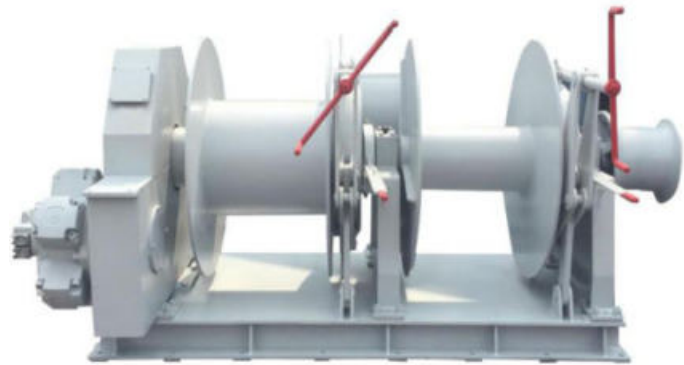


## Marine Winch

### Application

HI-SEA Marine winches are robust and designed to withstand the most extreme environmental conditions from the highest to the lowest possible operating temperatures. They are suitable for all kinds of ships and used for mooring, anchoring, towing, fishing...



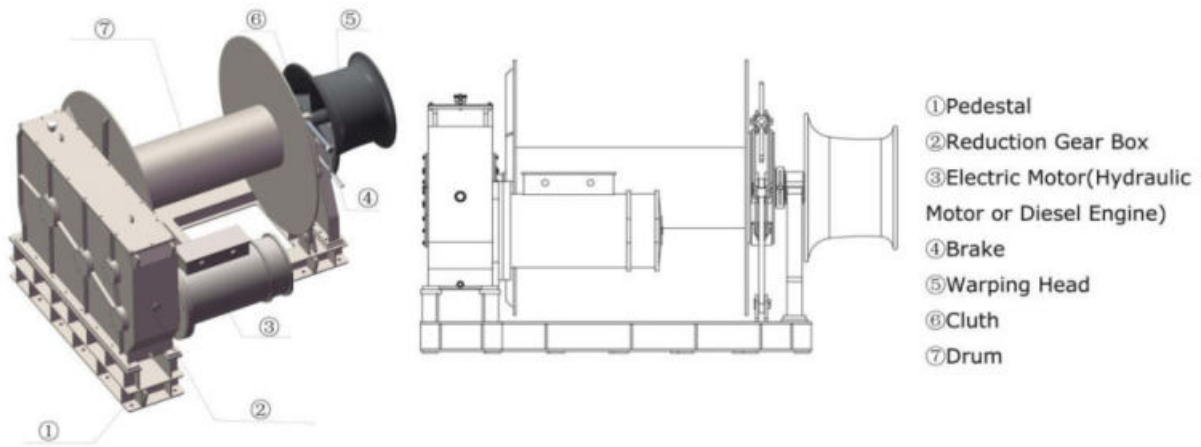
### Structure

1. Driving type: manual type ,electric motor, hydraulic motor or diesel engine
2. Control method: local control and remote control
3. Drum type: single, double or triple drum configuration in a side-by-side or waterfall arrangement
4. Single warping head or double warping head
5. Can be equipped with gypsy
6. Clutch: manual or hydraulic operated
7. Brake: manual or hydraulic operated
8. Available with or without spooling devices
9. Single, dual or variable Speed



### Features and Advantages:

1. Compact structure, high quality
2. Small volume, light weight
3. Little abrasion , long lifespan
4. Working steadily and smoothly
5. Simple operation, easy installation and maintenance
6. Working load: 5KN--3000KN
7. Approved by CCS, ABS, BV, LR, DNV-GL, RINA...
8. Can be customized as per user's requirements



**Technical Specifications**

Rated Pull	Rated Speed	Drum Capacity	Motor Power(hydraulic/electric)
kN	m/min	φmm*m	kW
5	≥12	φ15*100	2.2/3
10	≥12	φ15*100	4/5.5
15	≥12	φ15*100	6.3/7.5
20	≥12	φ15*100	8.5/11
30	≥12	φ28*140	11/15
40	≥12	φ18*150	15/22
50	≥12	φ36*170	15/22
70	≥12	φ36*170	22/30
80	≥12	φ26*200	22/45
100	≥12	φ28*200	30/45
125	≥12	φ28*200	45/55
130	≥9	φ28*200	30/45
150	≥9	φ30*250	30/45
180	≥9	φ30*250	45/55
200	≥9	φ40*250	60/75
250	≥9	φ44.5*250	60/75
280	≥9	φ45*250	75/90
300	≥9	φ50*250	75/90
350	≥9	φ52*50	90/110
400	≥9	φ56*250	90/120

450	≥9	φ56*250	90/135
500	≥9	φ58*250	120/150
550	≥9	φ57*250	120/165
600	≥9	φ64*250	132/180
700	≥9	φ56*250	160/210
800	≥9	φ58*250	200/240
900	≥9	φ60*250	200/270
1000	≥9	φ64*250	250/300

1. Driving type: manual type, electric motor, hydraulic motor or diesel engine.

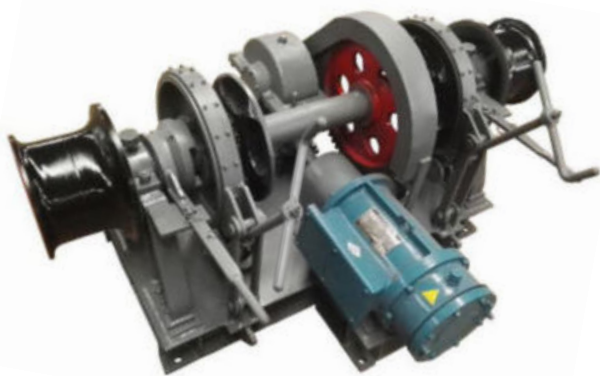
2. Warming head type: single or double.

3. Gypsy: single or double.

Note: Please inform us of the above three points when making an inquiry.

Above specifications only for reference, we can supply various winches according to your requirements.

## Marine Windlass



### Applications

Marine windlass is ship machinery for anchoring and anchor drop, also used as mooring on board. Using steam engine, electric motor and hydraulic motor as power.

### Advantages

- Excellent performance, long service life
- Suitable for vessel anchoring and offshore anchoring
- Approved by DNV-GL, ABS, BV, LR, CCS, RMRS...
- Can be customized as per user's requirements

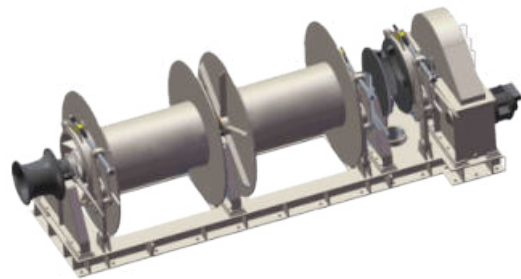
### Structures

• Marine windlass mainly units includes: base, bracket, chain wheel, brakes, sprocket, gearbox, control system (except manual windlass) and other components.

• There are horizontal and vertical anchor windlass, the general ships widely use vertical anchor windlass. And vertical anchor windlass also called anchor capstan and its power below deck, to save deck area, naval ships widely use vertical anchor windlass.

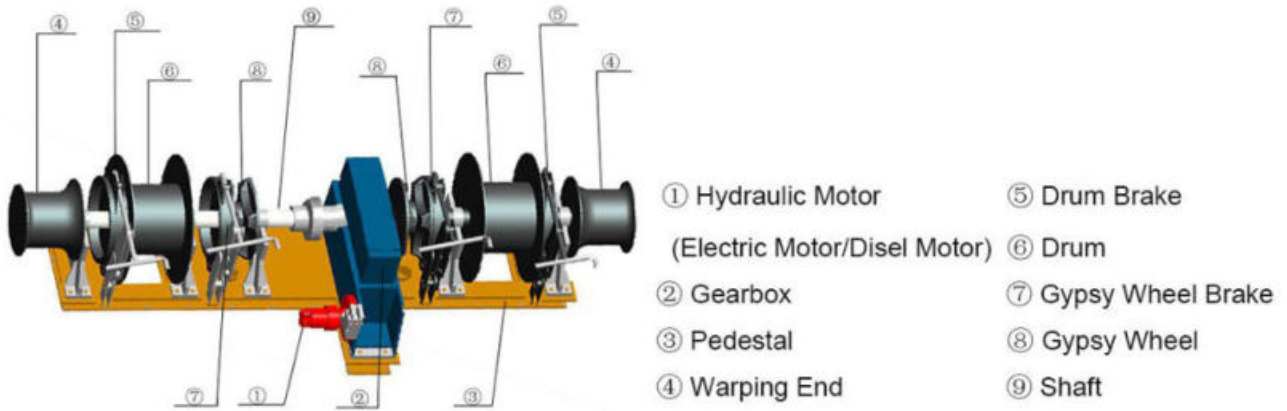
• Driving type: manual windlass, anchor steam windlass, electric windlass (DC electric windlass, AC electric windlass) and hydraulic windlass

- According to the arrangement: double gypsy wheels



windlass, single gypsy wheel windlass, and combined windlass.

- Supply capacity: chain diameter 19-150mm, rated load 15.3-860KN
- Control method: local control and remote control
- Can be equipped with drum as an anchoring winch



**Technical Specifications**

Chain dia.	Chain grade	Rated load	Rated speed	Rope dia.	Rope length	Mooring speed	motor power
mm	AM	kN	m/min	mm	m	m/min	kW
Φ 58/60/62	3	159.8/171/182.6	≥9	Φ 60	200	≥15	55
Φ 64/66/68	3	194.6/206.9/219.6	≥9	Φ 60	200	≥15	75
Φ 64/66/68	3	194.6/206.9/219.6	≥9	Φ 65	200	≥15	75
Φ 64/66/68	3	194.6/206.9/219.6	≥9	Φ 70	200	≥15	75
Φ 70/73	3	232.8/253.1	≥9	Φ 60	200	≥15	86
Φ 70/73	3	232.8/253.1	≥9	Φ 65	200	≥15	86
Φ 70/73	3	232.8/253.1	≥9	Φ 70	200	≥15	86
Φ 76/78	3	274.4/289	≥9	Φ 65	200	≥15	95
Φ 76/78	3	274.4/289	≥9	Φ 70	200	≥15	95
Φ 81/84	3	311.6/335.1	≥9	Φ 70	200	≥15	104
Φ 81/84	3	311.6/335.1	≥9	Φ 80	200	≥15	104
Φ 87/90	3	359.5/384.8	≥9	Φ 80	200	≥15	127
Φ 92-100	3	402-475	≥9	Φ 80	200	≥15	152
Φ 102-105	3	494.2/523.7	≥9	Φ 80	200	≥15	184
Φ 107-117	3	543.8-650	≥9	Φ 80	200	≥15	230
Φ 120-132	3	684-827.6	≥9	Φ 80	200	≥15	288

Note:

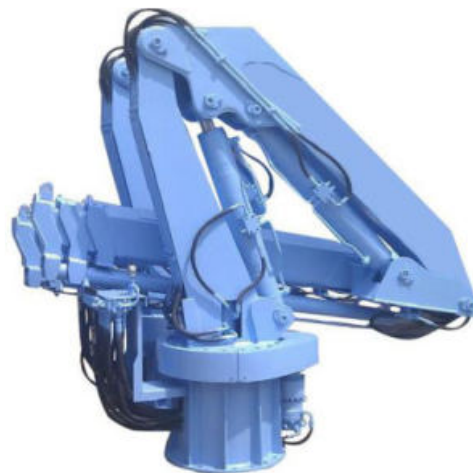
1. Driving type: manual type ,electric motor,hydraulic motor or diesel engine.
2. Double gypsy wheels or single gypsy wheel
3. Double warping ends or single warping end

Above specifications only for reference, we can supply various windlasses according to your requirements.

## Marine Crane

### Application

Marine cranes by HI-SEA Marine are designed to meet safety standards and extreme environmental conditions of the maritime industry. The cranes are a preferred solution for heavy lifting of provision, service equipment or container and cargo handling.

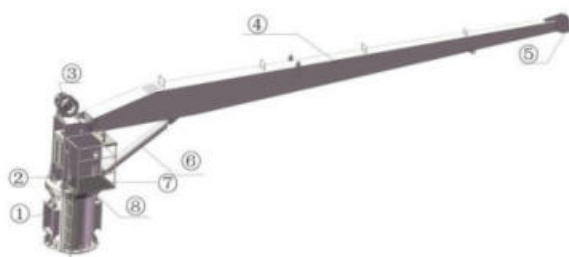


### Structures

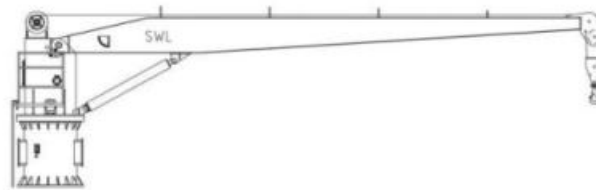
1. Driving type: electrical motor or hydraulic motor
2. Structure: fixed boom, knuckle boom, telescopic boom or telescopic knuckle boom
3. Control method: local control and remote control

### Advantages

1. Max. working radius: 6-40m
2. Large loading capacity
3. Compact structure, small size
4. Corrosion resistant, long lifespan
5. Saving Space, Multi-function
6. Low power consumption and high efficiency
7. Easy installation, low maintenance
8. Automatic & manual overload protection system
9. Approved by ABS, BV, LR, CCS, DNV-GL...
10. Can be customized as per user's requirements



- ① Pedestal
- ② Slewing Unit
- ③ Hoisting Winch
- ④ Crane Boom



- ⑤ Crane Hook
- ⑥ Luffing Cylinder
- ⑦ Control System
- ⑧ Slewing Bearing

### Technical Specifications

S.W.L	Max.Working Radius	Min.Working Radius	Hoisting Speed	Hoisting Height	Slewing Speed	Luffing Time	Power
KN	m	m	m/min	m	r/min	s	kW
10	6~12	1.3~2.6	15	30	1	60	7.5
15	8~14	1.7~3	15	30	1	60	11
20	5~15	1.1~3.2	15	30	1	60	15
30	8~18	1.7~3.8	15	30	0.9	70	22
50	12~20	2.5~4.2	15	30	0.75	80	37
80	12~20	2.5~4.2	15	30	0.75	100	55
100	12~20	2.5~4.2	15	30	0.75	110	75
150	12~20	2.5~4.2	15	30	0.6	110	90
200	16~25	3.2~5.3	15	35	0.6	120	75*2
250	20~30	3.2~6.3	15	40	0.5	130	90*2
300	30	3.2~6.3	15	40	0.4	140	90*2
350	20~35	4.2~7.4	15	45	0.5	150	110*2
400	20~35	4.2~7.4	15	45	0.5	150	140*2
450	25~40	5.3~8.5	15	50	0.45	160	140*2
500	25~40	5.3~8.5	15	50	0.45	170	165*2

### Marine Capstan



#### Applications

Marine capstan refers to the capstan installed on the deck of a ship, mainly used for ship anchoring, mooring, weight pulling and so on

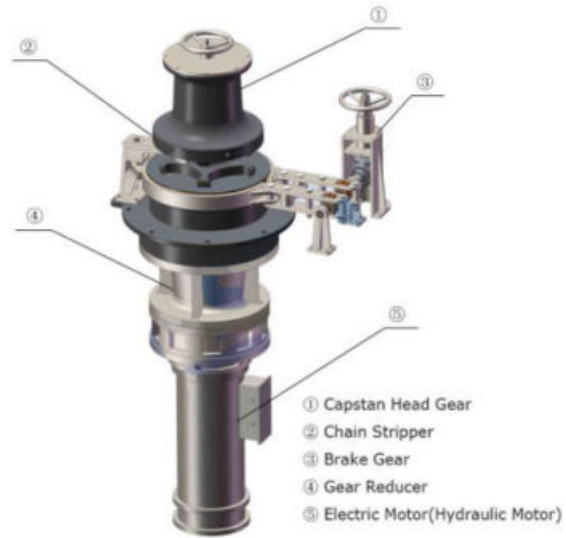
#### Structures

1. Driving type: electrical, hydraulic, diesel and manual.
2. Control type: Local control or remote control.
3. Can be equipped with gypsy, used for anchor chain.



**Advantages**

1. Compact size, small installation space
2. Working smoothly, long working life
3. Overload protection
4. High strength component, durable and reliable
5. Approved by CCS,BV,LR,ABS,DNV-GL...
6. Can be customized as per user's requirements

**Technical Specifications****Technical Specifications**

Specification	Work load	Anchor speed	Warping load	Warping speed	Motor power
	kN	m/min	kN	m/min	kW
Φ 12.5	6.6	≥9	5	≥9	2.2/0.75
Φ 14	8.3	≥9	6	≥9	2.2/0.75
Φ 16	10.9	≥9	8	≥9	2.2/0.75
Φ 17.5	13.0/14.6	≥9	10	≥9	3/1.3
Φ 19	15.3/17.2	≥9	10	≥9	4.3/1.7
Φ 20.5	17.9/20.0	≥9	15	≥9	4.3/1.7
Φ 22	20.6/23.0	≥9	15	≥9	6/2.5
Φ 24	24.5/27.4	≥9	20	≥9	8.5/3.5
Φ 26	28.7/32.1	≥9	20	≥9	8.5/3.5
Φ 28	33.3/37.2	≥9	25	≥9	8.5/3.5
Φ 30	38.3/42.8	≥9	30	≥9	11/11/7.5
Φ 32	43.5/48.6	≥9	30	≥9	11/11/7.5
Φ 34	49.1/54.9	≥9	40	≥9	16/16/11
Φ 36	55.1/61.6	≥9	40	≥9	16/16/11
Φ 38	61.4/68.9	≥9	50	≥9	16/16/11
Φ 40	68.0/76.0	≥9	60	≥9	22/22/16
Φ 42	75.0/83.8	≥9	60	≥9	22/22/16
Φ 44	82.3/92.0	≥9	70	≥9	22/22/16
Φ 46	89.9/100.5	≥9	80	≥9	30/30/22
Φ 48	97.9/100.5	≥9	80	≥9	30/30/22
Φ 50	106.3/118.8	≥9	90	≥9	30/30/22
Φ 52	114.9/128.4	≥9	100	≥9	30/30/22

Φ 54	123.9/138.5	≥9	100	≥9	45/45/30
Φ 56	133.3/149.0	≥9	120	≥9	45/45/30
Φ 58	143.0/159.8	≥9	120	≥9	45/45/30
Φ 60	153.0/171.0	≥9	140	≥9	45/45/30
Φ 62	163.4/182.6	≥9	150	≥9	45/45/30
Φ 64	174.1/194.6	≥9	160	≥9	60/60/45
Φ 66	185.1/206.9	≥9	160	≥9	60/60/45
Φ 68	196.5/219.5	≥9	180	≥9	60/60/45
Φ 70	208.3/232.8	≥9	200	≥9	60/60/45

Above specifications only for reference, we can supply various capstans according to your requirements.

