



MARINE & OFFSHORE LUBRICANTS



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Wire
Ropes



Propeller
Caps



Marine
Environment



Rudder
Carrier
Bearings



Open
Gears



APPLICATION AREAS



Oil to Water
Interface

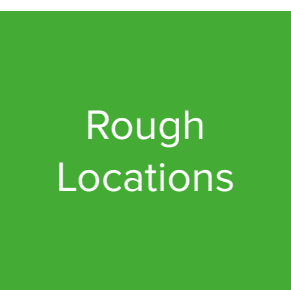
Deck
Piping / CUI



Hydraulic
Oils



Deck
Machinery



Rough
Locations



Offshore
Oil & Gas



Jacking
Equipment

An underwater scene featuring a variety of marine life. In the foreground, there are several bright yellow fish swimming near a dark, rocky reef with red coral. A small, striped fish is visible on the left. In the background, a large, faint, translucent fish is visible against a blue, slightly hazy water background. The overall scene is vibrant and colorful.

Our Mission:

LanoPro shall offer high performance specialty lubricants with minimal environmental impact

Our Vision:

Making environmentally friendly lubricants the preferred choice



About LanoPro

LanoPro is an independent company focusing on developing and offering high performance environmentally friendly and specialty lubricants.

We market and supply our range of lubricants globally through our world wide stock points and regional distribution & sales partners.

Since our inception in 2006 we have been investing and focusing on developing high performance specialty lubricants in response to the increasing demand for environmentally friendly / biodegradable lubricants.

LanoPro is today offering an extensive range of Environmentally Acceptable Lubricants (EALs) and specialty lubricants for Marine, Oil & Gas and General Industry applications.

Unique technology, environmentally friendly, compliant, high performance and corrosion protection prevention lies at the core of our lubricants' properties. Simultaneously the products have all the favorable characteristics common to conventional petrochemical based solutions.

LanoPro is proud to offer a comprehensive range of specialty greases & oils with over a decade of proven track record with premier end users. Through our well progressed sales & distribution channels and world class supply partners we offer high performance & conventional lubricants at commercially competitive terms.

Our office locations include Singapore, Oslo and Gothenburg.

WHY LANOPRO?

- *Quality and Compliance*
Specialty Performance Products
- *Commercially Competitive*
One Global Price
- *World Wide Distribution*
High Availability
- *Proven Supplier*
Strong Track Record



WHAT DO WE SUPPLY?

EAL Lubricants

Greases

Hydraulic Oils

Oils

Coatings

Mineral Lubricants

Greases

Specialty Products

Leak Stop

Auto Line



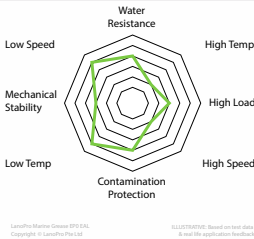
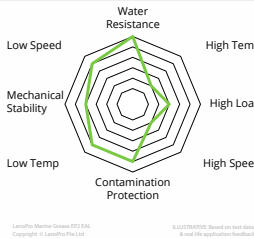
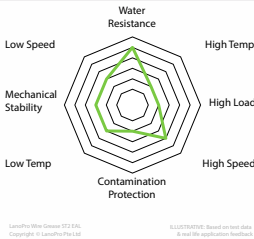
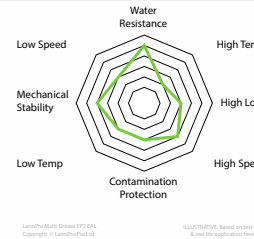
ENVIRONMENTALLY ACCEPTABLE LUBRICANTS *

Product	NLGI	Thickener	Temp Range	Dropping Point	Worked Penetration	Applications
LanoPro Multi Grease EP0 EAL	0	Calcium	-20°C to +80°C	>140°C	355-385	Deck-equipment, slides, hinges, propeller cap, stern roller, rudder carrier.
LanoPro Multi Grease EP2 EAL	2	Calcium	-20°C to +80°C	>140°C	265-295	Deck-equipment, slides, hinges, propeller cap, stern roller, wire rope.
LanoPro Marine Grease EP0 EAL	0	Calcium	-40°C to +100°C	>140°C	355-385	Deck-equipment, slides, submerged pumps, stern roller, rudder carrier.
LanoPro Marine Grease EP2 EAL	2	Calcium	-40°C to +100°C	>140°C	265-295	Deck-equipment, slides, sub-merged pumps, stern roller, wire rope.
LanoPro Universal Grease HD2 EAL	2	Lithium complex	-30°C to +140°C	>260°C	265-295	Multi-purpose, roller bearings, ball bearings, sliding bearings, .
LanoPro Wire Grease ST2 EAL	2	Inorganic	-10°C to +90°C	Not applicable	265-295	Wire rope, mooring wires, davit wires, towing wires, crane wires, umbilicals.
LanoPro Lube Paste ST2 EAL	2	Inorganic	-10°C to +90°C	Not applicable	265-295	Slides, hinges, rollers, slowly moving parts, slipways, mechanisms.
LanoPro Offshore Grease HD2 EAL	2	Lithium / Calcium	-30°C to +100°C	>260°C	265-295	Jack-up equipment, heavy duty open gears.

Product	Flash Point	Pour Point	Visc @ 40°C	Visc @ 100°C	Viscosity Index	Applications
LanoPro Hydraulic 32 EAL	>260°C	-40°C	31	7	196	Heavy-duty hydraulic systems that are required to operate at high pressures.
LanoPro Hydraulic 46 EAL	>270°C	-40°C	46	9	182	Heavy-duty hydraulic systems that are required to operate at high pressures.
LanoPro Hydraulic 68 EAL	>270°C	-39°C	70	12	176	Heavy-duty hydraulic systems that are required to operate at high pressures.
LanoPro Hydraulic 100 EAL	>260°C	-39°C	103	17	174	Heavy-duty hydraulic systems that are required to operate at high pressures.



ENVIRONMENTALLY ACCEPTABLE LUBRICANTS

Product	Product	Product	Product
LanoPro Marine Grease EPO EAL	LanoPro Marine Grease EP2 EAL	LanoPro Wire Grease ST2 EAL	LanoPro Multi Grease EP2 EAL
Performance	Performance	Performance	Performance
 LanoPro Marine Grease EPO EAL Copyright © LanoPro Pty Ltd ILLUSTRATIVE: Based on test data & real life application feedback	 LanoPro Marine Grease EP2 EAL Copyright © LanoPro Pty Ltd ILLUSTRATIVE: Based on test data & real life application feedback	 LanoPro Wire Grease ST2 EAL Copyright © LanoPro Pty Ltd ILLUSTRATIVE: Based on test data & real life application feedback	 LanoPro Multi Grease EP2 EAL Copyright © LanoPro Pty Ltd ILLUSTRATIVE: Based on test data & real life application feedback
NLGI	NLGI	NLGI	NLGI
0	2	2	2
Thickener	Thickener	Thickener	Thickener
Calcium	Calcium	Inorganic	Calcium
Base Fluid	Base Fluid	Base Fluid	Base Fluid
Synthetic esters	Synthetic esters	Proprietary blend	Polymer vegetable oil
Temp Range	Temp Range	Temp Range	Temp Range
-40°C to +100°C (max +110°C)	-40°C to +100°C (max +110°C)	-10°C to +90°C	-20°C to +80°C (max +100°C)
Applications	Applications	Applications	Applications
Deck-equipment slides, hinges submerged pumps propeller cap, stern roller rudder carrier.	Deck-equipment slides, submerged pumps, stern roller, wire rope.	Mooring wires, davit wires, towing wires, crane wires, umbilicals, wire rope.	Deck-equipment slides, hinges, propeller cap, stern roller, wire rope.

EQUIPMENT OVERVIEW



VIPER WIRE LUBRICATOR provides fast and effective lubrication of wire ropes at speeds up to 2,000m per hour. 3 VIPER kits are available covering following dimension ranges: 6-36mm (Mini), 8-67mm (Mid) and 50-165mm (Maxi). Whilst at the same time achieving more thorough results by forcing quality lubricant under high pressure right through to the core of the wire rope.



LANOPRO PRESSURE SPRAYER is designed and developed to enable effective application of oils, coatings and cleaning products. It can efficiently spray oils and coatings on various applications such as wire ropes, pipes, coils, tools, metal surfaces, equipment etc. The Pressure Sprayer is equipped with a heater in order to achieve an optimum viscosity of the oil / coating during application and maximize penetration.



BIO REGULATIONS

Vessel General permit - VGP

Environmentally Acceptable Lubricants (EAL) – Mandated by U.S. Environmental Protection Agency (EPA).

The EPA implemented the Vessels General Permit (VGP) which entered into force in December 2013.

The VGP applies to all vessels above 79ft trading on U.S. ports and mandates such to use Environmentally Acceptable Lubricants (EAL) in all oil-to-sea interfaces, unless technically unfeasible, which covers applications / equipment such as stern tubes, rudder & thruster bearings, controllable pitch propellers, thrusters, stabilizers, wire ropes and other equipment subject to water interface / immersion.

DNV states: “However, any ship components that can potentially cause the leakage of lubricants into the sea are in principle to be considered according to the VGP”.

The legislation has denied ‘technically unfeasible’ being valid under certain situations such as:

- An EAL not being available or approved by the manufacturer for use in certain equipment
- Pre-lubricated equipment (e.g. wire ropes) have no available alternatives manufactured with EALs
- EAL lubricants meeting manufacturers’ specifications not being available at the ports in which the vessel operates

- Use of an EAL must wait until the vessel’s next dry-docking prior to being able to conduct a change-over

EAL compliance declaration is issued by the lubricant producer through 3rd party accreditation in accordance with national / regional Labeling Programs which have been approved by the EPA.

OSPAR Convention

- Introduced 1992 and short for “Oslo Paris convention”
- Premise for participating governments local legislation: All offshore oil & gas operation in North Atlantic
- HOCNF format (Short for the harmonized certificate for chemicals needed to be acceptable for Operators to use) is the strictest bio-regulation globally and applies to the Oil & Gas/Onshore industry in the region
- The Contracting Parties comprise fifteen governments which ensure enforcement
- LanoPro products and its components have been evaluated by independent laboratories in Norway in accordance with the OSPAR Harmonised Offshore Chemical Notification Format (HOCNF). Third party compliance confirmation has been issued by Add Novatech AS in Norway, confirming the product is an EAL according to the Vessels General Permit regulation, according to EPA’s definition.
- OSPAR is one of the EPA approved labeling programs for EALs



“Due to the good feedback received from our crew, the technical performance of the lubricants and favorable commercial terms we have since 2013 fully rolled out LanoPro’s complete marine product range across our entire fleet. I would like to in particular highlight the quality and performance of their VGP EAL approved lubricants. LanoPro has proven to be a reliable and professional supplier in terms of order management, on-time deliveries and high product availability across their stock points globally.”

Surajit Chanda

General Manager and Head of Fleet Supervision

BW Fleet Management



“We have been using LanoPro’s wire rope lubricants since the beginning of 2010, initially starting off with their wire oils on selected vessels. Due to good feedback received from our crews, the technical performance of the lubricants and favorable commercial terms we are now using LanoPro as the primary supplier of our wire rope lubricants across our fleet. By using LanoPro’s lubricants we have experienced pro-longed life time of our wire ropes enabling us to optimize our operation and costs.”

Victor Kjøde

Crane Operation Supervisor

Solstad Shipping AS

D | S | R



“We would like to highlight the strong results obtained from our internal testing, the technical performance of the lubricants and responsiveness from the Lanopro team both in Europe and locally here in Korea. This combined with favorable commercial terms has resulted in a partnership over the last years where we now are using Lanopro EAL wire grease on our EAL wire rope products. Lanopro has also proven to be a reliable and professional supplier in terms of order management, on- time deliveries and general business manners.”

Mr. Kim Minyong

QM Team manager

DSR Wire Corp



“We have tested the Wire Grease ST2 EAL on our vessel and the sea staff have come back with the following comments; The product is very good and better than existing wire grease. It lubricates wires well, is resistant to cold weather and they would recommend for future supply.”

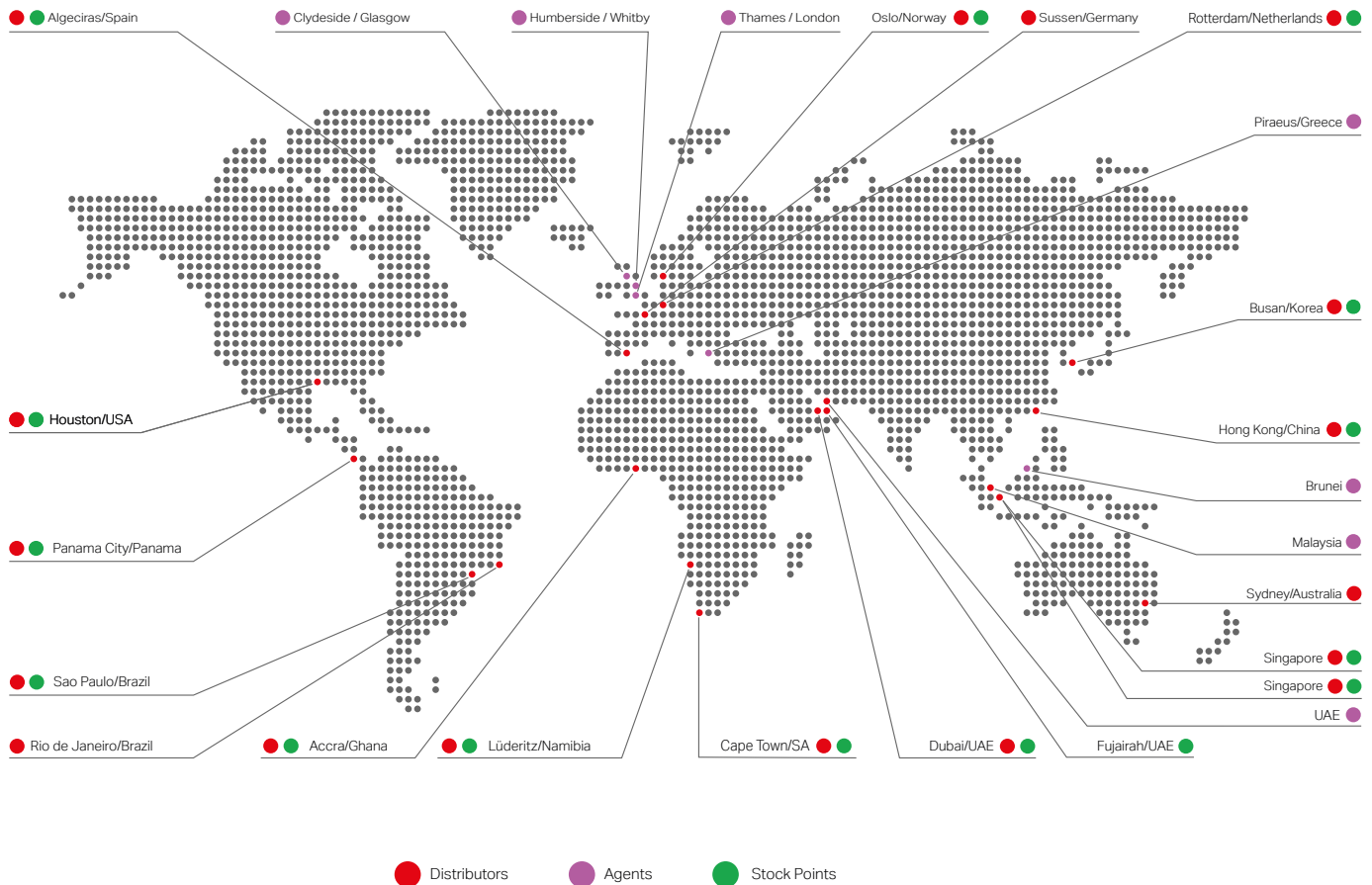
Mike Seymour

Technical Manager

London Ship Managers



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●	Enerchem International (HK) Ltd	Hong Kong	+852 3978 0068	rudy@falchem.net	falchem.sg
●	Enerchem	Brunei	+65 6257 9923	cs@falchem.net	falchem.sg
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●	Siort Pty Ltd	Australia	+61 1300 706 952	sales@siort.com.au	siort.com.au
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●	Centralam	Panama	+507 317-62-00	mail@centralam.net	centralam.net
●	Adex Group	Brazil	+55 (11) 5897-7832	contact@adexgroup1.com	adexgroup1.com



APPROVALS & OEM`S

Environmentally Approvals	Explanation	Website
HOCNF	Harmonised Offshore Chemicals Notification Format	www.miljodirektoratet.no/en/
SS 155470	Swedish Standard	www.sp.se/km/grease
EU ECOLABEL	European Certicifation for various products	www.ecolabel.eu
ACHILLES	Supplier approval for the offshore industry	www.achilles.com
Other Approvals	Explanation	Website
IMPA	International Marine Purchasing Association	www.impa.net
OEM`S		
Thordon Bearings Inc.	Qualified for Rudder Bearings	www.thordonbearings.com
Bijur Delimon International	Qualified for Central Lubrication Systems	www.bijurdelimon.com
MOL Techno-Trade, Ltd	Qualified for Boss Cap Fins	www.motech.co.jp/e_index.html
DSR	Qualified for Power Flex and Power Lift Wires	www.dsr.com:5001/main/?l=ENG
Flutek Ltd.	Qualified for Rudder Bearings	www.flutek.co.kr/eng/main.php
SEC Bremen	Qualified for Container Lashing	www.sec-bremen.de
MMG Meckelburger Metallguß	Qualified for Propeller Cap Filling	www.mmg-propeller.de/en.html
JUNG-A Marine	Qualified for Various Deck Equipment	www.jung-a.co.kr



REFERENCE LIST

Company	Company	Company	Company
Aker Solutions	Flutek	Manho Rope & Wire	Statoil
Angelicooussis Shipping Group	Frontline	Maran Gas Maritime	Tankerska Plovidba
Anglo-Eastern	GulfMark	MOL	Teekay
Baker Hughes	Hyundai Heavy Industries	MOL Techno Trade	Thome
BW Fleet Management	IKM Instrutek	MSC	Thordon
Carl Stahl	Island Offshore	Rolls-Royce	TORM
Capital Maritime	Knutsen Shipping	Schlumberger	Trafalgar Oil Ltd.
Central Mare Inc.	Lomar Shipping	Scorpio Tankers	Transnet SOC
DOF Offshore	London Ship Managers	SEC	Wet Wave
DSME	Maersk Line	SHI	World Fuel Services
DSR	Maersk Oil Trading	Solstad Farstad	



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BRO.300.10