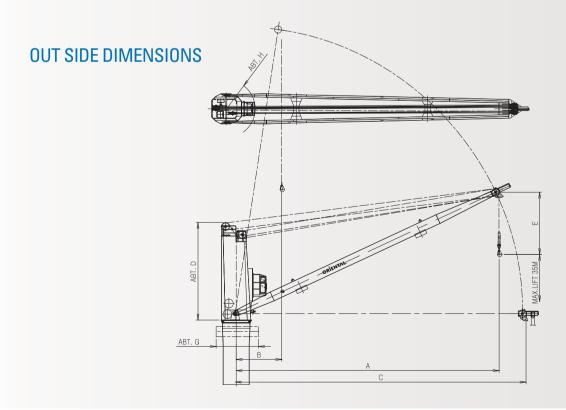
^{* 1.} Other size and parameters are possible by request

^{2.} The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



DECK CRANE (Cargo Crane)

Deck crane is the compulsory equipment for loading and unloading, and it is installed on the bulk carrier or container ship. And deck crane is complex machinary applied hydraulics, electric system and functions like the body of crane, winch, hydraulics components, slewing bearing.



SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include foundation post) and manufacturing. Crane house complete set equipped with winch, power pack, slewing bearing, slewing reducers, control cabin and accessories
- Crane jib complete set with sheave units
- Wire rope for hoisting & Luffing
- Foundation post including design
- Jib rest stand & piece
- Fasteners (bolts/washers/nuts) for slewing bearing
- Spare parts and accessories
- Slip ring with fittings
- Lighting on the crane post
- Lashing piece of hook or shackle (EYE PLATE + WIRE ASS'Y)
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector
- Fire extinguisher 1 set CO₂ type

OPTIONAL ITEMS

- Ice class application
- Stainless hydraulic coupling and fittings
- Stainless steel wire rope
- Oil heating device
- Certiflcate by classfication society : LR, ABS, DNV, GL, KR, CR and others

STANDARD DATA FOR DECK CRANE(Cargo Crane)

CRANE	SAFTY	WORKING	RAD. (mm)			DIA 4ENIO	ONL		HOISTING	LUFFING	SLEWING	E. POWER	SELF	
TYPE	WORKING LOAD	MAX.	MIN.		IVIAIN	DIMENS	IUN (M)		SPEED	TIME	SPEED		WEIGHT	
	(ton)	Α	В	С	D	Е	Н	K	(m/min)	(sec)	(rpm)	(S1- kW)	(ton)	
2026	20	26	4.5	27.5	8.9	6	3	4.5	20 / 38	70	0.5	100	40	
2028	20	28	4.5	29.3	8.9	6	3	4.5	20 / 38	70	0.5	100	40	
2030	20	30	5	32.5	8.9	6	3	4.5	20 / 38	70	0.5	100	40	
2520	25	20	4	21.5	8.9	4.5	3	4.5	20 / 38	60	0.6	100	38	
2522	25	22	4	23.9	8.9	4.5	3	4.5	20 / 38	60	0.6	100	38	
2524	25	24	4.5	25.2	8.9	6	3	4.5	20 / 38	70	0.6	100	38	
2526	25	26	4.5	27.5	8.9	6	3	4.5	20 / 38	70	0.6	120	40	
2528	25	28	4.5	29.3	8.9	6	3	4.5	20 / 38	70	0.6	125	40	
2530	25	30	5	32.5	8.9	6	3	4.5	20 / 38	70	0.6	125	40	
3020	30	20	4	21.5	8.9	4.5	3	4.5	20 / 38	60	0.7	125	40	
3022	30	22	4	23.9	8.9	4.5	3	4.5	20 / 38	60	0.7	125	40	
3024	30	24	4.5	25.2	8.9	6	3	4.5	20 / 38	70	0.7	125	40	
3026	30	26	4.5	27.5	8.9	6	3	4.5	20 / 38	70	0.7	125	43	
3028	30	28	4.5	29.3	8.9	6	3	4.5	20 / 38	70	0.7	125	43	
3030	30	30	5	32.5	8.9	6	3	4.5	20 / 38	70	0.7	125	44	
3620	36	20	4	21.5	8.9	4.5	3	4.5	17 / 32	60	0.7	125	42	
3622	36	22	4	23.9	8.9	4.5	3	4.5	17 / 32	60	0.7	125	44	
3624	36	24	4.5	25.2	9.9	6	3	4.5	17 / 32	70	0.7	125	45	
3626	36	26	4.5	27.5	9.9	6	3	4.5	17 / 32	70	0.7	160	46	
3628	36	28	4.5	29.3	9.9	6	3	4.5	17 / 32	70	0.7	160	46	
3630	36	30	5	32.5	9.9	6	3	4.5	17 / 32	70	0.7	160	46	
4020	40	20	4	21.5	11.7	6	3	4.5	17 / 32	60	0.7	160	46	
4022	40	22	4	23.9	11.7	6	3	4.5	17 / 32	60	0.7	180	46	
4024	40	24	4.5	25.2	11.7	6	3	4.5	17 / 32	70	0.7	180	47	
4026	40	26	4.5	27.5	11.7	6	3	4.5	17 / 32	70	0.7	180	48	
4028	40	28	4.5	29.3	11.7	6	3	4.5	17 / 32	70	0.7	180	49	
4030	40	30	5	32.5	11.7	6	3	4.5	17 / 32	70	0.7	180	49	
4528	45	28	4.5	29.3	11.7	6	3	4.5	17 / 32	70	0.7	210	49	
4530	45	30	5	32.5	11.7	6	3	4.5	17 / 32	70	0.7	210	50	

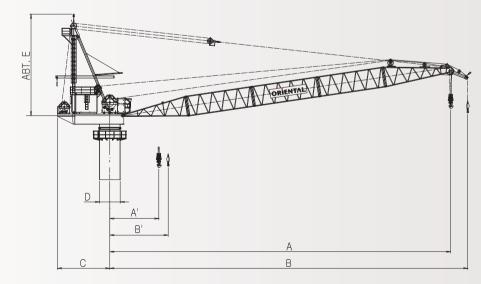
- * 1. Other size and parameters are possible by request
- 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.
- 3. Certificate of patent: 10-0978467



DECK CRANE (Lattice Boom Type)

Pedestal mounted oriental offshore crane is designed manufactured in complaince with the latest international standards for offshore cranes with certification requirements by all of leading classification societies. Optimal design is available to various sea states, different offshore requirements and comply with API-2C.

OUT SIDE DIMENSIONS



www.opco.co.kr / customer first oriental 22+23

SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include foundation post) and manufacturing. Crane machinery deck complete set equipped with power pack, hoisting winch, luffing winch, slewing device with slewing bearing,
- Crane boom complete set with sheave units
- Crane A-frame complete set with monorail for maintenanace.
- Pedestal with ring platform
- Cabin for operation the crane
- Fasteners (bolts/washers/nuts) for slewing bearing
- Wire rope for hoisting & luffing
- Safe load indication
- Load block ass'y
- Spare parts and accessories
- Slip ring with fittings
- Lashing piece of hook or shackle (EYE PLATE + WIRE ASS'Y)
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector
- Fire extinguisher 1 set CO₂ type

OPTIONAL ITEMS

- Ice class application
- Stainless hydraulic coupling and fittings
- Stainless wire rope
- Oil heating device
- Explosion-proof motor / Disel engine
- Offshore rule : AP1 2C
- Certificate by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR DECK CRANE(Lattice Boom Type)

CRANE	SAFTY	WORKING RAD. (m)		CAP. (ton) / RAD. (m)				MAIN DIMENSION			HOISTING SPEED		LUFFING	SLEWING	CONSUMP.	SELF			
TYPE	WORKING LOAD	MAIN	HOIST	AUX.	HOIST	MAIN	HOIST	AUX.	PERSONAL TRANSPER		(mm)		(m/r		TIME	SPEED	POWER	WEIGHT	
	(ton)	MAX.(A)	MIN.(A')	MAX.(B)	MIN.(B')	MAX.	MIN.	MAX.	MAX.	С	D	Е	MAIN	AUX.	(sec)	(rpm)	(kW)	(ton)	
LC1042	10	42	8	-	-	10/42	10/8	-	-	6747	2640	12510	10	-	137	0.5	97.5	80	
LC2013	20	22	6	25	8	20/13	6/22	5/24	1/ALL	7000	2530	10500	28	80	150	1.5	300	80	
LC7515	75	47.6	6.8	49.8	8.1	75/15	17/48	10/ALL	3/ALL	7255	2880	14070	14	70	150	0.8	450	100	

- 1. Other size and parameters are possible by request
 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.
- 3. Application for shipboard or offshore.

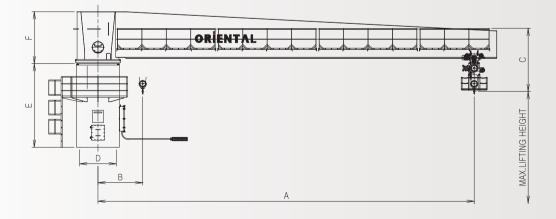


SLEWING JIB CRANE (Electric Motor Driven)

Electric slewing crane is installed on the dredger ship and works collecting and transporting the sand of the under water.

OUT SIDE DIMENSIONS





www.opco.co.kr / customer first oriental 24+25

SCOPE OF SUPPLY

STANDARD ITEMS

- Design and manufacturing.
- Crane complete set (pedestal, post, jib with hoist trolley, load block with hook, slewing bearing, etc.)
- Wire rope for hoisting
- Fasteners (bolts/washers/nuts) for slewing bearing
- Starter Panel, junction box
- Spare parts and accessories
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Ice class application
- Stainless steel wire rope
- Explosion-proof motor
- Remote control Receptacle / Wireless type
- Cable and connection work
- Assembly (after the works endurance test, the crane is dismantled for shipment) and putting into operation
- Dispatch; Service engineering such as supervisions during installation work inboard, instruction to vessel's crew, adjusting and attendance to on board test, etc
- Certification by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR SLEWING JIB CRANE(Electric Motor Driven)

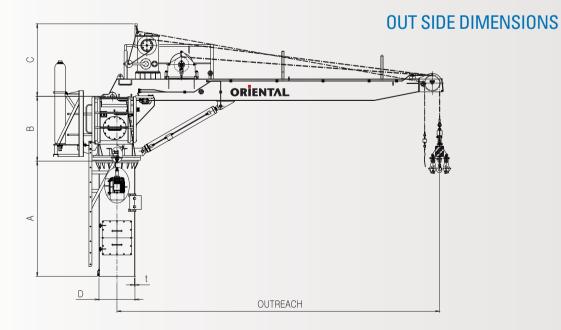
CRANE TYPE	SAFTY WORKING LOAD (ton)	WORKING MAX.	MIN.	MAIN DIMENSION (mm) C D E F				HOISTING SPEED (m/min)	TRAVERSING SPEED (m/min)	SLEWING SPEED (rpm)	MAX. LIFTING HEIGHT (m)	
SC0515	5	15,000	2,500	2,000	1,400	1,400	2,600	5.6/0.56	5	0.3	15	
SC1014	10	14,000	2,800	2,600	1,470	1,400	2,600	4.5/0.45	6	0.3	15	
SC1120	11	20,000	2,500	2,600	1,800	1,400	2,600	4/1	2	0.3	18	
SC1319	13	19,000	2,200	2,700	2,100	1,400	2,600	4/1	2	0.3	18	

- * 1. Other size and parameters are possible by request
 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.
 3. Application for dredger ship or others



COMBINED CRANE (HYD. Provision, Rescue Boat & Life Raft)

This crane is designed for operated provision with rescue boat & life raft handling. The crane is for provision that it is electrically-hydraulically driven self contained power pack, cylinder luffing type, and used generally for the handling provisions and engine spares for most ships, and manufactured & tested in compliance with requirements of lifting appliances. Also, it operates both rescue & life raft launching with suitable position at raft full weight. Designed by SOLAS rules as amended. Using remote control wire, crew can operate release system. For emergency, hydraulic accumulator will be replaced the electric force.



www.opco.co.kr / customer first oriental 26+27

SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include foundation post) and manufacturing. Crane house complete set equipped with winch, power pack, slewing bearing, slewing reducers, and accessories
- Crane jib complete set with sheave units
- Wire rope for hoisting (Cargo)
- Boat fall for rescue boat & life raft
- R/C rope in boat for lowering
- Fasteners (bolts/washers/nuts) for slewing bearing
- Spare parts and accessories
- Lashing piece of hook or shackle (EYE PLATE + WIRE ASS'Y)
- Painting works
- Test run and performance test at shop
- Inspection by class or shipyard's inspector at shop

OPTIONAL ITEMS

- Slip ring with fittings
- Jib rest
- Flood light on the crane jib
- Staninless steel wire rope
- Oil heating device
- Explosion-proof motor
- Certificate by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR COMBINED CRANE(HYD. Provision, Rescue Boat & Life Raft)

SAFTY WORKING LOAD	OUTREACH	CRANE SIZE	MAX PRESSURE	HOISTIN (m/	IG SPEED	LUFFING TIME		G SPEED	E.POWER S6, 40%		MAIN	DIMENSIO	ON (mm)		
(ton)	(m)		(bar)	PC	RD/LD	(sec)	PC	RD/LD	(kW)	А	В	С	D	t	
2	~11	35	250	10	18	32	0.8	0.6	19.5	2000	1400	1200	780	12	
2	14	50	250	10	18	46	0.9	0.6	19.5	2000	1600	1300	970	12	
2.2	7	35	250	10	18	32	0.8	0.6	19.5	2000	1400	1200	780	12	
2.3	4	35	250	10	18	32	0.8	0.6	19.5	2000	1400	1200	780	12	
3	6 ~ 7	35	250	10	18	55	0.8	0.6	19.5	2000	1400	1200	780	12	

^{* 1.} Other size and parameters are possible by request

^{2.} The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.

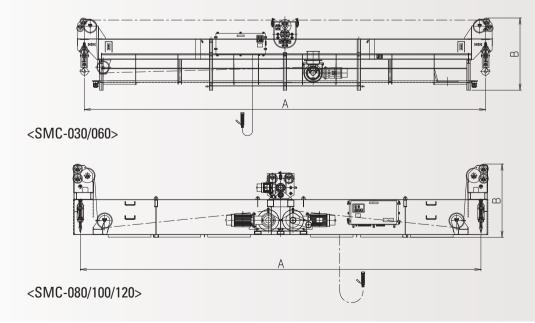


MONO-RAIL HOIST

This sliding beam monorail crane is manufactured and tested in compliance with the rules of lifting appliances, and is used for handling of provisions and engine spares for container ship, tankers and VLCC.

The OPCO's monorail crane is available with lifting capacity 13 tons and outreach max.7.5 meters from ship's parallel body.

OUT SIDE DIMENSIONS



www.opco.co.kr / customer first oriental 28+29

SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include fixed rail) and manufacturing. traversing beam, hoisting winch, steel wire rope with fittings for hoisting, hook block ass'y, traversing device, etc.
- Fixed rail with rack gear
- Cable reel with traversing cable
- Cable guide roller
- Cable receiver
- Vertical ladder & access ladder for crane access
- Spare parts and accessories
- Traversing beam lashing device
- Warning lighting on the crane
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Ice class application
- Rail support and access platform
- Change for speed (hoisting and traversing)
- Starter panel on the ship side installation
- Welding for installation onboard
- Cable and connection work on deck
- Dispatch service engineer
- Flood light
- Receptacle or radio remote controller
- Crane span extension
- Certificate by classification society : LR, ABS, DNV, GL, KR, CR and others

STANDARD DATA FOR MONO-RAIL HOIST

CRANE TYPE	SAFTY WORKING LOAD	MAX LIFT	MAX OUTREACH	HOISTING SPEED	TRAVERSING SPEED	DIMENS	ION (mm)	
	(ton)	(m)	(m)	(m/min)	(m/min)	А	В	
				7	7			
SMC - 030	3			,	10		1950	
		35		10	10	11400		
		00		7	7	11400		
SMC - 060	4 ~ 6			,	10		2050	
				10	10			
				7	7			
SMC - 080	7 ~ 8		3 ~ 5		10			
		40		10	10		2050	
		10		7	7		2000	
SMC - 100	9 ~ 10				10	11380		
				10	10			
				7	7			
SMC - 120	11 ~ 13	44			10		2100	
				10	10			

^{* 1.} Other size and parameters are possible by request

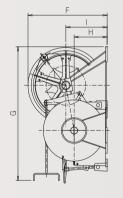
^{2.} The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



DECK MACHINERY(High-Pressure Motor Driven)

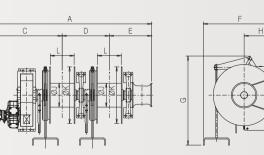
The high-pressure hydraulic winches & windlass are designed / manufactured in compliance with rules and regulations of classification society, ISO and OCIMF. The capacity of mooring winch is available up to 35 tons.

OUT SIDE DIMENSIONS



<MOORING WINCH>

<WINDLASS>



SCOPE OF SUPPLY

STANDARD ITEMS

- Windlass (with hydraulic motor and control valve)
- Mooring winch (with hydraulic motor and control valve)
- Hydraulic power unit (with oil tank) FWD
- Hydraulic power unit (with oil tank) AFT
- Starter panel for hydraulic power unit FWD
- Starter panel for hydraulic power unit AFT
- Isolation valve sets
- Counter flange sets
- Chain pipe head (bell mouth)

OPTIONAL ITEMS

- Remote control at shipside
- "SUS" brake rim
- Auto tension device
- Chain counter
- Brake test kit

STANDARD DATA FOR WINDLASS

		CHAIN	DRUM		H.DRUM (At 1st layer)					MAIN	DIME	NSION	l (mm)					
MODEL	CHAIN DIA (mm)	RATED LOAD (kN)	HOLDING LOAD (kN)	RATED SPEED (m/min)	RATED LOAD (kN)	RATED SPEED (m/min)	Α	В	С	D	E	F	G	Н	I	J	K	L	
HL-050-3-100	50	119	890	9	100	15	5140	480	2200	1360	1100	1500	2100	700	850	380	1320	890	
HL-060-3-125	60	171	1250	9	125	15	5570	700	2300	1435	1135	1500	2900	760	900	450	1400	920	
HL-062-3-125	62	183	1330	9	125	15	5570	700	2300	1435	1135	1850	3100	760	900	450	1400	920	
HL-064-3-125	64	195	1410	9	125	15	5590	720	2300	1435	1135	1850	3100	760	900	450	1400	920	
HL-066-3-125	66	207	1490	9	125	15	5640	720	2350	1435	1135	1850	3100	760	900	450	1400	920	
HL-068-3-125	68	220	1580	9	125	15	5720	750	2400	1435	1135	1850	3100	760	900	450	1400	920	
HL-070-3-125	70	233	1670	9	125	15	5720	750	2400	1435	1135	1950	3300	760	950	450	1400	920	
HL-073-3-125	73	253	1800	9	125	15	5720	750	2400	1435	1135	1950	3300	760	950	450	1400	920	
HL-076-3-125	76	274	1940	9	125	15	5870	750	2550	1435	1135	2100	3600	760	1050	450	1400	920	
HL-078-3-160	78	289	2030	9	160	15	6020	750	2550	1510	1210	2100	3600	760	1050	450	1440	880	
HL-081-3-160	81	312	2170	9	160	15	6020	750	2550	1510	1210	2100	3600	760	1050	450	1440	880	
HL-084-3-160	84	335	2330	9	160	15	6090	780	2590	1510	1210	2600	3900	760	1300	450	1440	880	
HL-087-3-200	87	360	2480	9	200	15	6210	780	2590	1585	1255	2600	3900	800	1300	450	1510	910	
HL-090-3-200	90	385	2630	9	200	15	6380	800	2740	1585	1255	2650	4300	800	1350	450	1510	910	
HL-092-3-200	92	402	2740	9	200	15	6380	800	2740	1585	1255	2650	4300	800	1350	450	1510	910	
HL-095-3-200	95	429	2900	9	200	15	6380	800	2740	1585	1255	2650	4300	800	1350	450	1510	910	
HL-097-3-200	97	447	3020	9	200	15	6460	840	2780	1585	1255	2950	4600	800	1450	450	1510	910	
HL-102-3-250	102	494	3300	9	250	15	6590	860	2810	1635	1285	3100	4800	900	1550	450	1510	910	
HL-107-3-250	107	544	3590	9	250	15	6840	900	3020	1635	1285	3100	4900	900	1550	450	1510	910	
HL-114-3-300	114	617	4010	9	300	15	6940	950	3070	1635	1285	3100	5000	900	1550	450	1510	910	
HL-117-3-300	117	650	4190	9	300	15	6160	100	3090	1670	1300	3450	5300	900	1700	500	1600	950	

STANDARD DATA FOR MOORING WINCH

			H.DRUM (At 1st layer)						MAI	N DIME	NSION	(mm)			
MODEL	RATED LOAD (kN)	HOLDING LOAD (kN)	RATED SPEED (m/min)	LIGHTLINE SPEED (m/min)	HAWSER ROPE DIA (mm)	DRUM DIA (mm)	Α	С	D	E	F	G	Н	J	K	L
HM - 100	100	260	15	45	60	380	4010	1550	1360	1100	1600	1800	700	380	1320	890
HM - 125	125	350	15	45	70	450	4220	1650	1435	1135	1600	1850	760	450	1400	920
HM - 160	160	470	15	45	70	450	4520	1800	1510	1210	1700	1900	760	450	1440	880
HM - 200	200	590	15	45	75	450	4740	1900	1585	1255	1800	2200	800	450	1510	910
HM - 250	250	730	15	45	75	450	4920	2000	1635	1285	1950	2300	900	450	1510	910
HM - 300	300	880	15	45	80	500	5070	2100	1670	1300	2000	2400	950	500	1600	950

^{* 1.} Other size and parameters are possible by request

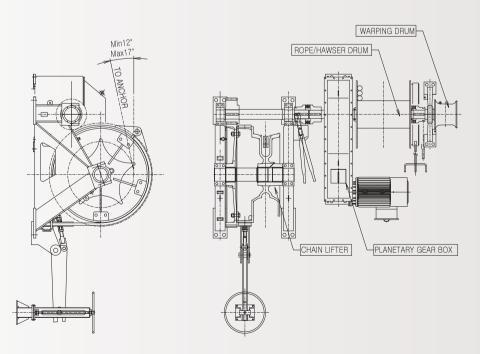
^{2.} The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



DECK MACHINERY (Electric Motor Driven)

The electric winches & windlass are designed / manufactured in compliance with rules and regulations of classification society, ISO and OCIMF. The capacity of mooring winch is available up to 35 tons.

OUT SIDE DIMENSIONS



SCOPE OF SUPPLY

STANDARD ITEMS

- Electric windlass
- Electric mooring winch
- Electric motor
- Slipping clutch
- Planetary gears
- Test run and performance test at shop
- Spare parts and accessories
- Bell mouth for chain guide
- Electric contactor cabinets
- Single control columns for capstans

OPTIONAL ITEMS

- Remote control at ship side Receptacle / Wireless type
- "SUS" brake rim
- Oils (grease, flushing oil, etc.)
- Brake test kit
- Chain pipe cover and Chain stopper
- Autotension systems
- Certification by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR DECK MACHINERY(Electric Motor Driven)

		CHAIN DRUM				1	MOORING DRU	M		
MODEL	CHAIN DIA	WORKING	NOMINAL	RA	TED	LIGHT LINE	DRUM	1-SIZE	ROPE	-SIZE
	(mm)	LOAD (kN)	SPEED (m/min)	LOAD (kN)	SPEED (m/min)	SPEED (m/min)	HAWSER dia ×L (mm)	WIRE dia ×L (mm)	HAWSER dia × L (mm)	WIRE dia ×L (mm)
EL-050-3-100	50	118	9	88	15	45	ø350 x 900	ø400 x 900	ø52 x 200	ø25 x 200
EL-060-3-120	60	171	9	118	15	45	ø400 x 950	ø450 x 950	ø60 x 200	ø28 x 200
EL-062-3-125	62	182	9	118	15	45	ø400 x 950	ø450 x 950	Ø60 x 200	ø28 x 200
EL-064-3-125	64	194	9	123	15	45	ø400 x 950	ø450 x 950	Ø60 x 200	ø28 x 200
EL-066-3-125	66	206	9	123	15	45	ø400 x 950	ø450 x 950	ø60 x 200	ø28 x 200
EL-068-3-125	68	219	9	123	15	45	ø400 x 950	ø450 x 950	ø60 x 200	ø28 x 200
EL-073-3-125	70	232	9	128	15	45	ø400 x 950	ø450 x 950	ø60 x 200	ø28 x 200
EL-073-3-125	73	253	9	125	15	45	ø400 x 950	ø450 x 950	Ø60 x 200	ø28 x 200
EL-076-3-125	76	274	9	125	15	45	ø400 x 950	ø450 x 950	Ø60 x 200	ø28 x 200
EL-078-3-160	78	288	9	160	15	45	ø400 x 950	ø500 x 950	ø65 x 200	ø30 x 200
EL-081-3-160	81	311	9	160	15	45	ø400 x 950	ø500 x 950	ø65 x 200	ø30 x 200
EL-084-3-160	84	335	9	160	15	45	ø400 x 950	ø500 x 1000	ø65 x 200	ø30 x 200
EL-087-3-200	87	359	9	200	15	45	ø450 x 1000	ø550 x 1000	ø75 x 200	ø34 x 200
EL-090-3-200	90	384	9	200	15	45	ø450 x 1000	ø550 x 1000	Ø75 x 200	ø34 x 200
EL-092-3-200	92	402	9	200	15	45	ø450 x 1000	ø550 x 1000	ø75 x 200	ø34 x 200
EL-095-3-200	95	428	9	200	15	45	ø450 x 1000	ø550 x 1000	ø75 x 200	ø34 x 200
EL-097-3-250	97	446	9	250	15	45	ø550 x 1200	ø650 x 1200	ø85 x 200	ø40 x 200
EL-102-2-250	102	494	9	250	15	45	ø550 x 1200	ø650 x 1200	Ø85 x 200	ø40 x 200
EL-107-3-250	107	543	9	250	15	45	ø550 x 1200	ø650 x 1200	Ø85 x 200	ø40 x 200
EL-111-3-250	111	585	9	250	15	45	ø550 x 1200	ø650 x 1200	Ø85 x 200	ø40 x 200
EL-114-3-300	114	617	9	300	15	45	ø550 x 1260	ø710 x 1260	ø90 x 200	ø42 x 200
EL-117-3-300	117	650	9	300	15	45	ø550 x 1260	ø710 x 1260	ø90 x 200	ø42 x 200
EL-122-3-300	122	706	9	300	15	45	ø550 x 1260	ø710 x 1260	ø90 x 200	ø42 x 200

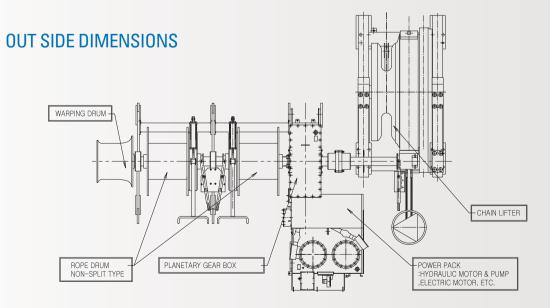
- * 1. Other size and parameters are possible by request
- 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



DECK MACHINERY (Self Contained Hydraulic Power Unit)

The self contained power pack type deck machinery consists driving unit which compact design with a totally enclosed gear transmission and electrical and hydraulic components. This winch and windlass is manufactured and tested in compliance with ISO and OCIMF. The capacity of mooring winch is available up to 35 tons.

All other fittings are designed and manufactured in accordance with JIS and OPCO's standard.



SCOPE OF SUPPLY

STANDARD ITEMS

- Hydraulic windlass (with hydraulic motor and counter balance valve)
- Hydraulic mooring winch (with hydraulic motor and counter balance
- Hydraulic motor & pump
- Oil filter & Air cooler
- Electric motor
- Slipping clutch
- Shop test

OPTIONAL ITEMS

- Electric remote control stand
- Hydraulic cable limit with speed limiter
- Chain length measuring device
- Lamp test
- Speed limiter control device
- Oils (system oil, grease, flushing oil, etc.)
- Chain pipe head (bell mouse)
- Certification by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR DECK MACHINERY(Self Contained Hydraulic Power Unit)

		CHAIN DRUM				MOORING DRUM	1	
MODEL	CHAIN DIA	WORKING	NOMINAL	RA	TED	LIGHT LINE	HAWSE	R DRUM
	(mm)	LOAD (kN)	SPEED (m/min)	LOAD (kN)	SPEED (m/min)	SPEED (m/min)	DRUM DIA (mm)	ROPE DIA (mm)
HLS-050-3-100	50	119	12	100	15	45	380	60
HLS-060-3-125	60	171	12	125	15	45	450	70
HLS-062-3-125	62	183	12	125	15	45	450	70
HLS-064-3-125	64	195	12	125	15	45	450	70
HLS-066-3-125	66	207	12	125	15	45	450	70
HLS-068-3-125	68	220	12	125	15	45	450	70
HLS-070-3-125	70	233	12	125	15	45	450	70
HLS-073-3-125	93	253	12	125	15	45	450	70
HLS-076-3-125	76	274	12	125	15	45	450	70
HLS-078-3-160	78	289	12	160	15	45	450	70
HLS-081-3-160	81	312	12	160	15	45	450	70
HLS-084-3-160	84	335	12	160	15	45	450	70
HLS-087-3-200	87	360	12	200	15	45	450	75
HLS-090-3-200	90	385	12	200	15	45	450	75
HLS-092-3-200	92	402	12	200	15	45	450	75
HLS-095-3-200	95	429	12	200	15	45	450	75
HLS-097-3-200	97	447	12	200	15	45	450	75
HLS-102-3-250	102	494	12	250	15	45	450	75
HLS-107-3-250	107	544	12	250	15	45	450	75
HLS-111-3-250	111	585	12	250	15	45	450	75
HLS-114-3-300	114	617	12	300	15	45	500	80
HLS-117-3-300	117	650	12	300	15	45	500	80

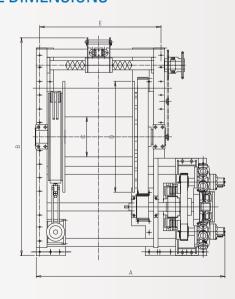
- * 1. Other size and parameters are possible by request
- 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.

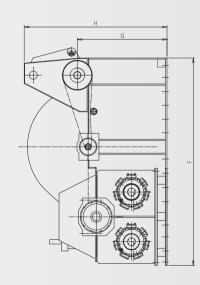


POSITIONING MOORING WINCH

The high-pressure hydraulic positioning mooring winches are designed manufactured to allow cast anchor deployment and secured mooring. The capacity is available up to max 100 tons with strong sturdy structural design. The winch control are available by local control as well as wheelhouse central control with rope tension and length readouts, and programmable mooring parameter. It is also available emergency release with coordinated multiple winch release function. The reguired guide sheaves and fairleaders are also available as parts of mooring winches.

OUT SIDE DIMENSIONS





www.opco.co.kr / customer first oriental 36+37

SCOPE OF SUPPLY

STANDARD ITEMS

- Design (Include foundation) and manufacturing.
 8-point hyd. mooring winch with electro-hydraulic power pack, local and wheelhouse control panel and accessories
- Single drum mounted on a common high tensile steel main shaft
- Low speed, high torque hydraulic motors via double stages
- Spring loaded hydraulic release band brake with manual override
- Brake band assembly consists of two halves
- Spare parts and accessories
- Automatic spooling device with manual override
- Fairleader, Horizontal lead, Vertical lead, Swing block
- Load cell, Encorder
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Auto tension system
- Heave compensation
- Stainless hydraulic coupling and fittings
- Stainless steel wire rope
- Certificate by classification society: LR, ABS, DNV, GL, KR, BV and others

STANDARD DATA FOR POSITIONING MOORING WINCH

	RATED	SPEED	WIRE	DRUM	BRAKE			M	AIN DIME	NSION (m	ım)			SELF
TYPE	PULL		ROPE	CAPACITY	CAPACITY	А	В	С	D	Е	F	G	Н	WEIGHT
	(ton)	(m/min)	DIA.	(layer)	(ton)	Α	ь	U	Б		'	u	"	(kg)
	50	7												
8P050T	25	14	42	12	100	3500	3900	675	1750	2250	3650	1660	2650	19000
	10	30												
	60	7												
8P060T	30	14	48	13	120	3500	4000	770	2100	2250	3750	1660	2650	21000
	12	30												
	70	7												
8P070T	35	14	52	13	150	3500	4100	850	2300	2250	3850	1660	2650	23000
	15	30												

- * 1. Other size and parameters are possible by request
- 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.
- 3. Application for shipboard or offshore.



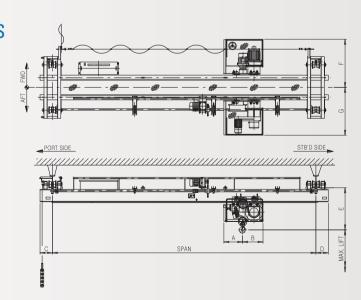
ENGINE ROOM CRANE (Normal Head Type)

This normal head type crane is manufactured and tested in compliance with rules of lifting appliance, and used for the maintenance of main engine for all kind of ships except only LNG carrier

The OPCO's engine room crane is available with lifting capacity up to 13 tons and crane span max. 10 meters. Two hoisting speed including creep speed is available for maintenance purpose, and controlled by a suspended RPB on the floor.

All other fittings are designed and manufactured in accordance with OPCO's standard.

OUT SIDE DIMENSIONS



www.opco.co.kr / customer first oriental 38+39

SCOPE OF SUPPLY

STANDARD ITEMS

- Design and manufacturing. Crane complete set equipped with body structure, hoisting units, traversing / travelling units, wire rope, hook with block and accessories
- Rack gears for travelling
- Starter panel with electric equipment
- Remote push button switch box
- Main line switch box
- Junction box
- Power cable with installation parts
- Spare parts and accessories
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Project lamp
- Alarm light with horn
- Wireless control (Radio control)
- Certificate by classification society: LR. ABS. DNV. GL. KR. NK and others

STANDARD DATA FOR ENGINE ROOM CRANE(Normal Head Type)

	CRANE TYPE	SAFTY WORKING	LIFTING LENGTH	WIRE ROPE			MAIN [DIMENSIO	ON (mm)			HOISTING SPEED	TRAVERSING SPEED	TRAVELLING SPEED	SELF WEIGHT	
	ITPE	LOAD (ton)	(m)	DIA. (mm)	А	В	С	D	Е	F	G	(m/min)	(m/min)	(m/min)	(kg)	
N	HD - 4.0	4	15/17/19	ø10	470	550	300	300	1150	1200	1350	3.0/0.3	3.0	6.0	2600	
N	HD - 5.0	5	15/17/20	ø10	470	550	300	300	1150	1200	1350	3.0/0.3	3.0	6.0	2600	
N	HD - 6.0	6	15/17/20	ø12	470	550	300	300	1300	1300	1450	3.0/0.4	3.0	6.0	4000	
N	HD - 7.0	7	15/17/19	ø12	470	550	300	300	1300	1300	1450	2.8/0.37	3.0	6.0	4000	
N	HD - 8.0	8	15/17/22	ø14	450	630	350	350	1400	1350	1150	2.8/0.37	3.0	6.0	5000	
N	HD - 9.0	9	15/17/22	ø14	450	630	350	350	1400	1350	1150	2.8/0.37	3.0	6.0	5000	
NH	HD - 10.0	10	15/17/22	ø14	450	630	350	350	1400	1350	1150	2.8/0.37	3.0	6.0	5300	
NH	HD - 11.0	11	14/18	ø16	450	680	350	350	1450	1600	1600	3.0/0.45	3.0	5.0	5300	
NH	HD - 12.0	12	14/18	ø16	450	680	350	350	1450	1700	1700	3.0/0.45	3.0	5.0	5300	
NH	HD - 13.0	13	14/18	ø16	450	680	350	350	1450	1700	1700	3.0/0.45	3.0	5.0	5300	
N	SD - 2.0	2	14/16	ø10	640	350	450	300	800	900	800	3.0/0.75	3.0	6.0	1500	
N	SD - 3.0	3	14/16	ø12	690	350	450	300	1050	900	800	3.0/0.75	3.0	6.0	2500	
N	SD - 4.0	4	14/16	Ø14	690	350	450	300	1050	900	800	3.0/0.75	3.0	6.0	2500	

st 1. Other size and parameters are possible by request

^{2.} The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



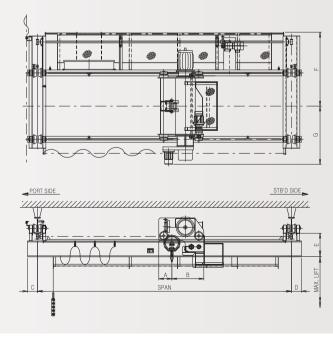
ENGINE ROOM CRANE (Low Head Type)

This low head type crane is manufactured and tested in compliance with rules of lifting appliance, and used for the maintenance of main engine for container ship especially to make shorten distance between rail top and centre of hook.

The OPCO's engine room crane is available with lifting capacity up to 13 tons and crane span max. 10 meters.

All other fittings are designed and manufactured in accordance with OPCO's standard.

OUT SIDE DIMENSIONS



www.opco.co.kr / customer first oriental 40+41

SCOPE OF SUPPLY

STANDARD ITEMS

- Design and manufacturing. Crane complete set equipped with body structure, hoisting units, traversing / travelling units, wire rope, hook with block and accessories
- Rack gears for travelling
- Starter panel with electric equipment
- Remote push button switch box
- Main line switch box
- Junction box
- Power cable with installation parts
- Spare parts and accessories
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Project lamp
- Alarm light with horn
- Wireless control (Radio control)
- Certificate by classification society: LR, ABS, DNV, GL, KR, NK and others

STANDARD DATA FOR ENGINE ROOM CRANE(Low Head Type)

CRANE TYPE	SAFTY WORKING	LIFTING LENGTH	WIRE ROPE			MAIN D	IMENSIO	N (mm)			HOISTING SPEED	TRAVERSING SPEED	TRAVELLING SPEED	SELF WEIGHT	
TTPE	LOAD (ton)	(m)	DIA. (mm)	Α	В	С	D	Е	F	G	(m/min)	(m/min)	(m/min)	(kg)	
LHD - 4.0	4	17	ø10	335	635	250	250	450	1500	1295	3.0/0.3	3.0	6.0	2900	
LHD - 5.0	5	17	ø10	335	635	250	250	450	1500	1295	3.0/0.3	3.0	6.0	2900	
LHD - 6.0	6	17	ø12	355	655	250	250	500	1550	1350	3.0/0.4	3.0	6.0	4000	
LHD - 7.0	7	20	ø12	355	655	250	250	500	1700	1340	3.0/0.4	3.0	6.0	4000	
LHD - 8.0	8	16	ø14	340	875	250	250	610	1700	1340	2.8/0.37	3.0	6.0	4200	
LHD - 9.0	9	16	ø14	340	875	250	250	610	1700	1340	2.8/0.37	3.0	6.0	4200	
LHD - 10.0	10	16	ø14	340	875	250	250	610	1700	1340	2.8/0.37	3.0	6.0	4500	
LHD - 11.0	11	16	ø16	330	885	250	250	590	1860	1480	3.0/0.45	3.0	5.0	5000	
LHD - 12.0	12	16	ø16	330	885	250	250	590	1860	1480	3.0/0.45	3.0	5.0	5000	
LHD - 13.0	13	16	ø16	330	885	250	250	590	1860	1480	3.0/0.45	3.0	5.0	5000	

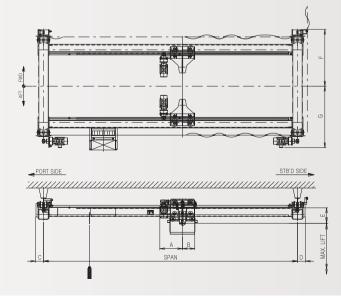
 ^{1.} Other size and parameters are possible by request
 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



ENGINE ROOM CRANE (2 Hook & 2 Trolley Type, Chain Hoist)

This 2 hook & 2 trolley type crane is manufactured and tested in compliance with rules of lifting appliance, and used for the maintenance of main engine for specifically configured. The height of hook required for overhauling purposes is a significant parameter. The opco's engine room crane is available with lifting capacity up to 4 tons and crane span max. 10m. Two hoisting speed including creep speed is available for maintenance purpose, and controlled by a RPB suspended from the crane.

OUT SIDE DIMENSIONS



www.opco.co.kr / customer first oriental 42+43

SCOPE OF SUPPLY

STANDARD ITEMS

- Design and manufacturing. Crane complete set equipped with body structure, hoisting units, traversing / travelling units, wire rope, hook with block and accessories
- Rack gears for travelling
- Starter panel with electric equipment
- Remote push button switch box
- Main line switch box
- Junction box
- Power cable with installation parts
- Spare parts and accessories
- Painting works
- Test run and performance test at shop
- Inspection by class or manufacturers inspector

OPTIONAL ITEMS

- Project lamp
- Alarm light with horn
- Wireless control (Radio control)
- Certificate by classification society: LR, ABS, DNV, GL, KR, NK and others

STANDARD DATA FOR ENGINE ROOM CRANE(2 Hook & 2 Trolley Type, Chain Hoist)

CRANE TYPE	SAFTY WORKING LOAD	LIFTING LENGTH	CHAIN DIA.			MAIN	DIMENSIO	ON (mm)			HOISTING SPEED	TRAVERSING SPEED	TRAVELLING SPEED	SELF WEIGHT
	(ton)	(m)	(mm)	Α	В	С	D	Ε	F	G	(m/min)	(m/min)	(m/min)	(kg)
CHD - 1.6	2 x 1.6	15	ø7.1	480	300	145	145	300	1280	1410	4.8	3.0	6.0	3000
CHD - 2.0	2 x 2	15	ø7.1	480	300	145	145	300	1430	1550	3.6/0.9	3.0	6.0	3000
CHD - 3.0	2 x 3	15	ø9	570	375	190	190	350	1550	1700	4.8	3.0	6.0	3500
CHD - 4.0	2 x 4	15	ø11.3	570	375	190	190	600	1770	1900	5	3.0	6.0	4000

^{* 1.} Other size and parameters are possible by request

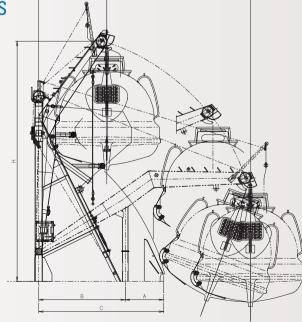
^{2.} The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



HINGED GRAVITY LIFE BOAT DAVIT & WINCH

A gravitiational-depression type davit which is designed into the precise and strong structure of OPCO has the best condition to control the equipped life boats on Tanker, BC, Ro-Ro ship, passenger ship and CONT.

OUT SIDE DIMENSIONS



www.opco.co.kr / customer first oriental 44+45

SCOPE OF SUPPLY

STANDARD ITEMS

- Complete set of davit winch fittings Hoisting winch with electric motor & foundation Remote control lines with fitting
- Trigger line with fitting
- Floating block with link
- Limit device (on one frames)
- Hanging off pendant line
- Recovery strop line
- Starter panel
- Protection box for R.P.B switch
- Spare with tool box
- Instruction plate, caution plate, name plate

OPTIONAL ITEMS

- Embarkation stage
- Inclined ladder
- Skid
- Cable seat and pipe with fittings
- Receptacle & plug
- Space heater for electric motor
- Piping for central lubrication
- Seat for pendant light
- Limit switch on both frame
- Main falls with fitting
- Certificate by classification society: (LR, ABS, DNV, GL, NK, KR) or EC approval certificates

STANDARD DATA FOR HINGED GRAVITY LIFE BOAT DAVIT & WINCH

MODEL	MAX.	MAX. BOAT BREADTH	WIRE ROPE DIA.	WINCH TYPE	POWI	ER (kW)		N	MAIN DIME	ENSION (mr	n)	
	(kg)	(mm)	(mm)		LIFE	L/R	Α	В	С	D	Н	L
HGD-057-24	5700	2400	ø16	BWE - 08 - 031 BWE - 08 - 181	3.7	18	800	2000	2800	1600	5500	3300
HGD-057-28	5700	2800	ø16	BWE - 08 - 031 BWE - 08 - 181	3.7	18	1050	2000	3050	1800	6000	3585
HGD-062-26	6300	2600	ø16	BWE - 10 - 030 BWE - 10 - 180	3.7	18/9	610	2290	2900	1600	5830	3650
HGD-073-30	7300	3000	ø18	BWE - 15 - 030 BWE - 15 - 180	5.5	26/13	760	2290	3050	1800	6350	3800
HGD-082-30	8200	3000	ø18	BWE - 15 - 030 BWE - 15 - 180	5.5	26/13	940	2385	3325	1800	6450	3950
HGD-100-30	10000	3200	ø20	BWE - 17 - 030 BWE - 17 - 180	5.5	26/13	1075	2500	3575	2050	7000	3945

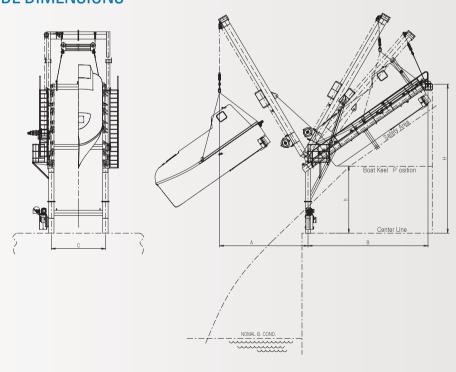
 ^{1.} Other size and parameters are possible by request
 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.



FREE FALL LIFE BOAT DAVIT & WINCH

A Free fall davit of OPCO which is equipped the stem of a ship is designed to launch the life boats on a Tank ship and BC by its own gravity.

OUT SIDE DIMENSIONS



SCOPE OF SUPPLY

STANDARD ITEMS

- Davit complete set (Slide ramp, Davit arm, Hoisting winch, Steel wire rope with fitting for hoisting, Traverse with hook, Power pack unit, etc.)
- Group starter panel (enclosure : IP23)
- START / STOP push button switch box (enclosure : IP56)
- Spare parts of maker standard and rule requirements

OPTIONAL ITEMS

- Embarkation stage
- Inclined ladder
- Seat for pendant light
- Space heat for pump motor
- Special electric voltage

STANDARD DATA FOR FREE FALL LIFE BOAT DAVIT & WINCH

MODEL	LAUNCHING LOAD	WIDTH OF SLIDE	WIRE ROPE DIA	POWER (PUMP UNIT)		N	1AIN DIME	NSION (mr	n)		BOAT MODEL	
	(kg)	(mm)	(mm)	(kW)	А	В	С	h	Н	L		
FD5500	5500	3280	ø16	9.8	8037	5470	3030	3333	7381	22000	SHIGI - FEL59	
FD5900	5900	3104	ø16	9.8	7486	6019	2854	3783	7336	17000	JY - FN - 5.8	
FD6240	6240	3350	ø16	9.8	8627	6765	3050	3691	8300	22000	SHIGI - FLE66	
FD6700	6700	3420	ø16	14.3	8066	6243	3170	3336	7888	21000	JYM - FF - 6.65	

- ** 1. Other size and parameters are possible by request
 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.

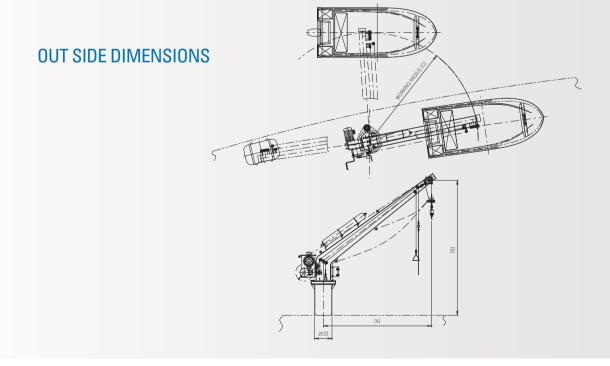


RESCUE BOAT DAVIT & WINCH

This single arm slewing davit is manufactured and tested under approval of classification society on behalf of government in compliance with the requirement of SOLAS rules and it amendment.

The OPCO's davit is suitable for handling all kind of rescue boat and life raft mounted on all kind of ships as well as FPSO, and the boat or cargo is lowered onto water by its own weight when the brake is released by remote control from in boat or on deck.

All fittings are designed and manufactured in accordance with OPCO's standard.



www.opco.co.kr / customer first oriental 48+49

SCOPE OF SUPPLY

STANDARD ITEMS

- Completed set of davit with winch
- Slewing device (include hyd. Power unit)
- Main fall with fitting
- Remote control ass'y with fitting
- Pendant line with fitting
- Pulling line with fitting
- Limit device
- Starter panel
- R.P.B with cable 10 M
- Spare part with tool box
- Instruction plate , Caution plate , Name plate
- Shop test record

OPTIONAL ITEMS

- Ice class application
- Stainless hydraulic fittings
- Stainless steel wire rope

STANDARD DATA FOR RESCUE BOAT DAVIT & WINCH

MODEL	WORKING RAD.	JIB HEIGHT.	PEDESTAL DIA.	HOISTING SPEED		LOWERING SPEED			
	(mm)	(mm)	(mm)	(m/min)		(m/min)		WINCH TYPE	
	Α	В	С	WEIGHT	SPEED	WEIGHT	SPEED		
RD - 2235	3500	4250	457	1500	18/MANUAL	2200	~78	RDW - 06	
RD - 2238	3800	4724	610	1500	18/MANUAL	2200	~78	RDW - 06	
RD - 2245	4500	4150	610	1500	18/MANUAL	2200	~78	RDW - 06	

 ^{** 1.} Other size and parameters are possible by request
 2. The above datas can be improved partially without notice. However, any modification which effect main specification will be approved.

After Sales Service Network

Customer-First

The best Master in Shipbuilding & Marine

SOUTH AFRICA

Quality is the essence of every OPCO product, so as reputation to our business. A product should be deemed as acceptable only when it satisfies you, the client, very well. Your complaints and claims are the most precious gift to us, as what you're pointing out as unsatisfactory in our product is what needs to be improved. Only when these complaints are properly addressed is the business benefited. Therefore, all OPCO products, regardless of their warranty periods, are entitled for

INDONESIA



PANAMA CHILE . URUGUAY ARGENTINA .

After Sales Service & Spare Part
Tel. +82-51-831-2747 Fax. +82-51-831-6260 E-mail.opcois@opco.co.kr Web. www.opcois.com

Overseas Business Part

Tel. +82-51-979-0833 Fax. +82-51-832-2064 E-mail.kjlee@opco.co.kr

Domestic Business Part

Tel. +82-51-979-0871 Fax. +82-51-831-3307 E-mail.kbki@opco.co.kr

Tel. +82-51-979-0860 Fax. +82-51-831-3308 E-mail.rnd@opco.co.kr