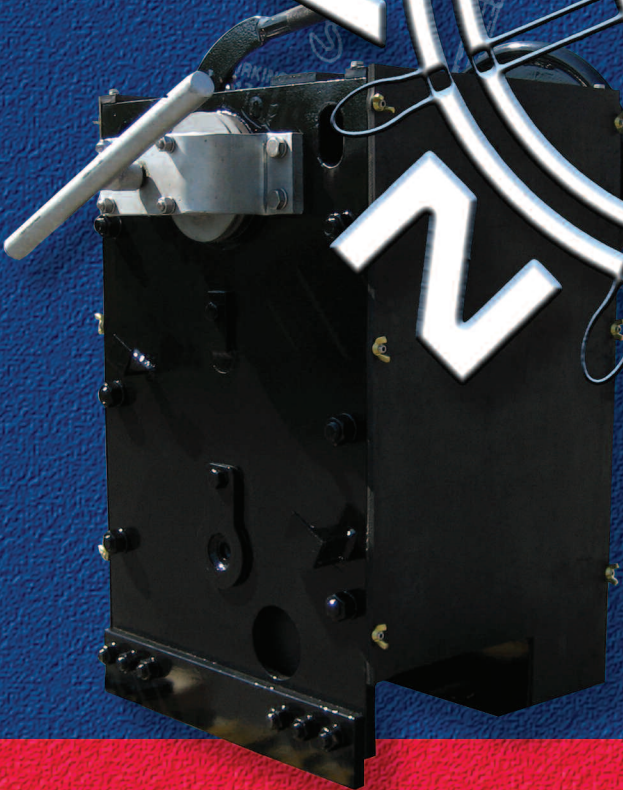
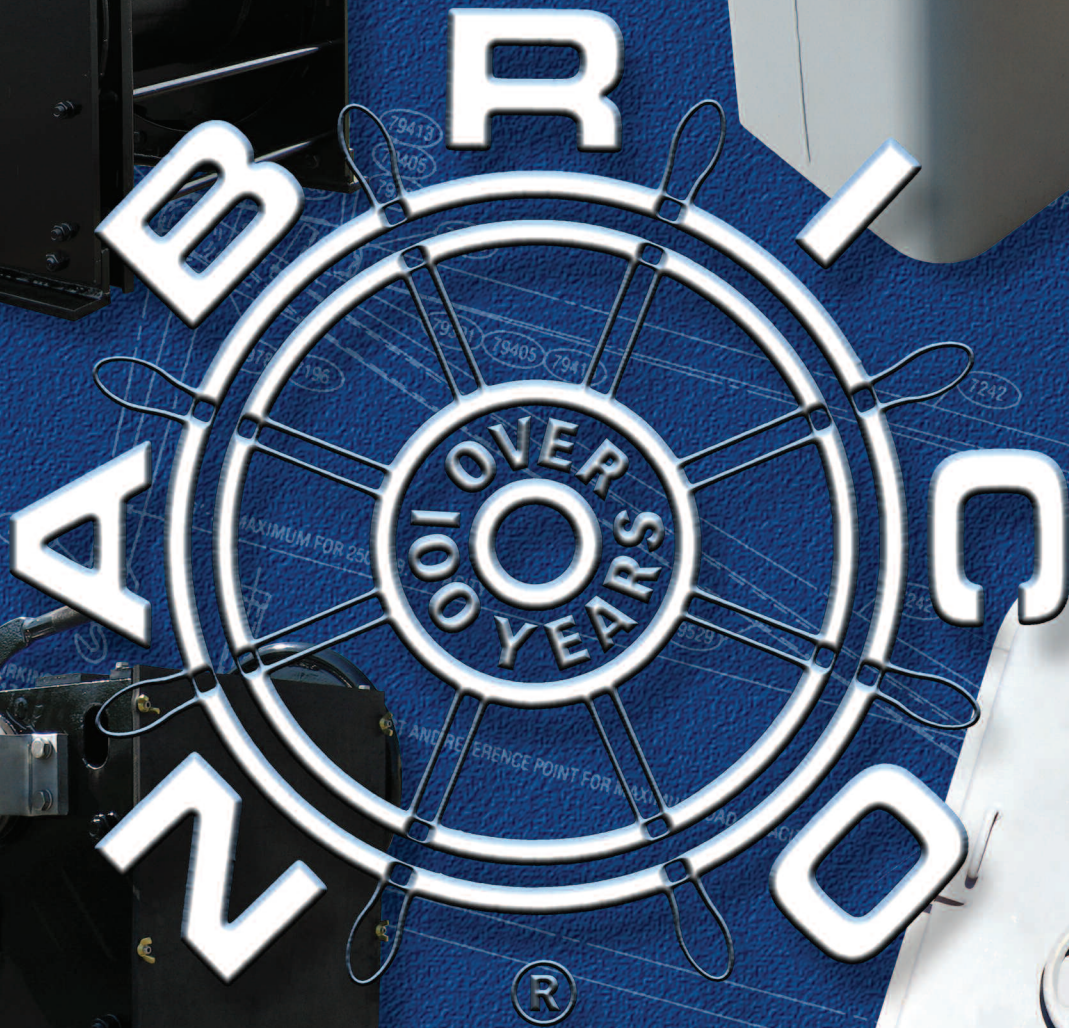
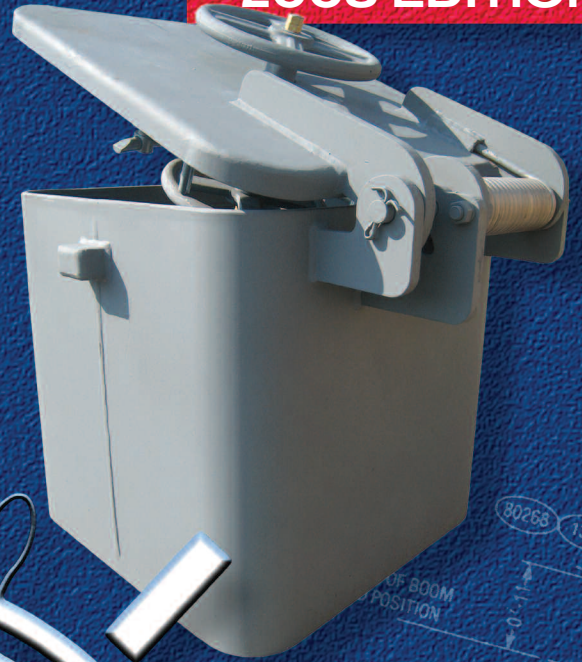
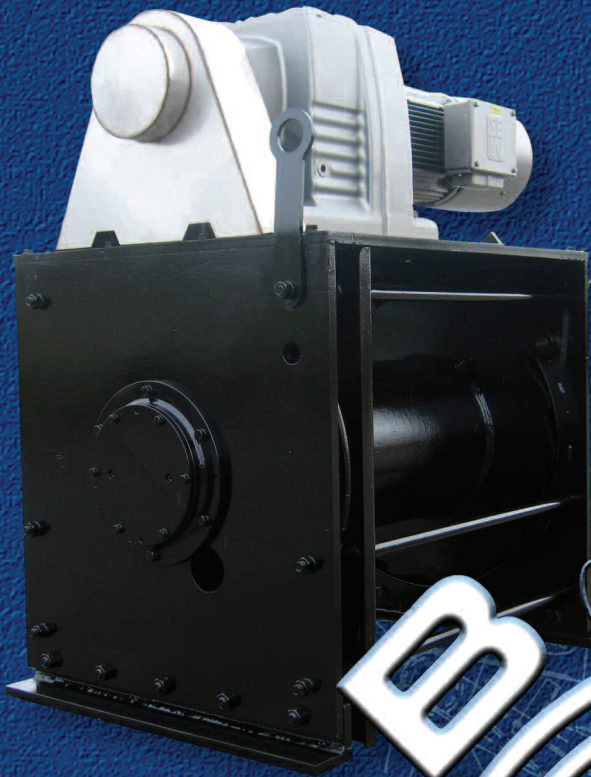


2008 EDITION



NABRICO PRODUCTS

www.nabrico-marine.com

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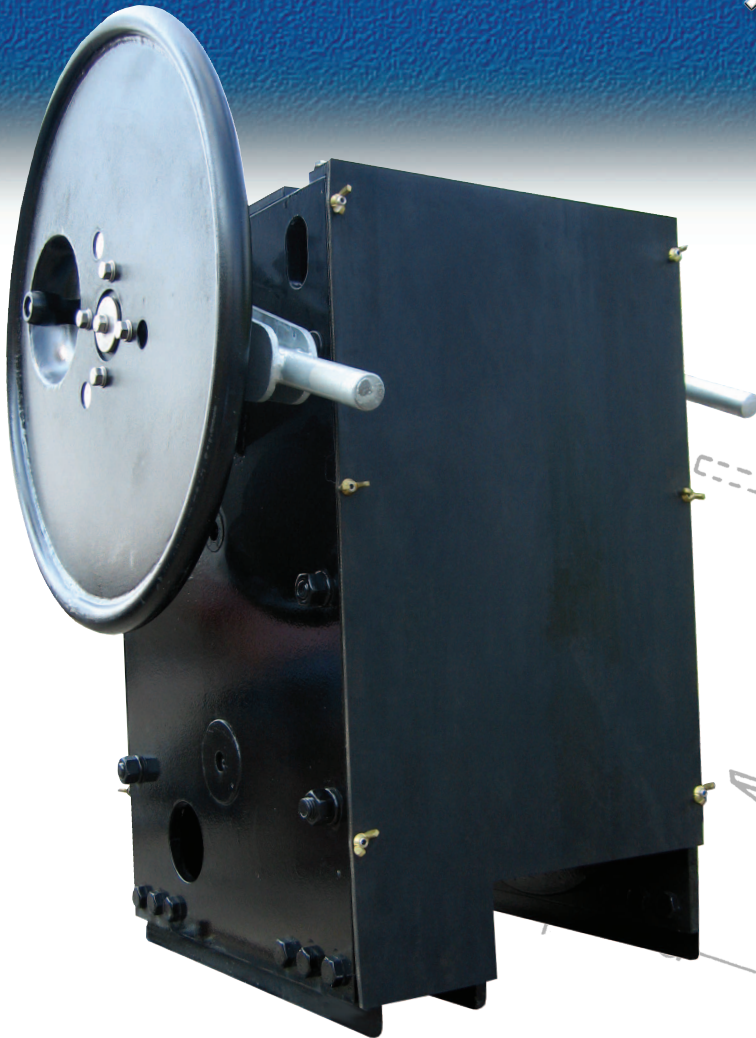
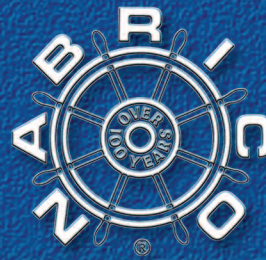
PRODUCT NOTICES

Proprietary Information. The information and sketches shown in this catalog are proprietary to Nabrico. Duplication, reproduction or manufacture from data contained herein is strictly prohibited.

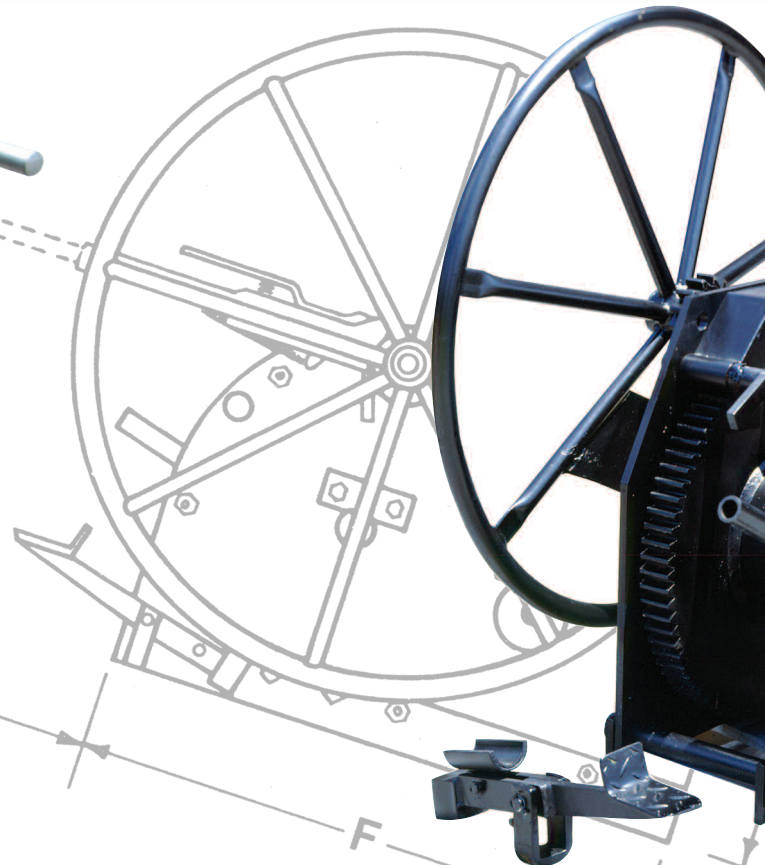
Usage Warnings. All Nabrico Products must be correctly sized, properly located and installed to serve their intended functions and it is the responsibility of Buyer or End User to insure such action is taken. Please note and consider the following warnings: Improper installation can result in failure of a Nabrico Product. Nabrico Products that have failed because of overloads, or which have been dislodged from foundations, or have fractures and/or deformations should be repaired or replaced immediately. Loads to bits must be applied to the posts between the base and the midpoint in a horizontal or downward direction. Properly placed chocks will prevent line chafing. Kevels should be installed horizontally on foundation bases of sufficient size, and forces to kevels must be direct to the trunk and not the horns. Horns will fail when exposed to direct loads. And, Nabrico Products are not designed for use to lift a vessel.

Dimensions. All dimensions shown in this catalog are in feet and inches. Weights are in English pounds. Capacities are in short tons of 2,000 pounds. Please note that dimensions and weights are nominal and are subject to standard variations. Maximum test pressure on hatches, doors and enclosures is 2 PSI unless advise in writing by Nabrico of a higher allowance. Product details and specifications are subject to change without notice.

NABRICO



DF-3-40



DF-156-10

NABRICO provides the extra hands you need for fast and sure tow make-up and breakdown with a complete line of hand winches in both right and left hand models. Available in 10, 20, 40 and 60 ton holding capacities, there is a **NABRICO** hand winch to meet the particular needs of your job or installation.

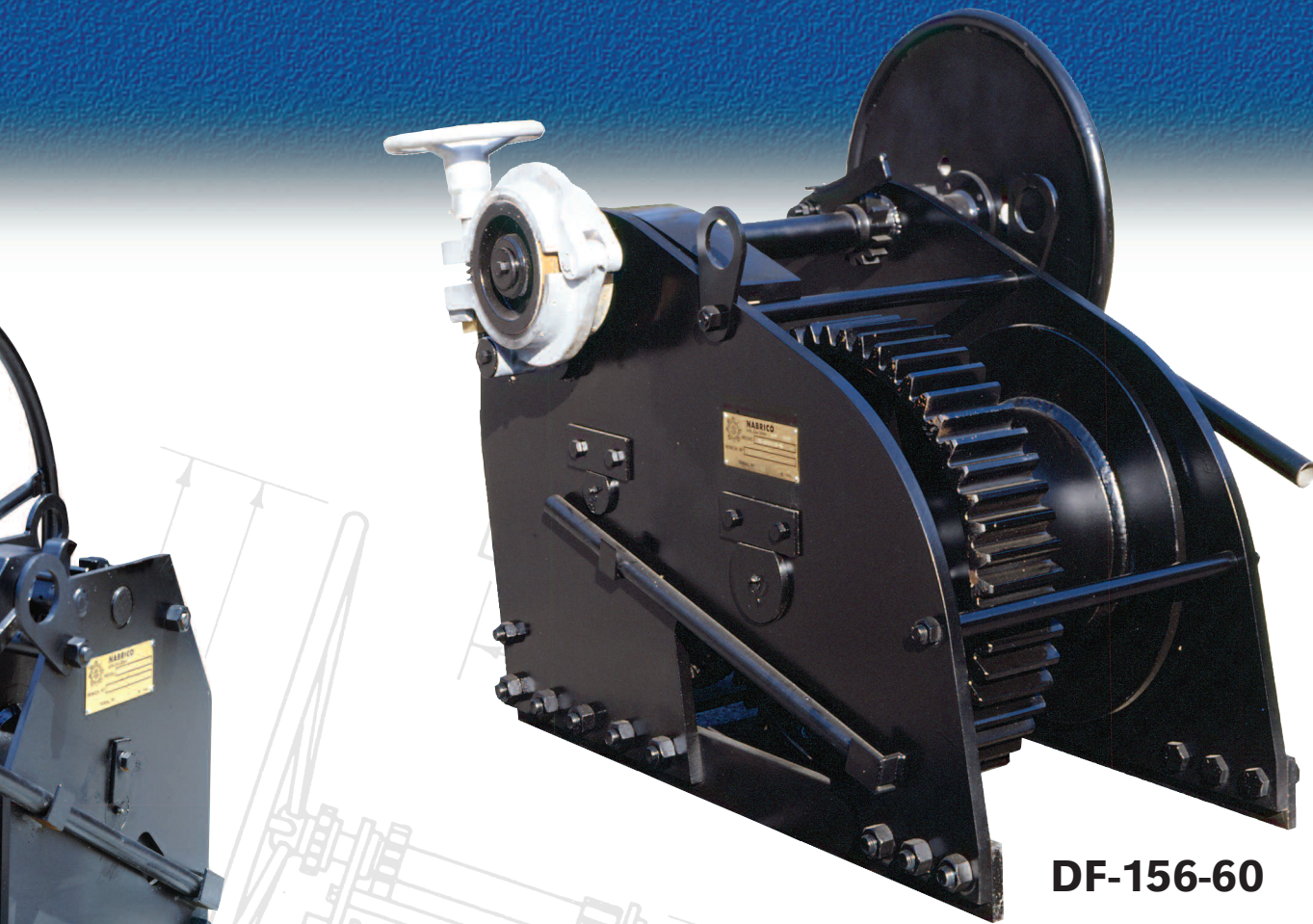
Match a **NABRICO** hand winch to your needs and available space and you're ready to go to work. For installation purposes, all dimensions should be verified.

(1) Holding & line pull ratings are for first layer of cable.

(2) Wider drum widths are available on request.

Winches portrayed in drawings, photographs and copy are not designed for lifting or lowering persons or equipment. Product details and specifications are subject to change without notice.

MANUAL WINCHES



DF-156-60

Features

- All steel construction.
- Machine cut gears and stainless steel ratchets.
- Bronze bushed bearings.
- Alemite fittings for proper lubrication.
- True right and left hand models for use in pairs.
- Positive no-slip tension.
- Fast cranking with handle.
- Quick release cam action.
- Full load rated hand brake with Stainless Steel braking surface.
- Corrosion-resistant hardware.
- Lever ratchet for extra high tension.
- Blasted and painted, galvanized and other coatings available.

MODEL	MOUNT	DOG HOLDING (1)	LINE PULL (1)		GEAR RATIO	DRUM FLANGE DIAM.	DRUM		DRUM CAPACITIES (FT.)											WEIGHT (LBS.)	OVERALL DIMENSIONS		
			HANDWHEEL ONE MAN	RACHET W/ STANDARD EXTENSION ONE MAN			DIAM	WIDTH (2)	CABLE SIZE												WIDTH	HEIGHT	LENGTH
DF-156		S.T.	LB.	LB.		IN.	IN.	IN.	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4	1-1/2						
10-6-M	Right/Left	10	5,200	7,000	5.57:1	18	8.625	6.0	353	317	174	129						500	1'77/16"	3'43/4"	4'4"		
20-7-M	Right/Left	20	14,000	14,400	18.57:1	16	10.75	7.25	270	186	109	57	39	21				850	2'01/4"	3'35/16"	5'7"		
40-11-M	Right/Left	40	14,000	17,800	18.57:1	19	12.75	11.25			287	176	130	84	36	26		1250	2'51/40"	3'6"	6'9"		
40-18-M	Right/Left	40	14,000	17,800	18.57:1	19	12.75	18.125			463	279	151	139	58	51		1350	3'01/4"	3'6"	6'9"		
60-11-M	Right/Left	60	24,000	28,800	27.0:1	24	14.00	10.625			572	325	262	200	119	111	62	2100	2'87/8"	4'2"	6'8"		

For additional information, drawings and specifications contact NABRICO.

WINCHES

2 and 5 Ton Hand*



MODEL	LINE PULL		SHOCK LOAD <small>(3 foot drop)</small>	HAND BRAKE HOLDING OR DCG
	SLOW SPEED	FAST SPEED		
2 Ton	4025	3500	3800 <small>(3 foot drop)</small>	6000
5 Ton	10,000	8500	8250 <small>(3 foot drop)</small>	14,000

ALL ABOVE NUMBERS ARE POUNDS

CABLE CAPACITY (FULL DRUM)							
	DRUM WIDTH	1/4	5/16	3/8	7/16	1/2	WEIGHT
2 Ton	6"	275	200	105	100	60	65
5 Ton	6"			300	100	170	116

*Available with solid handwheel.



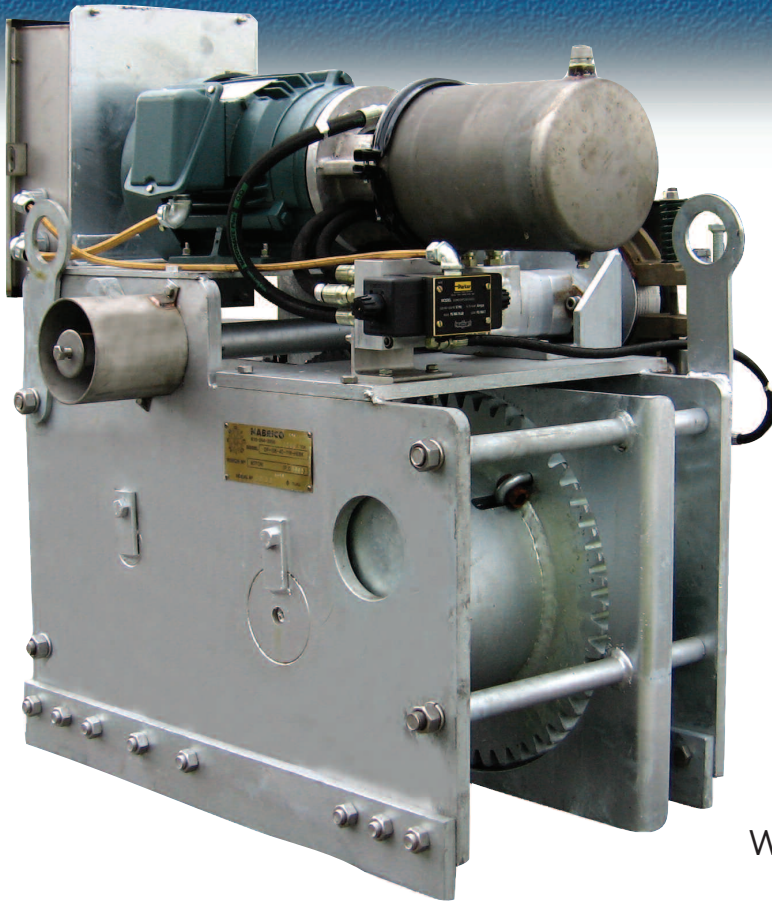
Specialty

NABRICO manufactures custom winches to meet your specific needs. Contact us regarding your requirements for:

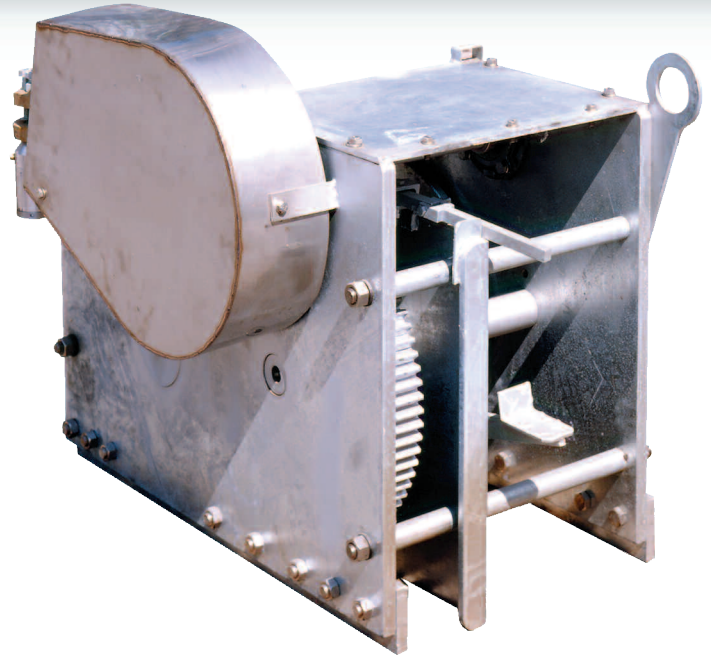
- Mooring
- Rail
- Mining
- Oil Field
- Off-Shore
- Agriculture

CHAIN DRIVE WINCH

For additional information, drawings and specifications contact NABRICO.



40 TON HYDRA ELECTRIC



40 TON BASIC HYDRAULIC

Winch operated by customer supplied hydraulic power or remote mounted power package.

Features

- Self-contained hydraulic/electric power unit with Stainless Steel tank.
- Failsafe brake.
- Mechanical dog for emergency manual operation.
- Hot-dipped galvanized standard.
- Hydraulic system prevents power spikes.
- Free-wheeling feature to allow faster cable pull-out.
- Stainless Steel components: control box, guards, tanks and fasteners.
- Full Synthetic Biodegradable Hydraulic fluid.

MODEL	MOUNT	HOLDING BRAKE & OR DOG (1)	LINE PULL			LINESPEED AT DRUM SURFACE NO LOAD	H.E. GEAR RATIO	MANUAL GEAR RATIO	DRUM FLANGE DIAM.	DRUM		DRUM CAPACITIES (FT.)								MOTOR	WEIGHT		MOUNTING DIMENSIONS			
			RATED (2)	MAX	HANDWHEEL ONE MAN					DIAM	WIDTH (3)	CABLE SIZE									H.E.	BASIC	WIDTH	LENGTH	HEIGHT	
												7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4							1-1/2
DF-156		S.T.	LB.	LB.	LB.	FPM			IN.	IN.	IN.								HP	LB.	LB.					
10-6-HE	Right or Left	10	2272 at 830 psi	3150 at 1119 psi	7,000	23.5	29.25:1	5.57:1	18	8.625	6.00	353	317	174	129				3	897	690	105/16"	1' 10 1/2"	3' 6 3/8"		
20-7-HE	Right or Left	20	9382 at 1138 psi	11700 at 1381 psi	14,000	17.2	92.86:1	18.57:1	16	10.75	7.25	270	186	109	57	39	21		7.5	1284	1010	1' 3 1/2"	2' 6"	3' 5"		
40-11-HE	Right or Left	40	17213 at 1695 psi	18000 at 1797 psi	15,000	12.8	92.86:1	18.57:1	19	12.75	11.25			287	176	130	84	36	26	10	1930	1518	1' 8 1/8"	3' 0"	3' 4"	
60-11-HE	Right or Left	60	31771 at 1998 psi	33480 at 2105 psi	24,000	9.9	135.20:1	27.0:1	24	14.00	10.625			572	325	262	200	119	111	62	15	3225	2523	1' 11 1/8"	3' 10 7/8"	4' 3"

(1) Holding & line pull ratings are for first layer of cable.

(2) Hydra-Electric line pull pressures are pre-set for RATED condition.

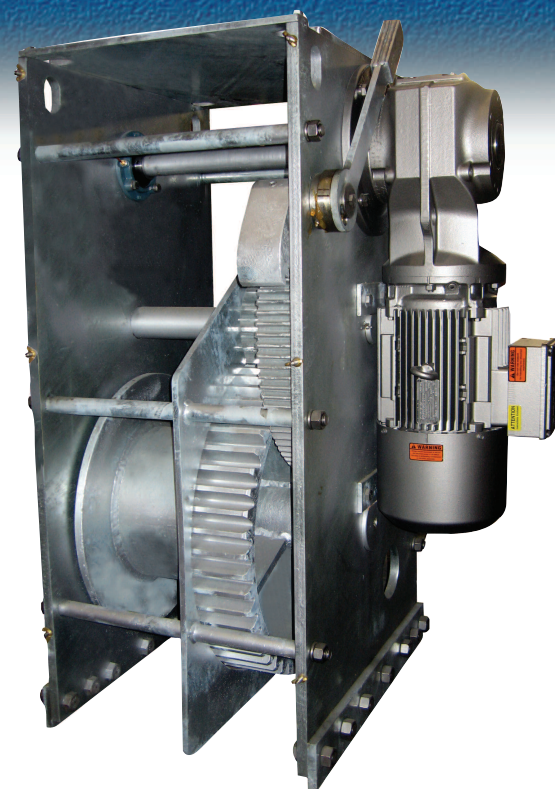
(3) Also available in wider drum widths upon request.

Product details and specifications are subject to change without notice.

POWER WINCHES



30 TON



40, 50, 65 TON

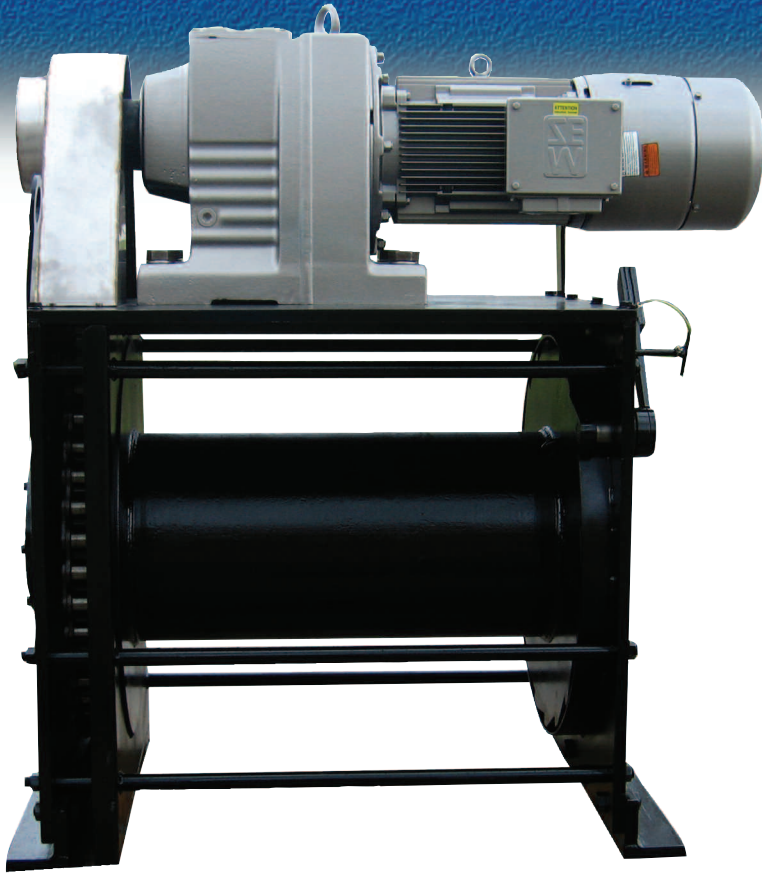
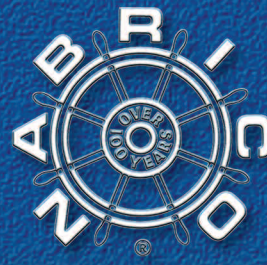
Features

- Salt water package standard.
- Hot-dipped galvanized.
- Stainless steel or silicon bronze fasteners.
- 3-ply conveyor belt covers (damage and corrosion-resistant).
- New thick, 3-tooth locking dog with large lever release and failsafe disc brake.
- Crane and hoist-duty motor, NEMA design, with high-efficiency worm gear box.
- Control box option: NEMA 4X stainless steel.
- Provisions for emergency manual operation.
- Minimal maintenance and easy to repair.
- Over 100 fewer parts than other electric winches (no chain, sprockets, ball bearings, or top shaft - 40 & 50 ton).
- Variable frequency drive option available. Amp draw limits, variable speeds and motor protection.
- Heaviest winch in its class.
- 30 Ton - 5.4 HP motor standard.
- 40 Ton - 7.5 HP motor standard.
- 50 Ton - 10 HP motor standard.
- 65 Ton - 10 HP motor standard.
- Other motors and ratios available.

MODEL	MOUNT	LINE PULL				LINESPEED @ FIRST LAYER OF 1 IN. CABLE NO LOAD	DRUM FLANGE DIAM.	DRUM		DRUM CAPACITIES (FT.)					MOTOR	WEIGHT	MOUNTING DIMENSIONS		
		@ RATED AMPS	@ MOTOR STALL	HAND CRANK @ MOTOR SHAFT	MOTOR			DIAM	WIDTH	CABLE SIZE							WIDTH	LENGTH	HEIGHT
DF-1		LBS.	LBS.	LBS.	HP	FPM	IN.	IN.	IN.	1/2	5/8	3/4	7/8	1	HP	LBS.			
30-11	Universal	13,000	19,500	19,000	5.4	18	17.25	10.75	11	361	228	138	120	66	5.4	1,700	18 5/8"	22"	56 3/8"
40-11	Left or Right	18,000	27,000	22,000	7.5	18	19	12.75	11.25	287	180	130	100		7.5	1,850	20 1/8"	23 1/4"	52 1/2"
50-11	Left or Right	29,400	44,100	30,000	10	12.5	19	12.75	11.25	287	180	130	100		10	1,850	20 1/8"	23 1/4"	52 1/2"
65-11	Left or Right	32,000	48,000	30,000	10	10	24	14	10.625	572	325	262	200		10	3,200	23 1/4"	30"	62 5/8"

For additional information, drawings and specifications contact NABRICO.

NABRICO



36" Chain Drive Positioning Winch



NABRICO's most technologically advanced, backed by a tradition of recognizing and meeting the needs of the towing and transportation industries, provides an infinite number of line pulls and line speeds. Our standard model has a starting line pull of 24,000 lbs. with 16,000 lbs. continuous at 30 fpm. Drum capacity is generous, varying from 572 to 1328 feet, depending on the size of the cable. Accessible, clearly marked controls allow for remote or local operation. Wireless operators as an option.

Control Cabinet for Winches



CABLE CAPACITY			LINE SPEED	LINE PULL
CABLE SIZE*	24" DRUM WIDTH	36" DRUM WIDTH		
3/4"	877	1328	Standard: Infinitely variable from 0-30 fpm. Custom application up to 100 fpm.	Standard: Infinitely variable line pull to 48,000 lbs. at motor stall; 24,000 lbs. starting and 16,000 lbs. continuous. Custom applications are available.
7/8"	768	1165		
1"	686	1043		
1 1/8"	623	948		
1 1/4"	572	872		

Note: These figures are based on uniform rope winding. The amount of tension applied when spooling the rope will also affect the length.

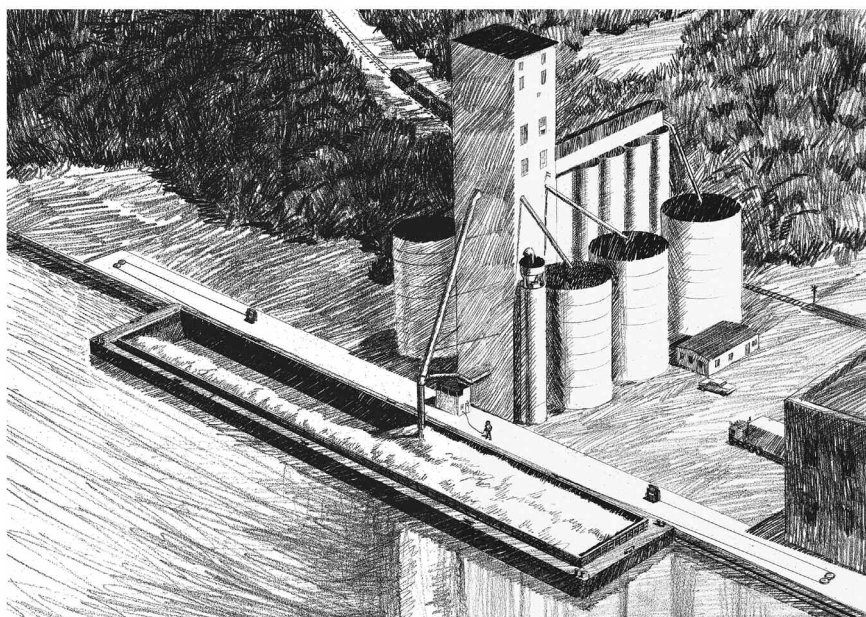
* Cable capacities are @ 5 layers.

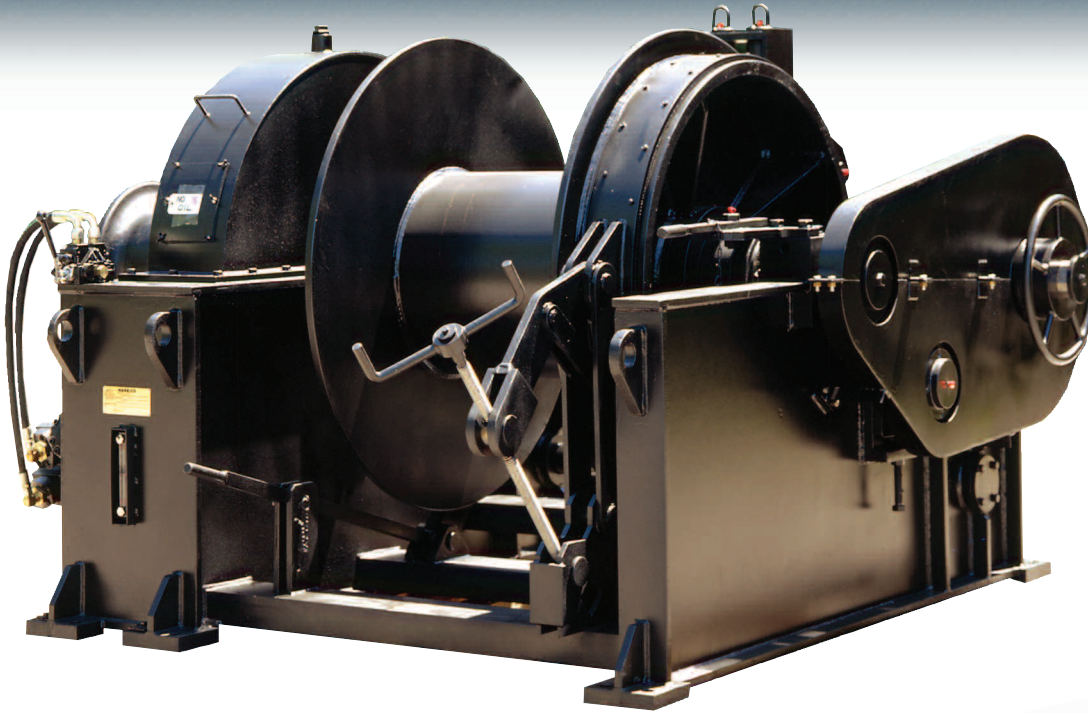
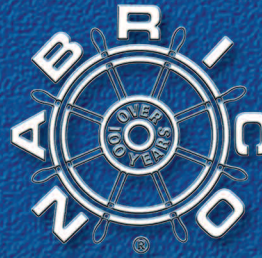
POSITIONING WINCH

NABRICO's constant tension, all electric positioning winch system consists of two winches, two variable speed drives, variable speed motors, helical bevel gearboxes, failsafe brakes, PLC (programmable logic controls) and a solid state regen unit. These components have been engineered to allow one winch to be in a drive mode, pulling, while the other winch is in a torque mode, holding. When the object being positioned is at rest, both drives are in the torque mode, and the load holds its position on the dock, letting out cable during loading, and taking in cable during unloading. This also allows cable in and out as required during tide movement. The amount of torque/pull and speed on the cable is controlled by two potentiometers mounted on the control panel. The positioning winch system is capable of maintaining the full horsepower load at zero speed indefinitely. If there should be a loss of power or the emergency stop is pressed, the failsafe brakes hold the load.

NABRICO has utilized proven winch designs with the latest drive and touch screen technology. Adjustable ramps have been programmed into the system to minimize the shock on the cable and associated hardware that is a result of starting and stopping.

NABRICO pioneered the positioning winch system employing the most recent available technology. In addition to the standard model, the system is available in a larger, 50 horsepower model, and in a smaller 10 horsepower model. Using various motor and gearbox combinations, the line pull and speed can be changed, since the basic engineering in the panel and winch remain the same. The positioning winch has industrial, marine and rail applications.





INDEPENDENT TYPE WINDLASS

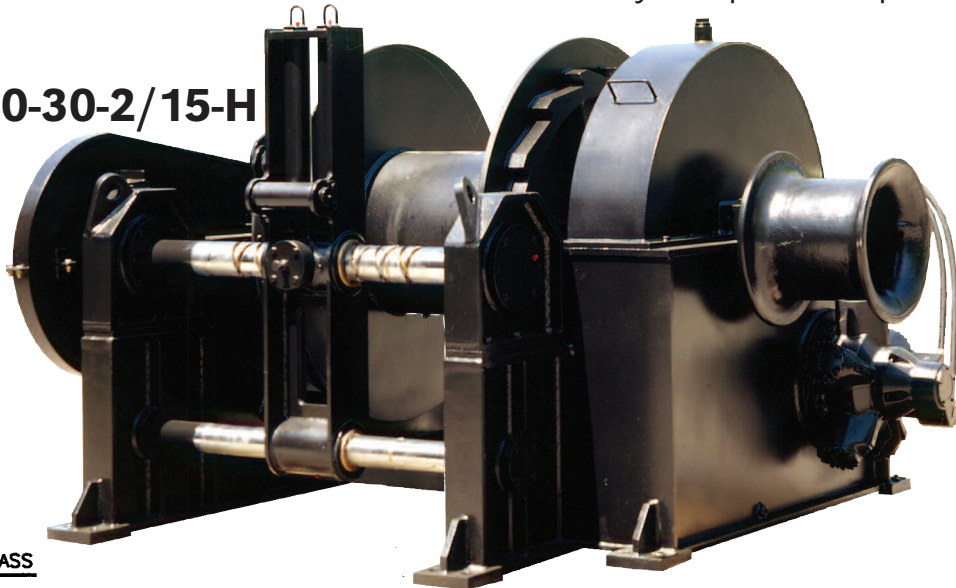
General Features

- Fabricated steel construction.
- Three coat zinc and epoxy paint system for complete marine environment protection.
- Electric or hydraulic power.
- Jaw clutched drum.
- Single or double warping heads.
- Spur gear reduction operating in oil bath.
- Level wind available.
- Drum band brake and holding dog.
- Drum capacity and line pull to meet customer requirements.

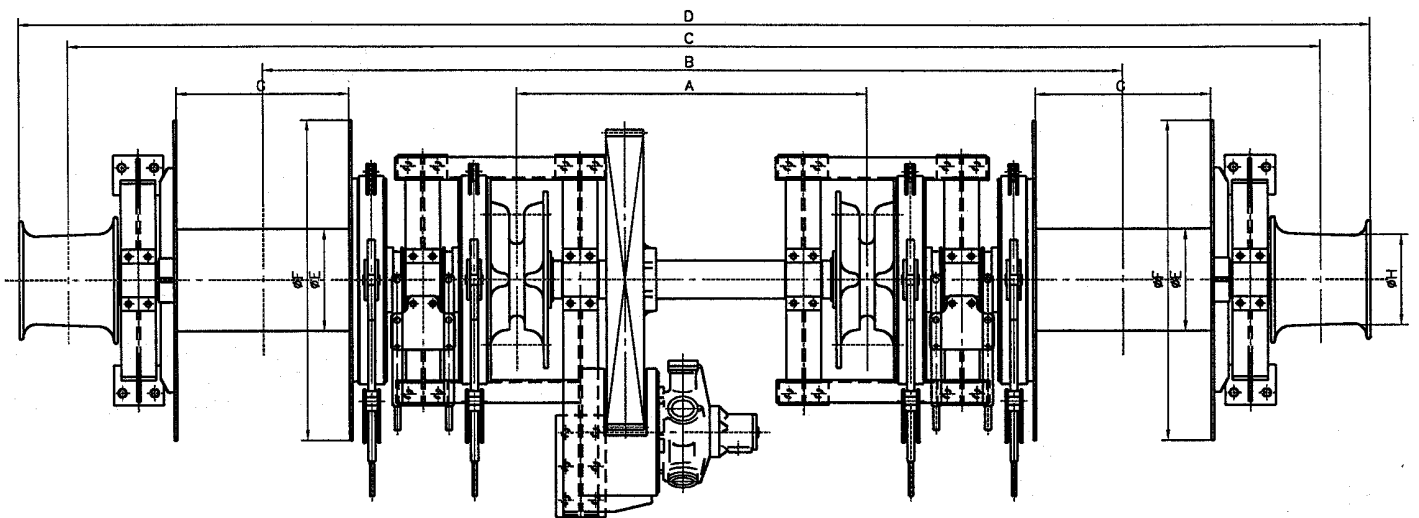
ANCHOR WINCHES & WINDLASSES

- Drum to spool 1200' of 1 3/4 inch diameter wire rope.
- Two 15 inch diameter steel gypsy heads.
- Hydraulic motor with fail safe motor brake.
- 4-way control valve mounted and piped on the winch.
- Manually operated band brake with stainless steel brake and steel hand wheel.
- Lever operated machined jaw clutch.
- Wire rope level wind for uniform lay of wire on the drum.
- Ratchet and pawl type holding dog on the drum.
- Rated to lift a 5020 lbs. anchor from 30 fathoms at 30 fpm.
- Rated line pull 20,000 lbs.
- Other sizes and features available.
- Other available offshore deck machinery; mooring winches, towing winches, anchors, chain and capstans. Contact NABRICO with your specific requirements.

DF-AW-1000-20-30-2/15-H

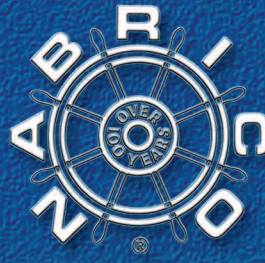


ORDINARY TYPE WINDLASS



For additional information, drawings and specifications contact NABRICO.

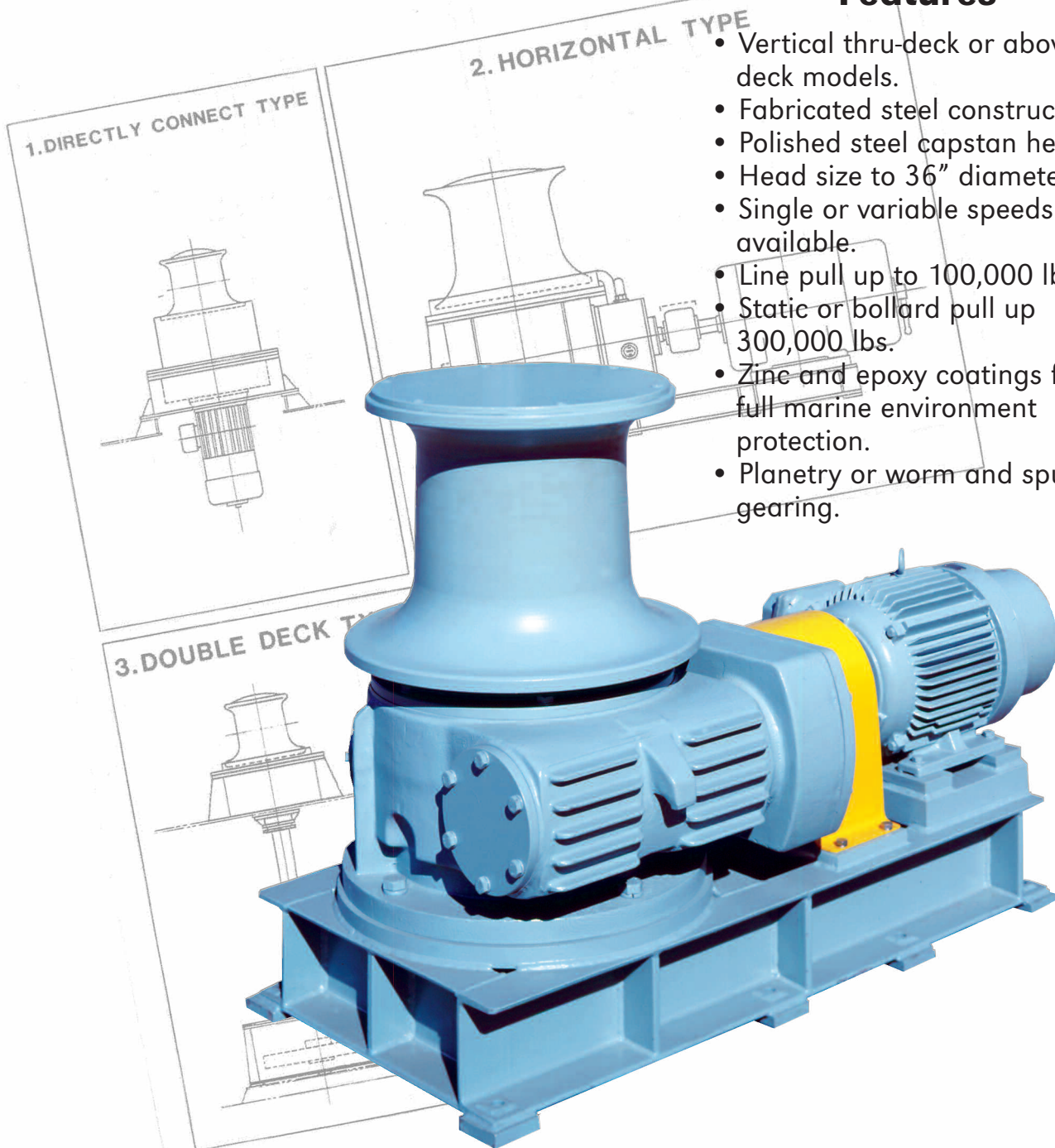
NABRICO



ELECTRIC

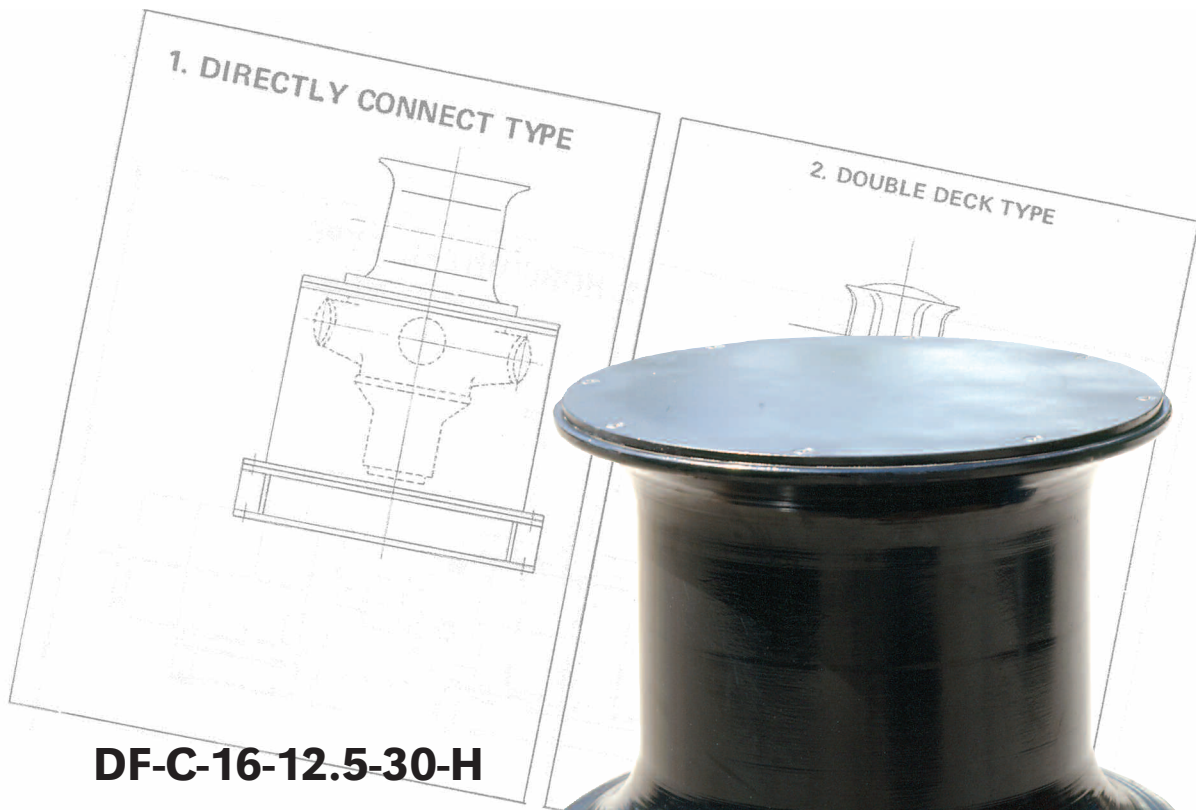
Hydraulic or Electric Features

- Vertical thru-deck or above deck models.
- Fabricated steel construction.
- Polished steel capstan head.
- Head size to 36" diameter.
- Single or variable speeds available.
- Line pull up to 100,000 lbs.
- Static or bollard pull up to 300,000 lbs.
- Zinc and epoxy coatings for full marine environment protection.
- Planetary or worm and spur gearing.



CAPSTANS

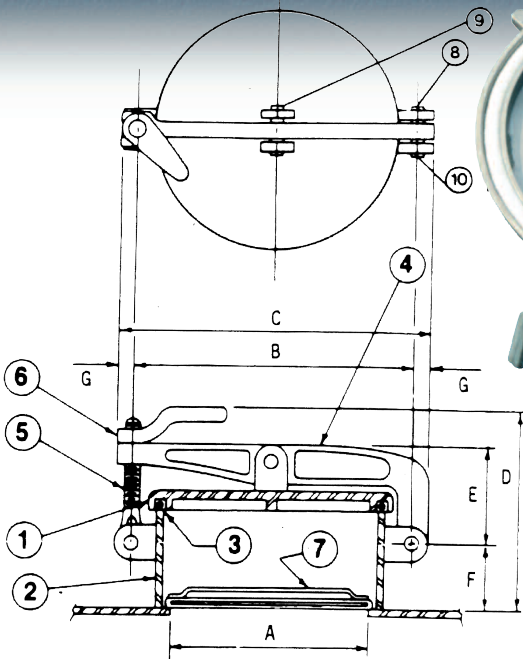
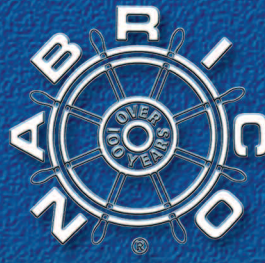
HYDRAULIC



DF-C-16-12.5-30-H

- 16" diameter polished steel head.
- Rated line pull 12,500 lbs. at 30 fpm.
- Designed for above deck mounting.
- Other sizes and features available.





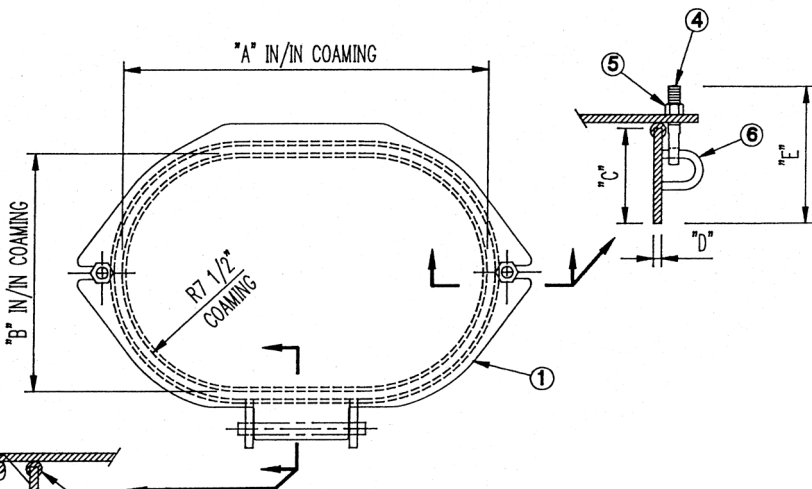
SMALL HATCH (ULLAGE)

- Sizes: 6", 8" and 10" diameter.
- Available in Stainless Steel or Carbon Steel.
- Various coaming heights.



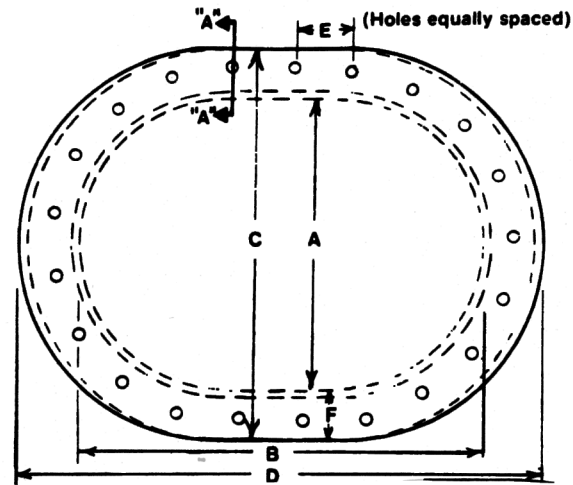
4 DOG HATCH

- Oval or round configurations.
- Available in Blast/Paint, Carbon Steel and Stainless Steel.
- Varied coaming heights.



TWO BOLT MANHOLE

- Various sizes and coaming heights available.



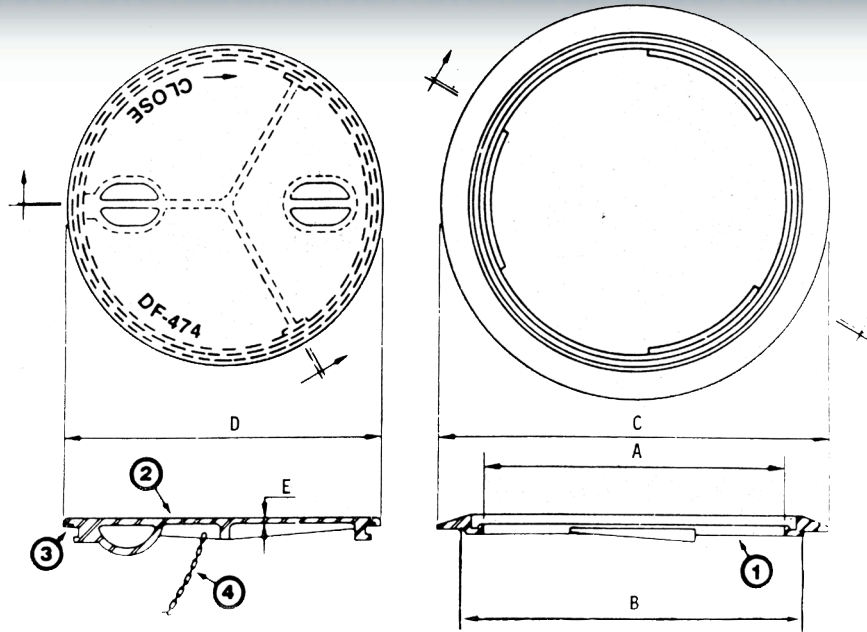
MULTI BOLT HATCH

- Oval or round configurations available.
- Varied coaming heights.
- Material fastener and gasket options.

Maximum test pressure: 2psi

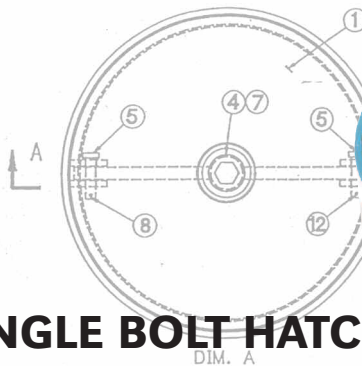
Product details and specifications are subject to change without notice.

HATCHES

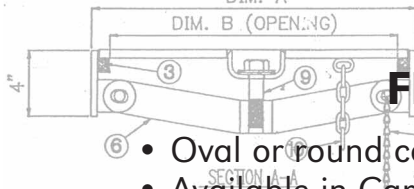


TWIST LOCK HATCH

- 18" Diameter.
- Coaming Available.

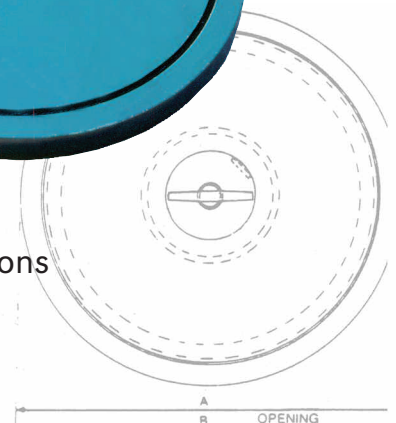


SINGLE BOLT HATCH



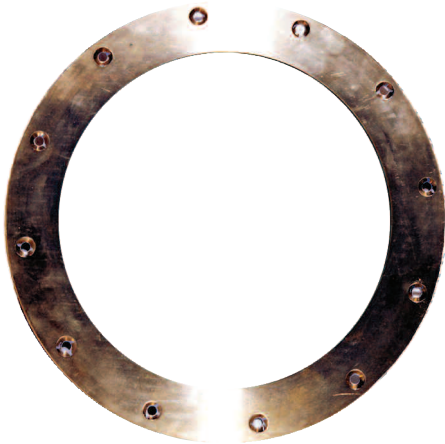
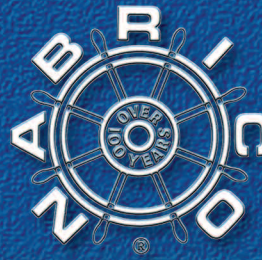
FLUSH HATCH

- Oval or round configurations.
- Available in Carbon Steel and Stainless Steel.
- Additional models are available and specifications will be furnished upon request.



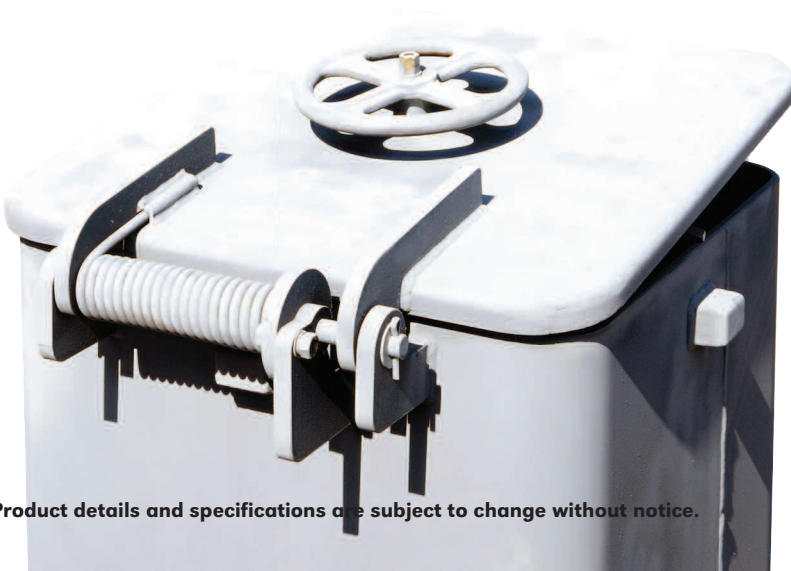
Maximum test pressure: 2psi

NABRICO



PORT LIGHT

- Many varieties available.
- Material - Steel, Stainless Steel and Aluminum available.



Product details and specifications are subject to change without notice.

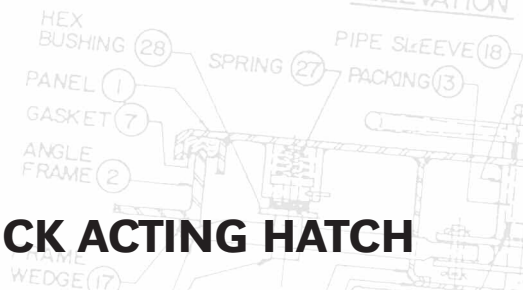
QUICK ACTING DOOR

- Common sizes in stock.
- Doors are suitable for a design head of 28'.
- This product/model is covered under ABS (PDA) Certificate #01-HS211271A-PDA.



QUICK ACTING HATCH

- Common sizes in stock.
- 24X24X24" hatch is suitable for a design head of 16.9'; 30x30x24" hatch is suitable for design head of 16.6'.
- This product/model is covered under ABS (PDA) Certificate #01-HS211271B-PDA.



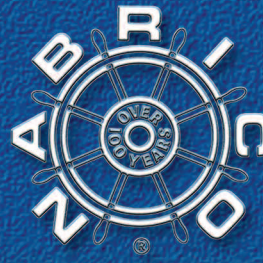
DOORS & ENCLOSURES



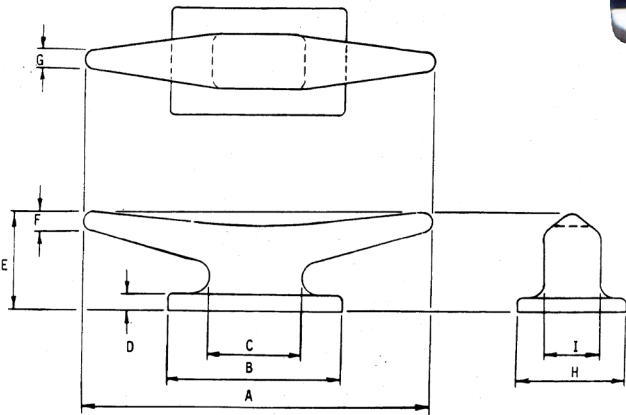
6 DOG DOOR

- Common sizes in stock.
- Doors are suitable for a design head of 28'.
- This product/model is covered under ABS (PDA) Certificate #01-HS195940-PDA.

NABRICO



Nabrigo Cast Steel Level Chock
 Sizes: 24", 36", 42" and 48"



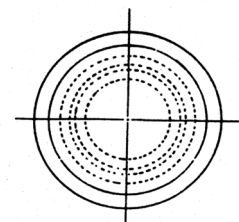
Nabrigo Cast Steel Level
 Sizes: 18" and 24"



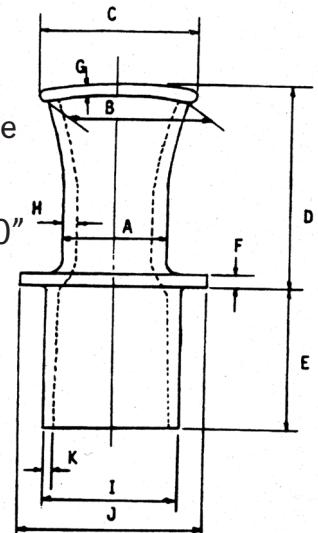
Nabrigo Steel Button Chock
 Sizes: 6", 8" and 10"



Nabrigo Cast Steel
 Double Bitt
 Sizes: 8", 10", 12" and 14"



Nabrigo
 Cast Steel Single
 Bitt
 Sizes: 8" and 10"



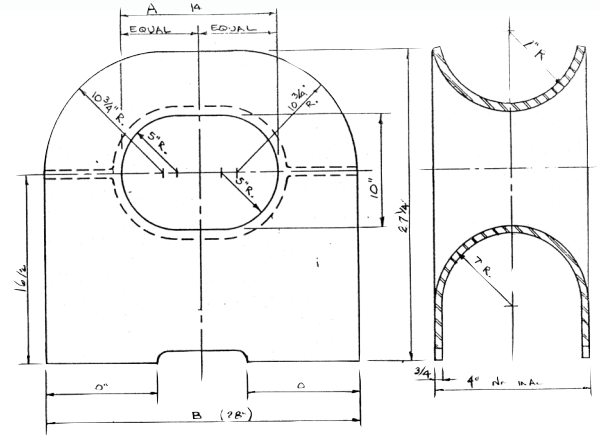
NABRICO will produce custom castings in a variety of materials and employing different methods to meet your specific needs. Contact us with your requirements.

Product details and specifications are subject to change without notice.

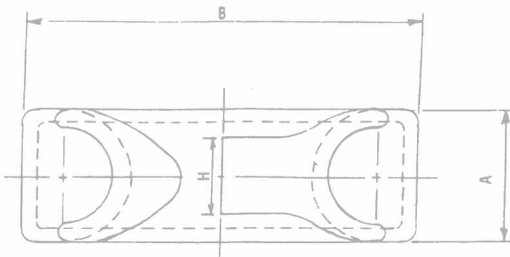
CASTINGS



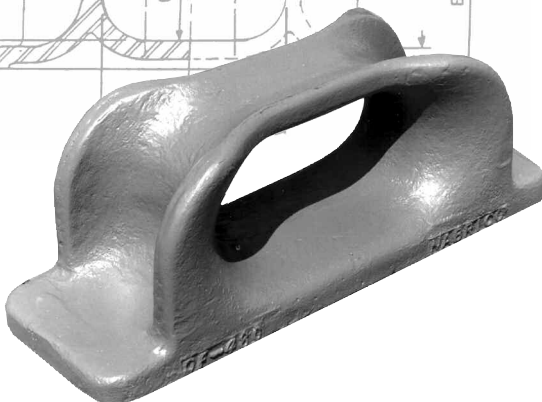
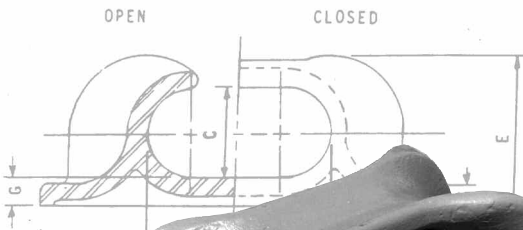
Nabrico Cast Steel
Roller Button Chock
Sizes: 12" and 16"



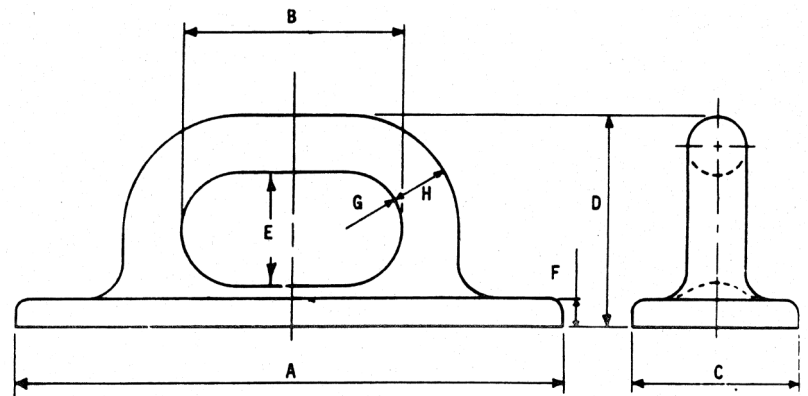
Nabrico Panama Canal Chock



Nabrico Ratchet Strap



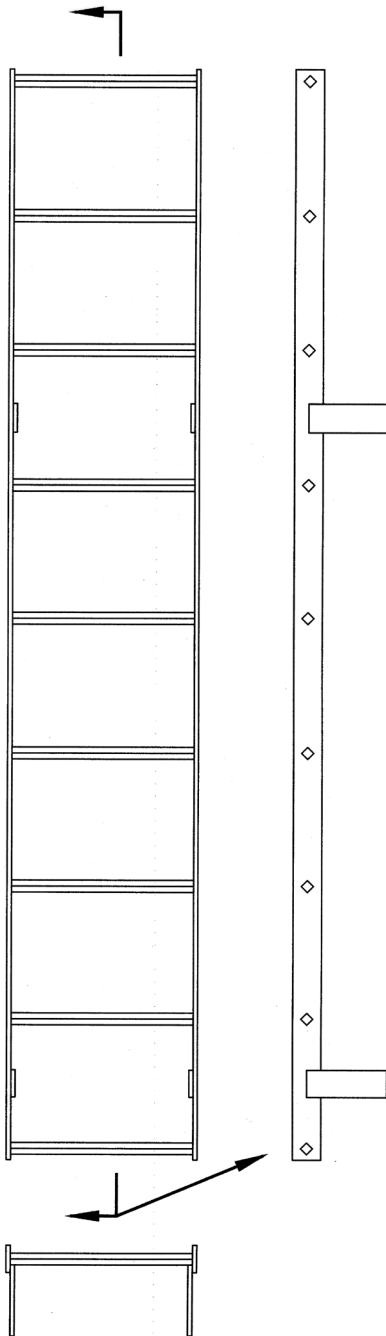
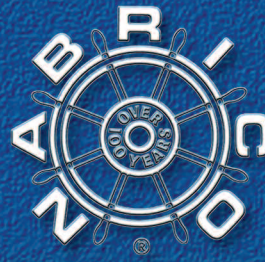
Nabrico Cast Steel Chock
Sizes: 6" to 12"



Nabrico Cast Steel D-Ring

NABRICO will produce custom castings in a variety of materials and employing different methods to meet your specific needs. Contact us with your requirements.

For additional information, drawings and specifications contact NABRICO.



LADDERS

- Stainless steel and steel.
- Various lengths and widths.



INTERLOCKING PIN

- Helps maintain tow alignment.
- Reduces barge connection shock.

EXPANSION TRUNKS

- Various sizes available.
- Stainless steel options for trunk/hatch/ullages and fasteners.
- Custom coatings available.



ACCESSORIES



Nabrico steel suction
Bellmouth
Sizes: 6", 8" and 10"

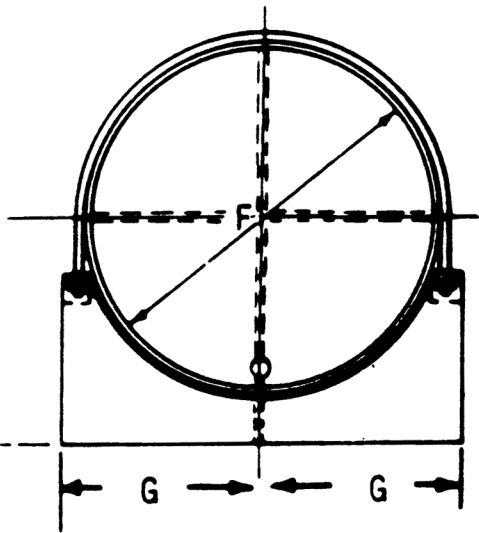


FLAG POLE SIGN

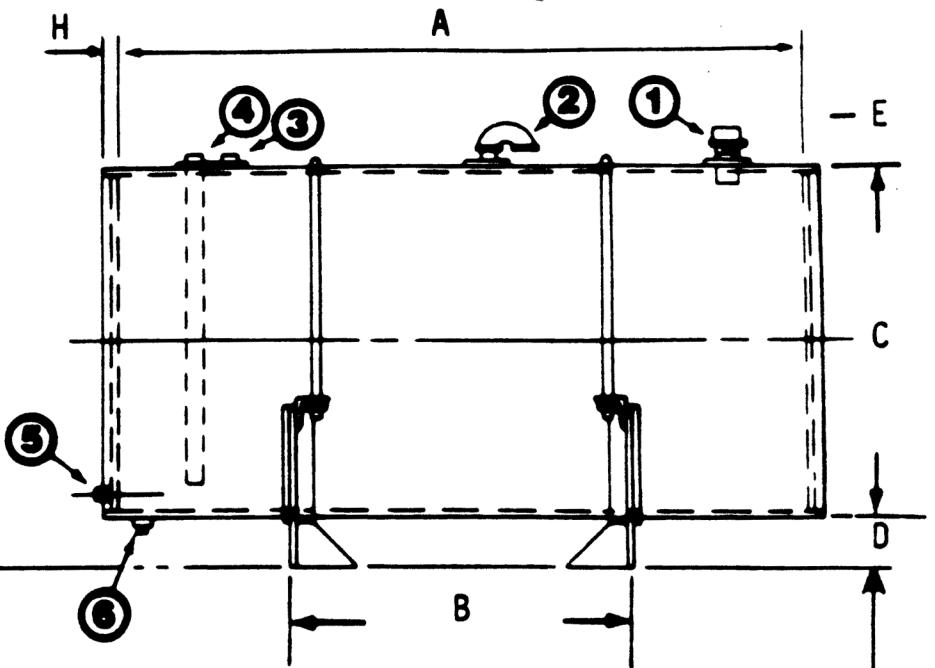
- Light holder.
- Warning sign.
- Loading/unloading flag.
- Document holder available.

FUEL TANK

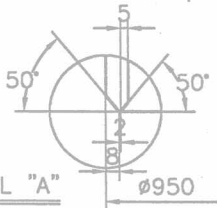
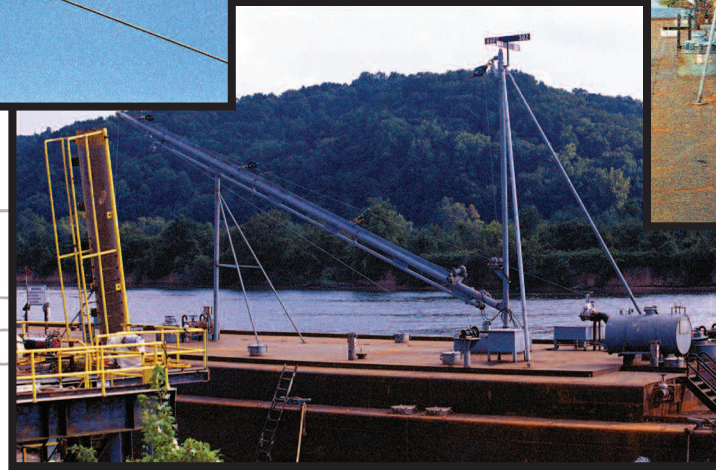
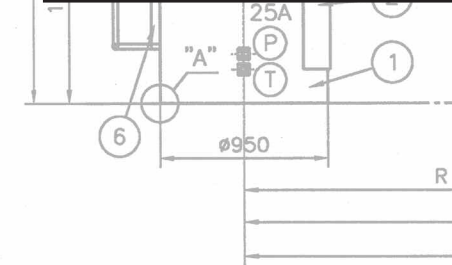
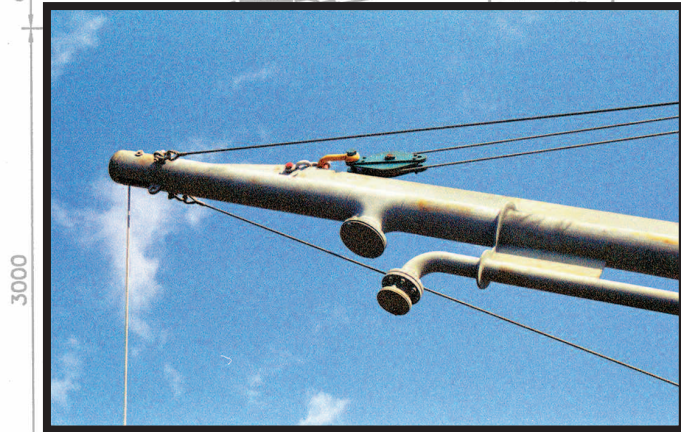
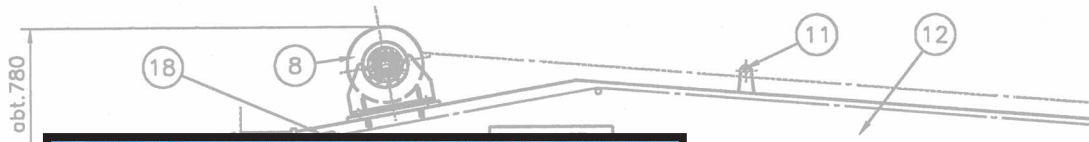
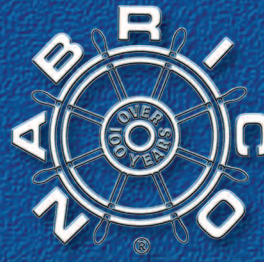
- Fuel tanks are available in sizes from 300 to 15,000 gallons.



END ELEVATION



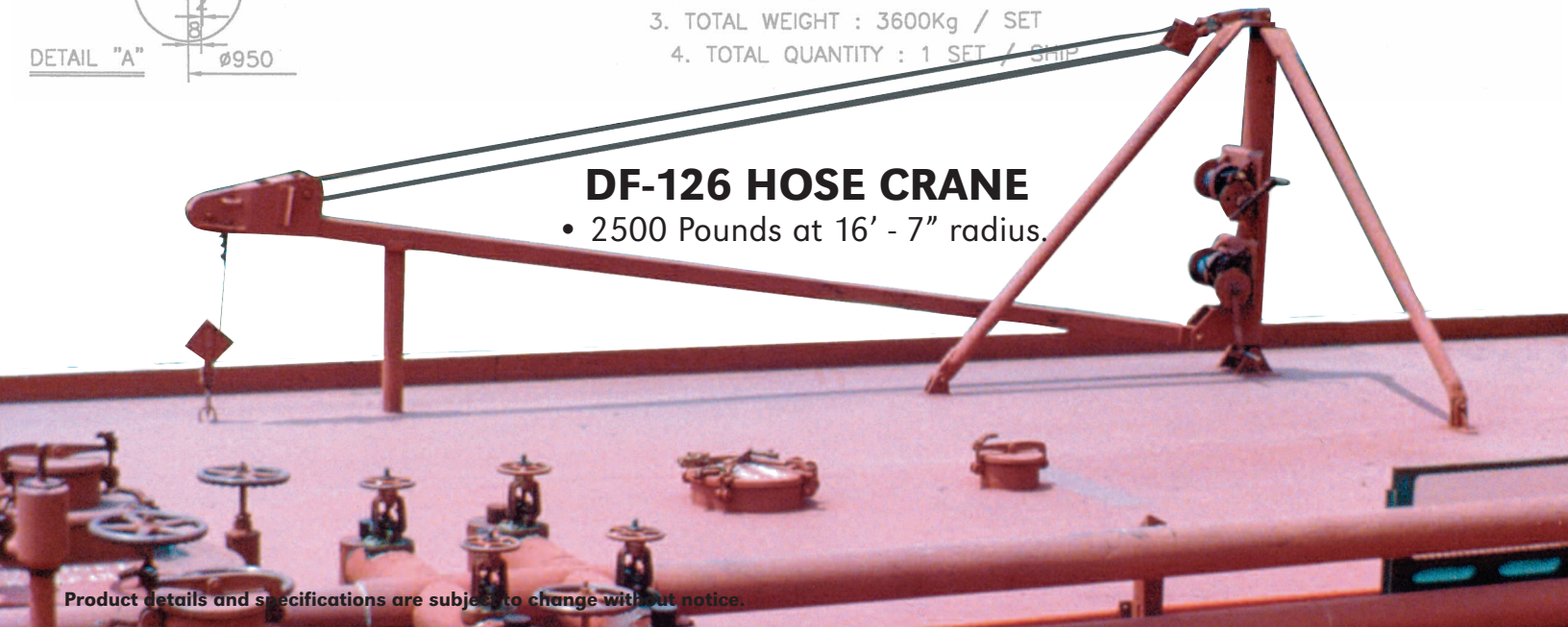
SIDE ELEVATION



- 2. SLEWING ANGLE : 360°
- 3. TOTAL WEIGHT : 3600Kg / SET
- 4. TOTAL QUANTITY : 1 SET / SHIP

DF-126 HOSE CRANE

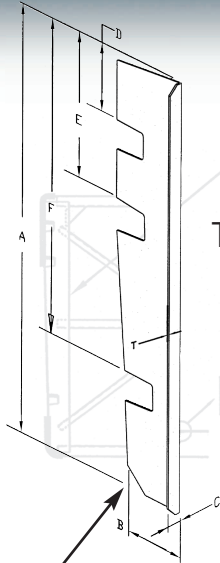
• 2500 Pounds at 16' - 7" radius.



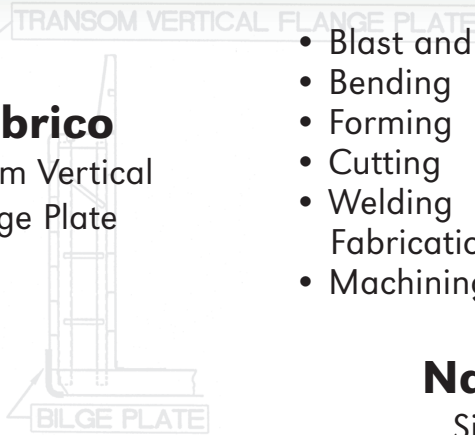
CRANES & STEEL PROCESSING

SERVICES

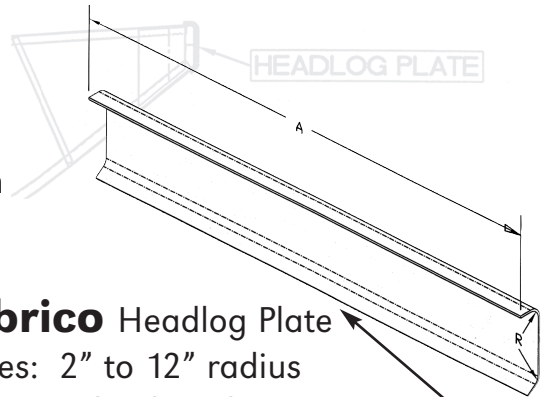
- Blast and Paint
- Bending
- Forming
- Cutting
- Welding
- Fabrication
- Machining



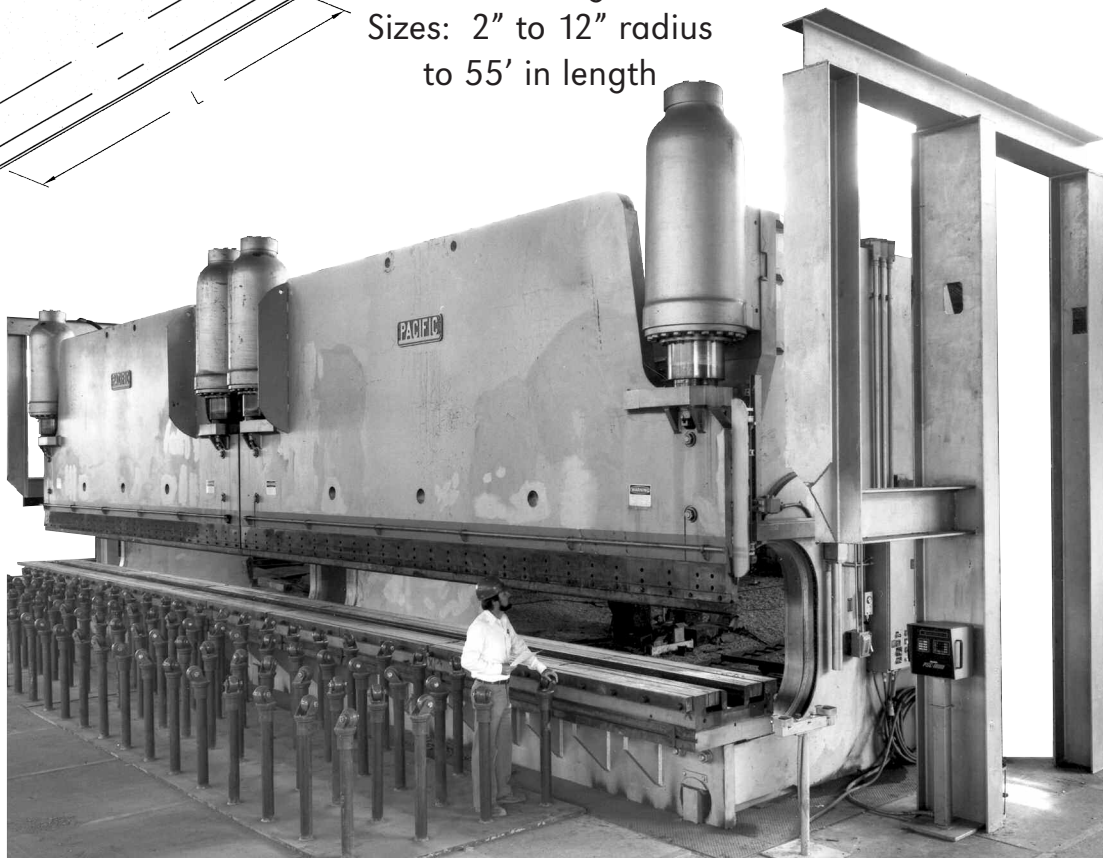
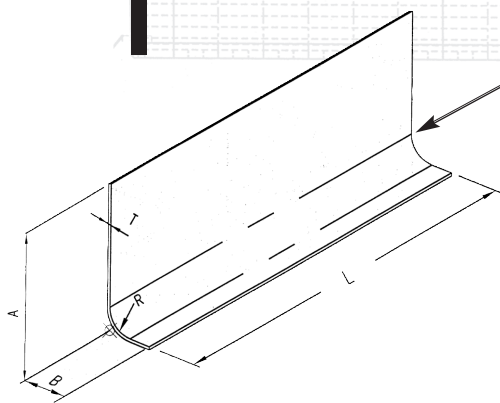
Nabrico
Transom Vertical
Flange Plate



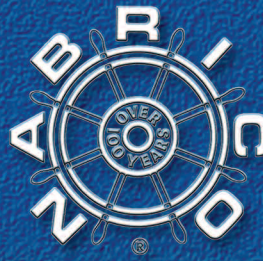
Nabrico Bilge Plates
Sizes: 2" to 12" radius
to 55' in length



Nabrico Headlog Plate
Sizes: 2" to 12" radius
to 55' in length



NABRICO



PRODUCT WARRANTY

NABRICO warrants that all NABRICO products shall be free from defects in material and workmanship during the Warranty Period (as hereinafter defined); provided, however, that NABRICO's warranty hereunder shall not apply to any equipment, material or components that is not manufactured by NABRICO, and NABRICO makes no express or implied warranty that any such equipment, material or components are free from manufacturer or supplier defects. To the extent doable, NABRICO agrees to transfer and assign to a Buyer or End User any warranties extended by the manufacturer or supplier of such equipment, material or components. NABRICO shall have no obligation or responsibility to repair or replace any defective NABRICO Product if a notice of defect is not reported in writing to NABRICO within 180 days from the date of shipment of any NABRICO Winch Products and 90 days from the date of shipment of any other NABRICO Products (such 180 day and 90 day periods are hereinafter referred to as "Warranty Period").

In the event Buyer or any End User timely notify NABRICO in writing of any claim of defect covered by this warranty, NABRICO shall correct the nonconforming work by making repairs or replacements, at NABRICO's option and at NABRICO's expense, if NABRICO's examination shall disclose to its satisfaction that all or a portion of the NABRICO Product is defective. However, this warranty is conditional upon compliance by the Buyer or End User with loading, use and handling in accordance with good commercial practices of the trade, and NABRICO shall not be responsible for defects caused by misloading, overheating, improper cleaning, misapplication, physical abuse or from normal wear and tear. This warranty is void where any NABRICO Product has been altered or repaired by anyone other than NABRICO or its authorized agent.

THE WARRANTY AND REMEDIES SET FORTH HEREIN ARE IN SUBSTITUTION OF AND IN LIEU OF ANY AND ALL OTHER WARRANTIES AND REMEDIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE CONSTRUCTION, DELIVERY AND SALE OF A NABRICO PRODUCT, AND NABRICO SHALL, FOLLOWING SAID DELIVERY AND SALE, IN NO EVENT BE LIABLE TO BUYER OR ANY END USER FOR THE BREACH OF ANY WARRANTY, GUARANTY, OR REMEDY, EXPRESSED OR IMPLIED, IN FACT OR IN LAW, EXCEPT AS SPECIFICALLY SET FORTH ABOVE. EXCEPT AS PROVIDED HEREIN, NABRICO SHALL AT NO TIME AND IN NO EVENT BE LIABLE TO BUYER OR ANY END USER OR TO ANYONE CLAIMING TO OR THROUGH BUYER OR ANY END USER FOR LOSS OR DAMAGES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, DIRECT, INDIRECT, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFITS RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, ANY ACT, ERROR, OMISSION, NEGLIGENCE, STRICT LIABILITY, TORT, PRODUCT LIABILITY, OR OTHERWISE OF NABRICO, ITS EMPLOYEES OR SUBCONTRACTORS.

2008 EDITION



NABRICO PRODUCTS

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