



Tugger Winch



TRELLEBORG'S TUGGER WINCH

The new generation of mooring line heaving systems now offers improved safety and reliability.

For safe mooring operations it is imperative that heaving lines are in good condition. The use of poorly maintained or damaged heaving lines can result in breakages, endangering mooring crews or jetty personnel operating within the snap-back zone.

As an alternative to the traditional capstan, the heaving line is retrieved and spooled onto the enclosed drum of the "tugger winch". This enables the jetty owner / operators to control maintenance, providing increased safety and efficiency of mooring operations.



The integral tugger winch improves safety and efficiency of mooring line retrieval for onshore & offshore applications.

Benefits

- Remote control "hands free" line retrieval further increases safety and convenience for operators.
- Clutch to disengage drive for free spooling during payout and match the ships winch or line boat.
- A built in torque limiting clutch further reduces the risk of fouled lines parting during retrieval and payout.
- Spooling device for retrieval; automatically lays the heaving line neatly on the drum.
- The tugger winch may be fitted integral to the Trelleborg quick release hook base structure, reducing jetty space requirements and obstruction on the dolphin. Alternatively the winch can be supplied as a free standing unit.
- Storage of heaving lines is within the winch drum, keeping dolphin tops and walkways clear of heaving lines, reducing the risk of tripping and entanglement.
- Enclosed tugger winch drum offers increased protection from the environment, extending heaving line operating life.
- A rotational swivel and rope guide allows retrieval from any direction.
- A built in auxiliary capstan head provides traditional capstan winch operation.

DAM-CTW-01 Ver 4.0



Trelleborg Marine Systems' commitment to continuous product improvement means that we reserve the right to upgrade and modify equipment and systems without notice as technological and operational parameters demand.



1 GENERAL SPECIFICATIONS		
1.1	Line Pull	Typically 1000kg (Torque limited)
1.2	Line Speed	Pay Out : Free spooling to match ships winch or line boat Pay In : Variable speed from 10 - 45m/min
1.3	Holding Capacity	Approx. 1.5 Ton (automatic "failsafe" disk brake on motor)
1.4	Drum Capacity	120m of 14mm Dyneema (HMPE) rope
1.5	Support Structure	Integral Mounting With Hook Base Structure or free standing Refer to data sheet DAM-QRH-01
1.6	Key Standard Features	Auxiliary capstan winch to haul separate messenger and heaving lines
		Stainless steel lockable and hinged cover over assembly
		Spooling device
		Free spooling payout
1.7	Weight	500kg with control enclosure
2 WINCH CONTROLS		
2.1	Motor Starter	Variable Speed – Variable Speed Drive (VSD)
2.2	Motor Starter Enclosure	Non Hazardous Areas – Stainless steel GR316, IP66
		Hazardous Areas – Epoxy coated aluminium alloy, Explosion Proof, Zone 1 IIB, IP66
2.3	Control Stand Operators	Joystick Direction and Speed – payout / off / retrieve Note : All options fitted with local emergency stop on local enclosure and control stand
2.4	Incoming Power Connections	Cable Entry – 32mm Conductor Terminations – UP to 25mm ² stranded or 16mm ² solid
3 MOTOR		
3.1	Electrical	Supply Voltage – 3 phase, 380 to 415 @ 50Hz, 440 to 480 60Hz
		Power – 5.5 kW (Typical)
		Insulation – Class F Duty Cycle – S2 Note : Voltages outside these ranges available upon request
3.2	Motor Features	Single phase space heater for anti condensation Tropic proof windings IP66 "Failsafe" brake with holding capacity of 1.5 x motor torque
4 SURFACE TREATMENT		
4.1	Surface Treatment	Surface Preparation – Class 2.5 Blast* 1st Coat : nominal 75 µm DFT epoxy zinc-rich primer 2nd Coat : nominal 125 µm DFT two-part epoxy, containing MIO 3rd Coat : nominal 75 µm re-coatable two-part polyurethane Colour : gloss black * AS1627.4, USA, National Association Corrosion Engineers, NACE or Society for Protective Coatings, SSPC-SP10 Sweden, Sa 2-1/2)

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