

# **OUR**OFFSHORE SOLUTIONS

Due to the fast pace of globalization in recent years, it has become increasingly common for customers to send their specifications to winch suppliers at the very last moment and to request as many offers as possible for comparison purposes.

Despite the price difference often being only minimal, the very cheapest option is still frequently selected. While this might be beneficial for the intermediate buyer (since it gives them a higher margin), it is usually not the best decision for the end user/owner who, just two to three years after delivery, may face vessel downtime or high maintenance costs due to broken components or other general winch malfunctions. Such costs are usually many times higher than the initial price difference.

The owner faces not only the high cost of downtime and repair, but also potentially dangerous situations when a breakdown occurs during operation. At DMT Marine Equipment we are committed to prevention in the broadest sense of the word, and to ensuring that our winches always operate reliably and with the minimum of maintenance effort.

We are prepared to offer 36 months of warranty on the main components in order to demonstrate our belief that our quality concept makes a real difference. Thus, SIMPLY NO DOWNTIME.

DMT MARINE EQUIPMENT may not always offer the lowest price but we do offer the most competitive price. In the past, you as owner, have no doubt experienced high costs due to winch failures, such problems usually occur after the guarantee has expired or at a critical point in equipment operation.

We, together with many years of feedback from our clients and experienced team, do everything in our power to prevent any above-mentioned vessel downtime caused by the winch. This allows you to have confidence in your vessel and focus on your core tasks, unburdened by concerns that one of the most important piece of equipment on board may let you down.

Budget seems to be the most important consideration for many buyers nowadays and we are sometimes asked to reduce our prices. However, we refuse to compromise on quality. Instead, we explain to the customer exactly what our price includes, and what sets us apart from the so-called 'competition'. When the price-quality ratio is taken into consideration, our intelligently designed and low-maintenance winch concepts is truly unbeatable.

The following information provides an at-a-glance overview of the benefits of working with us to ensure minimal downtime and low maintenance costs.



DMT Offshore Solutions combine our top quality winches with state of the art monitoring and control systems. Delivered on a turn-key basis, we provide complete mooring systems offshore companies can rely on.

Besides our Mooring Solutions, we serve the Offshore sector with Taut Wire Positioning Reference Systems which are installed on vessels operating with Dynamic Positioning. These and more are presented through representative examples in the following pages.

# THE DESIGN OF OUR WINCHES

You need your winches robust & perfectly designed, to support your activity without failing you.

We understand your business and search to offer the best so you are profitable and never experience downtime.

All DMT winches are 100% in-house engineered at our ISO 9001:2008, 14001:2004, 18001:2007 certified office in Europe. The vast majority is built on custom basis and according to the requirements of naval class societies like GL, DNV, BV, LR, RMRS and RINA.

Through efficiently arranged production processes worldwide, we are able to deliver our equipment at a very competitive price level.

We work from a partner perspective with our customers, through a personal approach. By maintaining close dialogues with clients, we are committed to find technical solutions, with the dedication to deliver them as turn-key projects.

We are proud to have earned a reputation among shipbuilders and fleet operators around the world as a supplier of robust and reliable equipment.

High reliability and compact design are a must in harsh weather conditions as oftenly encountered during vessel operations.

Our closed gearboxes, sealed with water & leakage proof materials are designed to prevent spils, rust due to water spills and other weather based problems.

Our engineers, with their know-how and love for the product bring you the best solutions to fit your requirements and make sure they guide you through the entire process alongside our project managers, production team and of course our After Sales & Commissioning teams worldwide.

The following pages present and example of each type of offshore solution we can provide. There are no limitations regarding our design or production capabilities.



# **OUR**MOORING SYSTEMS

**DESIGN:** Custom

PULL: Up to 350 Tons BRAKE: Up to 650 Tons

**DRIVE**: Electric | Electric-Hydraulic | Diesel

**CONTROL:** Integrated control & monitoring for the entire mooring system

Fully automatic

OTHER: Complete with DP control



# **OUR**MOORING SYSTEMS

DMT Mooring Winches are very suitable for vessels which require multiple-point mooring applications for their scope of work. Our Mooring Winches are 100% custom built and are therefore tailored to the exact mooring needs of vessel owners and operators. They find a partner in DMT that takes full responsibility to deliver the perfect solution.

DMT Mooring Winches are installed on several vessels operating in the Northern European offshore industry. DMT works on a turn-key basis acting as sole contract partner to ship builders and vessel operators for the delivery of complete mooring solutions. To realize the best mooring configurations, we often cooperate closely with naval design bureaus in the earliest stages of a project. Our engineers frequently team up with naval architects, to include our CAD-design in deck arrangement plans and stability calculations.

With our turn-key mooring solutions we take responsibility for the entire system. This means we provide all necessary components, from the power packs in the engine room(s), all the way up to the anchors at the end of the lines. This includes the control stations on the bridge, the local stations on deck and all the required measurement and signalling electronics.

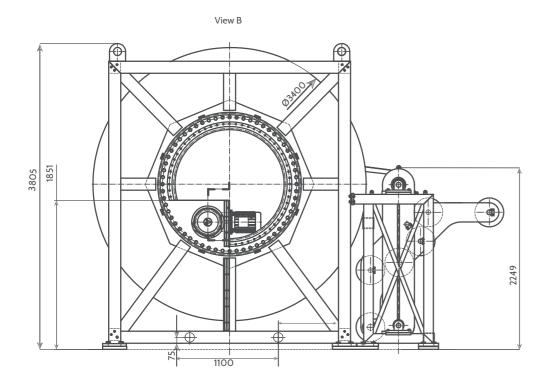
DMT mooring systems can be made in hydraulic and electric variants, with force and length measurement, constant tension operation and site vessel manoeuvring programs included in the software.







# OUR HOSE REEL WINCHES



**DESIGN:** Custom | NO limitations for the size

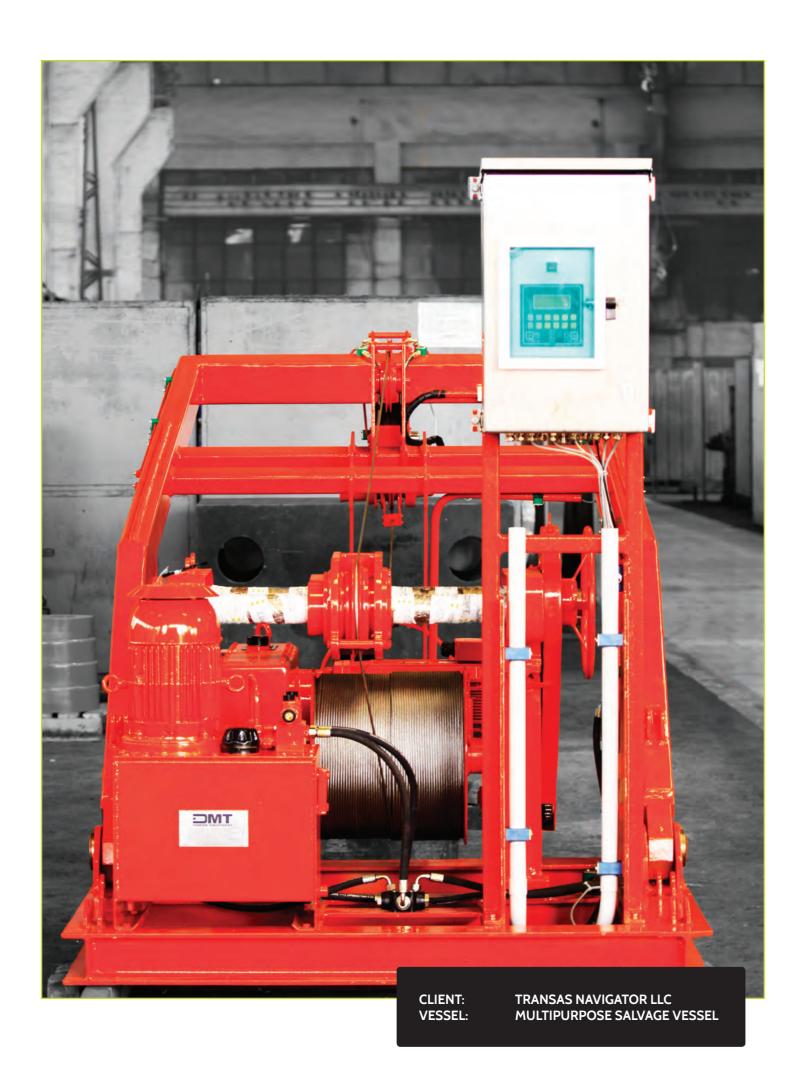
USE: Medium transportation

DRIVE: Electric | Hydraulic | Diesel

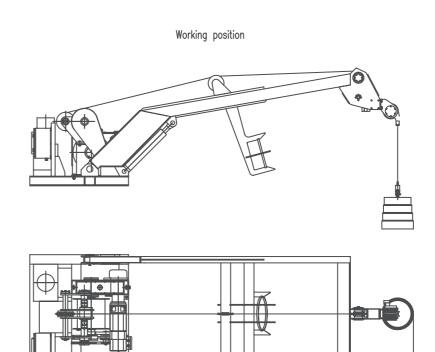
OTHER: Complete with hose of any type\*

The cooperation with our suppliers allows us to provide even the most sophisticated solutions according to the client's specific request.





# OUR MEGA GUARD TAUT WIRE POSITION REFFERENCE SYSTEMS



4860

DESIGN: Standard PULL: N/A BRAKE: N/A

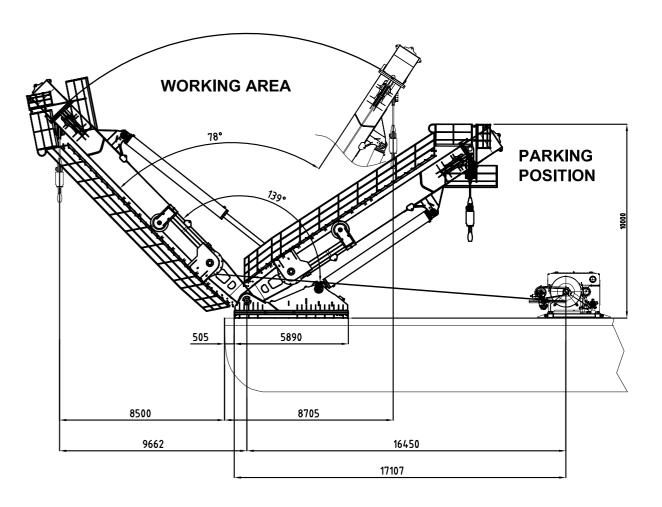
**DRIVE WINCH:** Electric drive for the winch DRIVE A-FRAME: Electric | Hydraulic

CONTROL: Included | Fully automatic

OTHER: DP system on request



## OUR A-FRAMES



SWL: 60 t at 8.5 m (Outboard) / 60 t at 8.7 m (Inboard)

WORKING CONDITION: Offshore/Subsea

DYNAMIC FACTOR: 1.3 (Offshore calm water)

DYNAMIC FACTOR: 1.7 (Subsea)

MAX. HEEL / TRIM: 2 / 5 (Offshore calm water)

MAX. HEEL / TRIM: 3 / 6 (Subsea)

MAX. WORKING RADIUS (Outboard): 8.5 m MAX. WORKING RADIUS (Outboard): 8.7 m CERTIFICATION: DNV

DESIGN TEMPERATURE: -20 C to +45 C ZONE CLASSIFICATION: safe zone

ATMOSPHERE: high in salinity up to 100% humidity

DMT MARINE EQUIPMENT produces a wide range of A-FRAMES designed to perform a multitude of offshore operations from offshore load handling to launch and recovery. The A-FRAME can be designed to include any specifications and can be adapted to any environment working conditions. The system is designed and produced in compliance with international rules and regulations and is certified by the desired Classification Society.

# OUR AIR WINCHES

#### **CABLE DRUM OPERATION**

STEEL WIRE ROPE
STORAGE CAPACITY
NOMINAL PULL / 1st LAYER
NOMINAL SPEED / 1st LAYER
NOMINAL PULL / 3d LAYER
NOMINAL PULL / 3d LAYER
BRAKE HOLDING FORCE / 1st LAYER

DRIVE

ROTATION NOMINAL FLOW NOMINAL PRESURE MAXIMUM PRESSURE IN SYSTEM 0 ÷ 1480 rpm 190 l / sec 6 bar 8 bar

Ø 22 mm

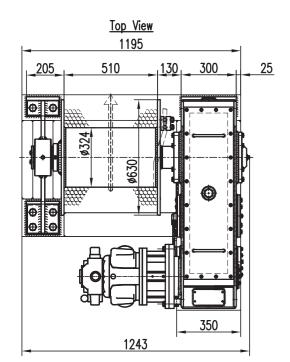
50 kN

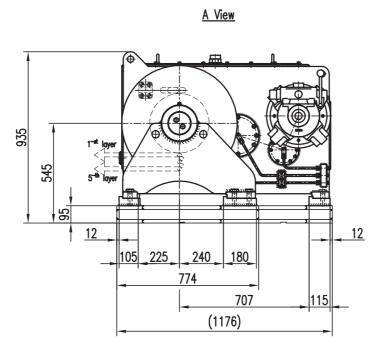
100 kN

150 m / 5 layers

0 ÷ 9,7 m/min 41,5 kN

0 ÷ 11,8 m/min















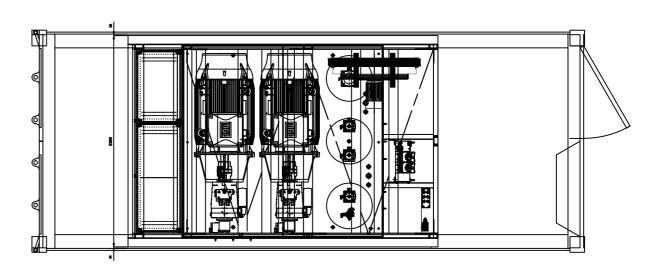
# **OUR**

The Hydraulic power unit is a stand alone, plug and play product in a containerized structure.

#### Technical data:

Maximum 300 bar with necessary flow of A frame total opening in maximum 6 minute. Necessary flow and pressure for the winch : 460 L / Nominal pressure 200 bar The HPU has the electronics integrated within, as a complete dedicated item housed in a containerized unit consisting of:

- Steel frame for the electric motors, mounted on shock absorbers
- 2 electric motors of 110 kW, 1485 rpm (at 50 Hz), maritime use, IP 56
- Power supply: 400 V / 50 HZ; Bell house and coupling
- Closed circuit pump (2 pc),
- Hydraulic oil reservoir approx. 3000L
- Level indicator (Low/Low-Low)
- Temperature indicator (T1 -T2)
- Return filter 10 mu, glass fibber elements
- Breather / filling cap (silica gel)
- Level gauge
- Industrial pressure transmitter 0-420 bar / 4-20 mA
- Air cooling of the hydraulic oil
- Manual control of the winch and hydraulic cylinder
- Antishock valves for smoot operation of the band brake and disc brake



## OUR BUOYS

DMT MARINE EQUIPMENT delivers buoys for offshore puproses which are produced according to the client's documentation and specific requirements.

The buoys are suitable to be anchored (stationary) or allowed to drift along the sea wave. Their construction is in high-quality steel grades including the ones of naval use with a thickness bigger than 10 mm.

The diameter of the buoys can be from 1 meter to 3 meters. The internal structure has a solid reinforcement and the coating is according to the client request.

The main characteristics of the buoys we deliver are high shock resistance and stability as well as the benefit of providing a long service life working under harsh marine conditions.





## DMT MARINE EQUIPMENT CONTACTS

DMT	MARI	NE	EQl	JIPM	ENT
The N	Jathar	lan	de		

Popovstraat, 7, 8013 RK, Zwolle, The Netherlands

Tel: +31 38 460 3304 Fax: +31 38 460 0803

sales.nl@dmt-winches.com

### DMT MARINE EQUIPMENT Russia

196158, Saint-Petersburg, Pulkovskoe shosse, 40-4, lit. A, office 8080

Tel: + 7 812 240 44 64 Fax: + 7 813 240 44 65

sales.ru@dmt-winches.com

### DMT MARINE EQUIPMENT China

6 Building, Run Yang Plaza Yangzhou 225009, China

Tel: +86 138 5221 9176 Fax: +86 514 8588 1767

## DMT MARINE EQUIPMENT Romania

Prelungirea Foltanului no. 13, COD 807325, Sat Costi, Comuna Vanatori, Galati, Romania

Tel: +40 236 406 006 Fax: +40 236 464 050

office.ro@dmt-winches.com

## DMT MARINE EQUIPMENT Singapore

Adress No. 66, Tannery Lane #01-05K, Sindo Building Singapore 347805.

Tel: + 65 984 148 66 + 65 833 382 13 Fax: + 65 629 497 21

sales.sg@dmt-winches.com

## DMT MARINE EQUIPMENT Australia

Tel: + 64 21 689 101 sales.australasia@dmt-winches.com

## DMT MARINE EQUIPMENT Ukraine

Buz`kiy bulvar 11 Nikolaev 54015, Ukraine

Tel: +380 512 366 542 Fax: +380 512 447 203

sales.ua@dmt-winches.com

### DMT MARINE EQUIPMENT Brazil

Av. Venezuela 27, sala 725/727 CEP: 20081-311, RJ, Brazil

Tel: +55 (21) 95 630 726 Tel: +55 (21) 95 612 957

sales.br@dmt-winches.com