RESTECH NORWAY

PLT® PNEUMATIC LINE THROWERS SAFETY, WORK & RESCUE







A Global Provider of Pneumatic Line Throwers





Restech Norway AS was established in 1989 by an officer from the Life Saving Organization.

Our main office is located in Bodø, a small city above the Arctic Circle in Norway.

Restech Norway AS is the manufacturer of the only Solas approved Pneumatic Line Thrower PLT®, and related high precision rescue and line throwing devices.

Our products are well known and recognized all over the world among users that needs a precise line-throwing tool. Both as a rescue tool and a working tool.

Some of our end users are Coast Guards, Ferries and Cruisers, Fire Brigades, Sea Rescue Organizations, FPSO-installations, Marine Police, Special forces, Terminals, Navy, Cargo and tanker vessels, Ocean Research and Offshore.





Ideal in oil and gas environment

Operated on compressed air, the PLT is a safe working tool for the operators in oil and gas environment.

It has become the standard tool around the world.



References

The PLT® is ideal for an oil and gas environment and will be found in use in many types of maritime operations. Depending on the operation and choice of projectile, six types, the PLT® can provide a safety zone from 50-200 meters.

These are some of our users who take advantage of the PLT® system.

A.P. Møller-Maersk AS Aker Marine Contractors AS

Aker Maritime

Aker Oilfield Services AS Aker Piping Technology

Aker Pusnes AS Alianca, Brazil

APL, National Oilwell Varco Atlantic Power & Gas

Bergesen Bluewater BOURBON

Bukser og Berging AS

BW Offshore

Canship Ugland Ltd

CBO

CGG Veritas Chevron UK

Colombia Shipmanagement Ltd. COSL Offshore Management Dalby Offshore Services Limited

Deep Sea Supply PLc

Dof Management

Dolphin Geophysical

. Eidesvik AS Elf UK

Euronav Ship Management

Exxon Mobil

Farstad Shipping ASA

Finarge Armamento Genovese S.R.L.

Fred Olsen & Co. Fronape, Brazil Fugro Geoteam

GC Rieber Shipping AS GEMS Survey Limited Golar Nor Offshore AS Gulf Offshore Norge A/S Havila Offshore AS

Heerema Marine Contractors Ned. BV

Hoyland Offshore AS Hydro Olje & Energi

INTERUNITY Management Corp.
Island Offshore Management AS
Japan Vietnam Petroleum Company

Ltd

Knutsen OAS Shipping AS Louis Dreyfus Armateurs

Maersk Drilling Maersk FPSOS Maersk Oil

Management Pte Ltd Marathon Petroleum

Mobil UK

Modec International LLC

Mowinckel Ship Management

Møkster Safety AS

Naftomar Shipping & Trading Co.

Norfield Shipping AS

Ocean Rig

Odfjell Drilling Technology Odfjell Well Services

OMS UK

OSM Offshore AS

Petrobras Transporte S.A.

Petrobras, Brazil PGS Production AS

Rederij Waterweg B.V.Holland

Remoratech

SBM-Single Buoy Moorings,

Monaco Shell UK

Simon Møkster Shipping A/S

Statoil Petroleum

Stolt Comes Seaway Ltd

Subsea 7

Swire Pacific Offshore Operations

Teekay Coorporation

The Torvald Klaveness Group

Thome Ship Transpetro, Brazil

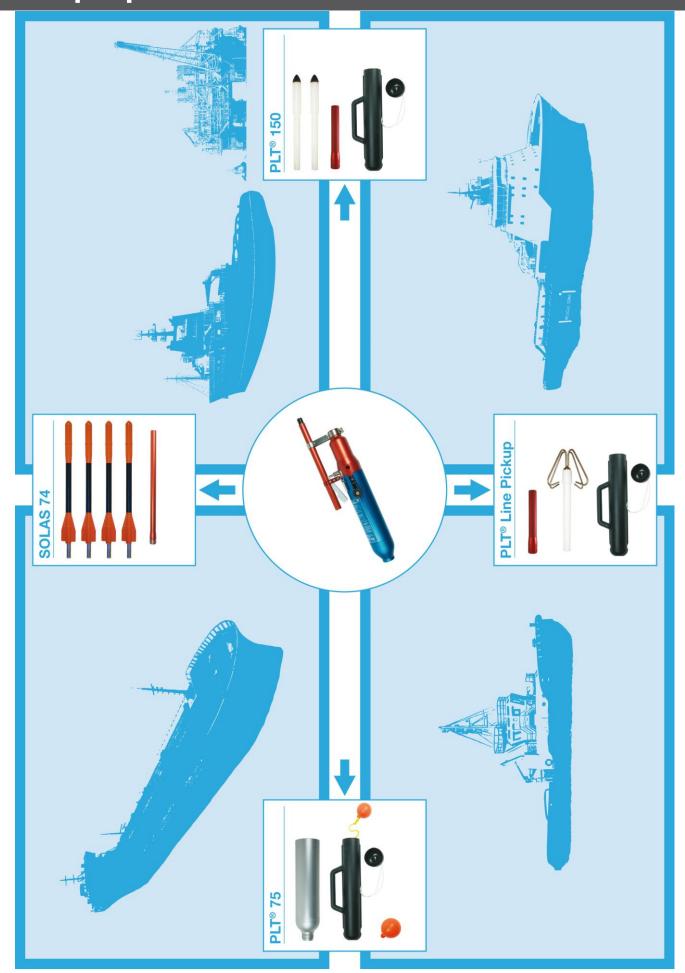
Ugland Marine Services AS

V.Ships Norway AS

Varun Shipping Company Limited



Multipurpose Tool



PLT[®] Launching Unit





No explosives No expiry date High precision

Article 1306	Air Cylinder	1
	200 or 300 bars (2900/4350psi).	
Article 1000	Launching Unit	1
Article 1017	Cover for air cylinder	1

The launching unit contains an air cylinder for filling of compressed air up to 200/300 bars (2900/4350psi). This is sufficient for 4/6 launches before refilling is necessary. The air cylinder is fitted with standard fittings for diving and BA-equipment for filling of dry and clean air from a high-pressure compressor.

- Launching distances up to 250m
- 4-6 multiple launches
- Can comply with IMO/SOLAS regulation 74/83
- 6 types of projectiles





Pivot Support

Due to the heavy recoil it is necessary to have a good support for the PLT.

We recommend using the Pivot Support. A steel tube can be welded or clamped at the launching areas (rail, i.e.).

In rough seas the Pivot will help personnel to keep balance and focus on aiming.

Solas Upgrade





If you already have a PLT Launching unit, you can upgrade to also comply with your LTA requirements, Solas 74. The set has no expiry date, is reusable and non-dangerous.

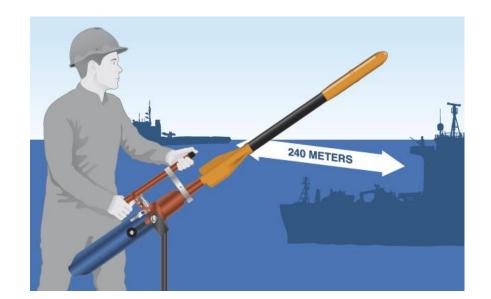
NB! Needs the PLT Launching Unit to be operated and comply with Solas

Article 1303	Launching Tube Rescue 230	1
Article 2101	Projectile Rescue 230	4
	Typical shooting range with a dry and clean line of 3,2mm (Art No 2103): 230m. Breaking strength: 2000N	

In order to reload the line back into the projectile a reloading kit is necessary.



Needs the PLT Launching Unit to be operated and comply with Solas



NO EXPIRY DATE

The PLT Rescue 230 meets the IMO Solas regulation 74. You can launch 4-6 times without refilling the air cylinder.

Certificates:

- DNV MED B 9174 and Type Approval
- DG Shipping Approval 19-NT(3)/2013 CCS BG15T00008
- US Coast Guard -160.040/ECO575/9174

150 Upgrade

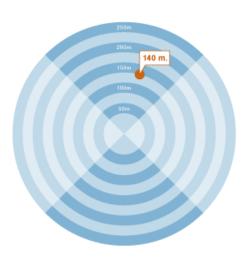


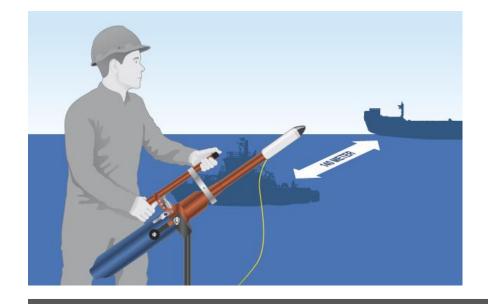


Medium range line transfer

NB! Needs a PLT Launching Unit to be operated

Article 3303	Launching Tube 125/150			
Article 7004	Projectile PL T 150	2		
	Typical shooting range with a dry and clean line with 3,2mm(Art No 2103): 140m			
Article 5202	Linebox 3,2mm nylon	1		
	Linebox containing 150m (164 yd) of 3,2mm (0.13 in) (Art No 2103) of line. Used for maximum range for projectile Art no 7004. Breaking strength: 200kg			





Operations

The rubber tipped projectile can reach up to 140 meters and pulls the line after itself.

It is commonly used for Line transfer between FSO/FPSO and tanker and in Oil Spill operations.

Depending on your line requirements the launching distance will vary.



75 Upgrade

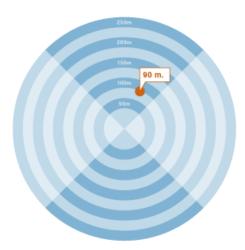




Short range Line Transfer

NB! Needs a PLT Launching Unit to be operated.

Article 6303	Launching Tube PLT 75	1
Article 6101	Projectile Ball	2
	Typical shooting range with a dry and clean line with 5mm (art no. 6109): 90m	
Article 6201	Line box 5mm floating line	1
	Line box containing line art no 6109, polypropylene (120m). Breaking strength 440kg. Floats and has a very bright yellow color. Breaking strength: 440kg.	





Operations

Launches an orange rubber ball that pulls a 5mm bright yellow floating line up to 90 meters. The ball can land on deck and it is filled with a liquid in order to avoid bouncing and freezing.

The PLT 75 increases your safety zone for your equipment and personnel.

It is commonly used in towing, vessel to vessel, docking and general line transfer operations.



Line Retrieval Upgrade

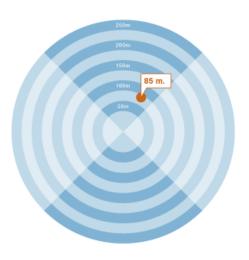


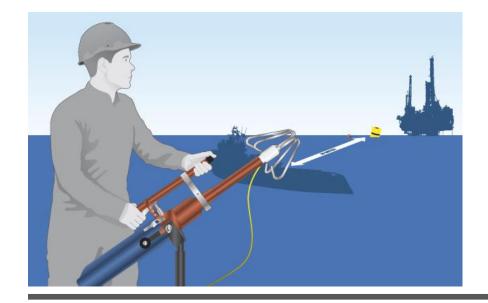


Picks up lines at medium range.

NB! Needs a PLT Launching Unit to be operated.

Article 3303	Launching Tube 125/150	1
Article 7002	PLT Line Pick-up Grapple	1
Article 6201	Line box 5mm floating line	1
	Line box containing line art no 6109, polypropylene (120m). Breaking strength 440kg. Floats and has a very bright yellow	
	color. Breaking strength: 440kg.	





Operations

Used for Emergency Towing, Bunkering, Streamer pick up and Anchor Handling.

The PLT is used by Anchor Handlers to safely and effectively grab the anchor buoy soft line. This is done by having a secondary small buoy attached to the free end of the soft line.

You can launch the Line Pick-up Grapple up to 85 meters from a safe and elevated spot on your vessel.



R 150 Upgrade

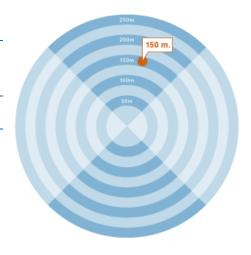


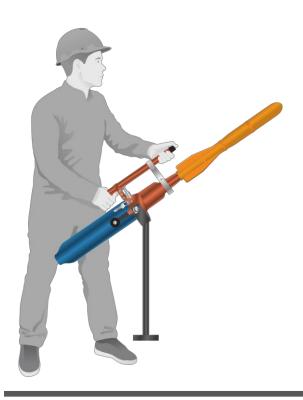


Medium range line transfer Re-usable

3101	R 150 Projectile	2
	The line is stored inside the projectile. Made from ABS plastic and aluminum. Typical shooting range with a dry and clean line of 3,2mm is 150 meters. Breaking strength is 200kg	
3303	150 Launching Tube	1

In order to reload the line back into the projectile a reloading kit is necessary.





Operations

Ideal for quick response operations for emergency towing, FPSO, standby and rescue vessels that uses the PLT Launching unit.

The line is stored inside the projectile and ready to launch right away in an emergency situation.

The projectile reaches 150 meters.



Rescue Buoy





This is a re-usable projectile that contains an automatic inflatable life buoy.

It will inflate within 2 seconds after entering the water. The Rescue Buoy can be used with both the PLT Mini and the PLT Launching Unit with the 150 Launching Tube.

Article 4105 Rescue Buoy

Typical shooting range with a dry and clean line of 3,2mm with the PLT is 115 meters. Breaking strength is 200kg

Typical shooting range with a dry and clean line of 2mm with the PLT Mini is 80 meters. Breaking strength is 190kg

The inflator has an expiry date and uses a 33 gram CO2 cartridge



Operations

The PLT Rescue Buoy reaches 115 meters with a 3.2 mm line. It is commonly used onboard standby and rescue vessels.



PLT Mini Launching Unit

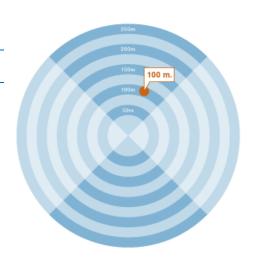




The PLT® Mini consists of a launching unit, several types of projectiles and a launching tube.

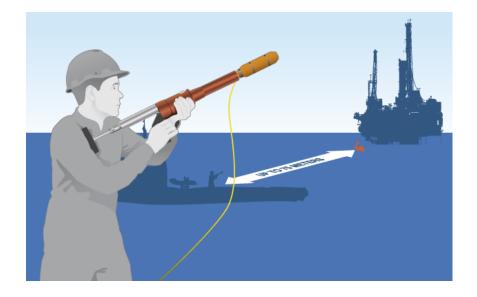
Article 4020 PLT Mini Launching Unit

Complete Launching Unit



Launching Unit

The Launching Unit can be used with either disposable 33 grams CO2 cartridges or compressed air from a high-pressure air cylinder. CO2 is commonly used during operations for easier maneuvering.



Operations

High maneuverability Launched from shoulder Medium range operations



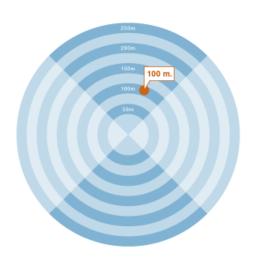
PLT[®] Mini Complete





Ideal for smaller rescue vessels or where high maneuverability is needed at sea or land.

Article 4020	PLT Mini Launching Unit	1
A .: 1 4464	D. J. W. DITMELAN	
Article 4101	Projectile PLT Mini 100	2
Article 4102	Projectile PLT Mini Rubber	1
Article 4200	Loading Device	1
Article 4202	Line box 2mm-nylon line	1
	Line box containing safety line (90m of art no 4110). Breaking strength: 190kg	
Article 4006	Disposable 33gr C02 cartridges.	1
	Comes in a 4-pack. Note that these can be shipped by Air as dangerous goods.	
	Other options of line on request User Manual and USB Stick included	





Operations

The Mini is a light weight shoulder launched line thrower. It is very popular among users both at sea and on land, who requires a mobile linethrower. We currently have 7 different projectiles that can be used in various types of operations with a wide range of lines.



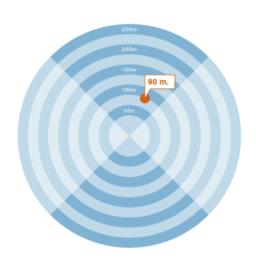
PLT[®] Mini Rescue Pack

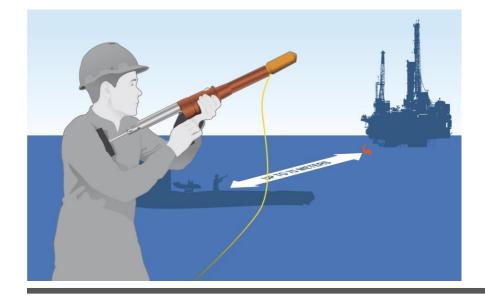




Ideal for smaller rescue vessels or where high maneuverability is needed

Article 4020	PLT Mini Launching unit	1
Article 4006	CO2 cartridge 4-pack	5
A :: £! = 1 = . 4.4.0.4	Desirable DLT Mini 400	0
Article 4101	Projectile PLT Mini 100	2
	Typical shooting range with a dry and clean line of 2mm (Art No 4110) and Projectile PLT Mini 100 art no 4101: 100m.	
Article 4102	Projectile PLT Mini-rubber	1
	Typical shooting range with a dry and clean line of 2mm (Art No 4110) and Projectile PLT Mini-rubber art no 4102 : 90m Breaking strength : 190kg	
Article 4104	Lightstick (5-pack)	1
Article 4200	Loading device	1
7111010 1200	Loading do not	
Article 4202	Line box PLT Mini 2mm nylon	2
	Other options of line on request User Manual and USB Stick included	





Operations

The Mini is a light weight shoulder launched line thrower. It is very popular among users both at sea and on land, who requires a mobile linethrower. We currently have 7 different projectiles that can be used in various types of operations with a wide range of lines.



PLT Mini Projectiles



PLT[®] Mini 100 100 meters



PLT[®] Mini Rubber 90 meters



PLT[®] Mini Line Pick-up Grapple 70 meters



PLT[®] Mini Sharp-Grapple 70 meters



PLT[®] Mini-Rescue Buoy Inflates in 2 sec. 80 meters



PLT[®] Mini Rubber tip 95 meters



PLT[®] Mini Entering Grapple 3 30-65 vertical meters





Waterproof, resistant to chemicals, humidity, dust.

Article 4100	4100 Container	

		Length	Width	Depth	Lid	Base
Internal dim.	mm	580	440	220	60	160
External dim.	mm	650	510	245		

- Made of Copolymer Polypropylene compound
- Resistant to harsh temperatures (-33°C / +90°C)
- Jam-free purge valve and latches
- Recommended for professional applications



Certifications

2002/95/EC Conformity with the Directive 2002/95/EC

DEF STAN 81-41 (level J)

IP67 Dustproof - Waterproof

MIL-STD 810F Mod. 5822







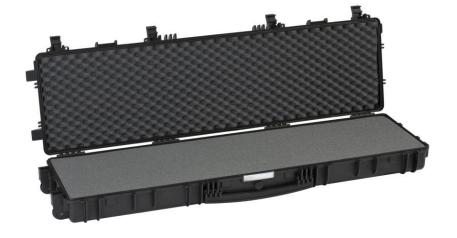
Waterproof, resistant to chemicals, humidity, dust.

Article 9400	9400 Container	

		Length	Width	Depth	Lid	Base
Internal dim.	mm	1350	350	135	42	93
External dim.	mm	1410	415	159		



- Made of Copolymer Polypropylene compound
- Resistant to harsh temperatures (-33°C / +90°C)
- Jam-free purge valve and latches
- Recommended for professional applications



Certifications

2002/95/EC Conformity with the Directive 2002/95/EC

DEF STAN 81-41 (level J)

IP67 Dustproof - Waterproof







Waterproof, resistant to chemicals, humidity, dust.

A =4: =1 = 0.404	0404 Cantainan	
Article 9401	9401 Container	

		Length	Width	Depth	Lid	Base
Internal dim.	mm	939	352	137	43	94
External dim.	mm	989	415	157		



- Made of Copolymer Polypropylene compound
- Resistant to harsh temperatures (-33°C / +90°C)
- Jam-free purge valve and latches
- Recommended for professional applications



Certifications

2002/95/EC Conformity with the Directive 2002/95/EC

DEF STAN 81-41 (level J)

IP67 Dustproof - Waterproof







Waterproof, resistant to chemicals, humidity, dust.

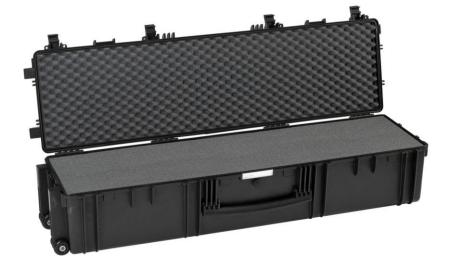
Article 9500	9500 Container	

		Length	Width	Depth	Lid	Base
Internal dim.	mm	1350	350	272	42	230
External dim.	mm	1430	415	296		



- Resistant to harsh temperatures (-33°C / +90°C)
- Jam-free purge valve and latches
- Recommended for professional applications





Certifications

2002/95/EC Conformity with the Directive 2002/95/EC

DEF STAN 81-41 (level J)

IP67 Dustproof - Waterproof



Bag 94





Padded to protect the equipment. Inclusive of a number of features to secure Launcher together with necessary accessories.

Article Bag 94 Bag 94

L 940 mm W 300 mm D 70 mm

BAG 94 is designed to perfectly fit into our storage container 9401. Built with durable, 600D tear resistant polyester and robust zipper with lockable Velcro pull zipper for the main compartment. The main compartment features two neoprene hook-and-loop side flaps and adjustable straps to secure parts. The front central compartment is equipped with adjustable interior straps to secure smaller parts.

The two side smaller pouches are designed to storage accessories. Both the main and front compartments are padded on all sides to protect and transport gear.

This bag features top and bottom compression straps and come with a removable shoulder strap. Personal ID window on the backside and front removable hook-and-loop screen-printable band.



Extras

The bag can easily become a backpack by fixing the BACKPACK KIT in its rear side (see BACKPACK KIT for more details).



Bag 135





Padded to protect the equipment. Inclusive of a number of features to secure Launcher together with necessary accessories.

Article Bag 135 Bag 135

L 1300 x W 300 x D 70 mm

BAG 135 is designed to perfectly fit into our storage container 9400. Built with durable, 600D tear resistant polyester and robust zipper with lockable Velcro pull zipper for the main compartment. The main compartment features two neoprene hook-and-loop side flaps and adjustable straps to secure parts. The front central compartment is equipped with adjustable interior straps to secure smaller parts.

The two side smaller pouches are designed to storage accessories. Both the main and front compartments are padded on all sides to protect and transport gear.

This bag features top and bottom compression straps and come with a removable shoulder strap. Personal ID window on the backside and front removable hook-and-loop screen-printable band.



Extras

The bag can easily become a backpack by fixing the BACKPACK KIT in its rear side (see BACKPACK KIT for more details).



Backpack Kit





Padded to protect the equipment. Inclusive of a number of features to secure Launcher together with necessary accessories.

Article Backpack Kit Backpack Kit

Practical and easy to fix kit to turn the bags into backpacks to safely transport your PLT.

The detachable, padded shoulder straps, clip right in the back of the bags D-rings.

The ergonomic straps are designed to be fully adjustable in length.





Types

It works on BAG 94 and BAG 135. Color: black



PLT Wall Mount







Module A right Module B left

Article 9012	PLT Wall Mount	Qty
Module A	PLT Base unit and its parts (5)	1
Module B	Projectiles and extra equipment (6)	1



over/under (600mm wall space) or Side by side (1200mm wall space)

The height is given by the length of base unit (670 mm) and projectiles (1220mm) Each module consists of 2 parts (bottom bracket and strapping bracket)

Weight:

Empty brackets: 5,2 kg

Weight with equipment: approx. 28 kg



The



The brackets are made of PE polyethylene plates welded and soft rounded according to regulations.

Material

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