#### A positive start of 2021

Finally winter is ending and slowly everyone could enjoy some nice weather, going outside and enjoy the sun. It looks like that 2021 will become the year we are finished with COVID-19 as all of us will receive the vaccines.

RMN finished the year 2020 with a positive look back on results, welcomed many new customers and expanded our range of distributorships. Due to all requests we receive on lighting and ATEX we are still busy to expand our range of products in this fields. The company TEP Ex is now also part of our distributorships network, which makes us able to offer an even larger product range than before.

Together with Wencon we have made a fantastic agreement for global repair operations cooperating with Gardit, a large service partner in Denmark. Also a good cooperation starts with major exhaust gas scrubber manufacturers in the same way as we have with engine manufacturers. Aftersales service becomes very important and together we are able to act in the right way. Also shipyards discover the benefit of having a Wencon Repair Kit on board during sea trails. When testing the vessel to the limit a small and easy to fix problem can suddenly become very important. With over 20 years of experience with Wencon Products we know exactly how to advice each type of customer.

As the year 2020 ended with many purchase orders in re-lighting 2021 started even bigger. Shipowners make more often the choice for the high quality doublepower!! LED luminaires for their vessels. With this great organisation in the Czech Republic with and long history in developing light fittings they are leading the market in quality, energy savings and extreme long life times. Due to their European manufacturing lead times are short and price level is very competitive.

Beside this the NTE LED Floodlights with their special Marine & Offshore protective coating becomes booming business. This manufacturer from Spain develop many high performance products to save energy. The efficiency of their LED Floodlights is much better than many others in the market. Lead times are short because all is produced in Spain.



Spring 2021





Repair Management Nederland B.V. More management less firefighting



#### CJC HDU 15/25 THE STRONG ONE

Oil Filtration in the best way. With the **HDU 15/25 PV** unit a flexible and powerful unit can be supplied suitable for many different applications. It is used for the maintenance of fluids for power transmission, cooling and quench oil. The HDU 15/25 PV is ideal for removal of particles, degradation products and water. The filter is equipped with a strong CJC Gear Wheel Pump. The electric motor can be supplied for all standard AC and DC voltages. The **CJC® Filter Inserts** consist of several discs bonded together. The material is either cellulose or cotton liners depending on the fluids to be filtered. The CJC® Filter Inserts does have an enormous large dirt-holding-capacity.

The pump flow is available from 30-120 litre per hour depending on application and fluid type.

The unit is equipped with a wall bracket to mount easily where needed. It can also be equipped with a carry bracket or on a trolley complete with a set of hoses.

#### CJC PTU 15/25 THE STRONG SISTER

In the same size the unit is available as the PTU 15/25 PV which is been developed as filter separator for Marine Diesel (MDO), Marine Gas (MGO) and Marine Special Distillates (MSD).

The filter pump draws oil from the settling/bunker tank and presses it through the filter insert. From the centre of the insert the oil flows down into the coalescer element. Here larger drops will form and settle in the bottom of the coalescer housing and can be drained easily. From top of the coalescer housing the oil will flow to the service tank or back to the settling/bunker tank. The unit is ideal for separation of water, removal of particles and degradation products. Result a clean and very low water content in the fuel oil.



### **TEPEx EX Floodlights for Zone 1, 21, 2, 22**

#### PLFS-N 100 LED series, and there is light. From 8.610 up to 40.600 lumen

High quality LED Floodlights for use in areas with potentially explosive atmospheres of gases, vapors and dust. Suitable for Zone 1, 21, 2, 22. With many mounting options the fixture can easily be installed. The fixtures have a high efficiency, a colour rendering index CRI 80 and an estimate service life of 70.000 hours. With OVP (Over Voltage Protection), OCP (Over Current Protection) and OTP (Over Temperature Protection) and autonomous reactivation after recovery. The housing is made from high quality aluminium powder painted casting with a diffuser of extreme strong borosilicate glass and a gasket of silicone. Aparatus category II 2GD and explosion protection Ex db eb op is IIC T6 Gb, Ex tb op is IIIC T80°C Db. For environment temperatures from  $-40^{\circ}C \div +50^{\circ}C$ . The protection degree is IP66 category 1 and IK08 impact resistant. Rated voltage 90-305 Vac, 127-431 Vdc 50/60Hz. The Floodlights are available as single unit or as multi floodlight solutions with 2, 3 or 4 modules.

The Floodlight is also available as single unit type PLFS 50 LED in 35W, 50W and 60W





### **DOUBLEPOWER!!**

TREE LED one of the most durable LED Linear luminaires on the market

# doublepower!!

#### **DOUBLEPOWER!! TREE LED TaMax beats high temperature environments**

This specific LED Luminaire is available as a TaMAX version. The benefit of this special version is that it can be used in areas with an ambient temperature up to  $+65^{\circ}$ C without any degradation on the entire luminaire. The driver is even tested on  $+75^{\circ}$ C to ensure that an extreme long true lifespan of over 100.000 hours (L80B10) and 8 year full guarantee can be given on this product.

This luminaire is over the years tested and proven on installations in numerous industrial operations.

The luminaire has a high modularity with many output options. Variable use of reflectors, optics and combinations of the two, variable lighting charcteristics tailored to the needs of various operations. No stroboscopic effect. Available with DALI/DSI smooth control, possibility to include into a complex DALI/KNX combination or both.

Also available as an emergency light with an integrated emergency module.

The front glass cover is available with a transparant or diffusion design.

The luminaire has a very compact design with particularly efficient heat management.

It is the ultimate LED luminaire for use in ships engine rooms or boiler rooms where other LED luminaires cannot withstand the high temperatures. Protection rating is IP65.

#### **CUSTOMERS EXAMPLES ARE**

Top French companies as **Airbus, Electricité de France, Nestlé, SNCF, Ariane Group, DHL, Arcelor Mittal** are using this specific doublepower!! TREE LED in difficult environments.

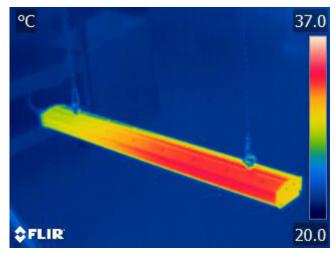
The TREE withstand not only high temperatures but also environments with high dust level, chemical evaporations and extreme low temperatures to -40°C as well.

The luminaires are developed and produced in Europe, Czech Republic and European top quality componenent are used.

The doublepower!! TREE is available in 2, 3 and 4 modules and from 4.451 up to 11.604 lumen. The luminair has an enormous efficient Lumen/Watt ratio.

Can be ordered with 3 mm tempered glass AGC Clear Vision front cover or with PMMA for HACCP applications. High level of permeability, without degradation in course of time.

An **Extreme Low Glare Factor** is ensured placing the LED strips deeper into the luminaires body and using a larger lighting surface for the optical system.



#### **EXTREMELY EFFICIENT HEAT DISSIPATION**

The design of the TREE luminaire was developed in cooperation with technical universities in such a way as to ensure most efficient heat removal from sensitive luminiaire components. Thermographic camera measurements confirmed that the design is more efficient than with other luminiares on the market. The entire system works under very comfortable temperature conditions which contributes to the luminaire's long life span without significant degradation of luminous flux.

The carefully calculated and designed openings in the luminaire's profile further enhance its cooling efficiency.





### **EGA MASTER NON SPARKING TOOLS**

#### **SAFETY TOOLS**

EGA Master manufactures the widest range of tools to work safely in hazardous environments, be it due to the presence of gas or dust, due to the presence of electric tension or magnetic fields, or due to work being carried out at heights. EGA Master's tools are certified to give the user full assurance that they comply with all relevant norms and best practices in the industry.

**EGA Master's non-sparking tools** are **certified by the BAM Institute**, approved by the European Union to be certified based on directive 94/9/EC. All tools are forged after casting to achieve the best quality in the market, both in mechanical properties and in attractive finish.

#### DIFFERENCE IN MATERIALS OF NON SPARKING TOOLS AND HOW TO MAKE THE CORRECT CHOICE

Among the advances and differences between Copper-Berilium alloy and the Aluminium-Bronze alloy we have the following highlights: **Copper-Berylium Alloy (Cu-Be)**, Hardness; 283-365 Brinell. Tensile Strength; 1250 N/mm<sup>2</sup>. Magnetism; Non ferrous substance in composition makes it safer when non-magnetic applications are required. Durability; Much higher due to the higher hardness and tensile strength. Higher efforts can be made. Price; Higher price due to the special raw material used.

**Aluminium-Bronze Alloy (Al-Bron)**, Hardness 229-291 Brinell. Tensile Strength; 800 N/mm<sup>2</sup>. Magnetism; Minimum ferrous component makes them 100% non-magnetic, altough its low magnetism make it appropriate for non critical non-magnetic applications. Durability; Not as much as Cu-Be. Price; Around 30% lower price.

**Tools made of Cu-Be Alloy** can be used in all groups (I, IIA, IIB, IIC) in a safe way, always respecting the maximum surface temperature allowed, with the only exception of acetylene, with which copper might react and create highly explosive acetylite gases.

**Tools made of Al-Bron Alloy** can be used in a safe way, always respecting the maximum surface temperature allowed, except for IIC group (hydrogen, gas of water, acetylene, bisulphide of carbon, ethyl nitrate).

Non-sparking tools are not classified as anti-static because they do conduct electricity. Do not use high copper content tools (>65%) in direct contact with acetylene due to the possible formation of explosive acetylide, specially in presence of moisture.



### WENCON GRE PIPE REPAIR KIT

#### THE REPAIR KIT

The Wencon GRE Pipe Repair Kit is designed to enable the crew to repair leaks on GRE types of Pipes using the pipe wrap method. Applying interchanging layers of WENCON UW COATING and WENCON REINFORCEMENT TAPE will seal the leak and produce a strong temporary repair, that will last until replacement or more permanent solution is possible.

#### Suitable for

GRE Ballast Pipes and GRE Scrubber Pipes.

Can also be used on Steel Ballast Pipes, Steel Cargo Pipes, Cable Pipes and many other applications specifically when the pipes are in a wet area or high humidity where dew point can cause an adhesion problem for standard methods.

#### WENCON GRE Pipe Repair Kits available for

Wencon developed a series of 3 different GRE Pipe Repair Kits for pipe diameters of Ø250mm, Ø500mm and Ø1000mm. The kits contains the right amount of materials to repair a pipe lenght damage of 1000mm. It also contains the application tools and a Tercoo disc for the right surface preparation.

#### Article 8740 GRE Pipe Repair Kit Ø250mm contains:

- 3 pcs Wencon UW Coating orange, wet surface 1035
- 3 pcs Wencon UW Coating Brown, wet surface 1036
- 1 pcs Wencon set Application Tools
- 1 pcs Tercoo Duo Disc 620101
- 4 pcs Wencon Reinforcement Tape 50mm x 10m 1120
- 1 xPackage (40x30x35cm) 7,0 kg

#### Article 8741 GRE Pipe Repair Kit Ø500mm contains:

- 6 pcs Wencon UW Coating orange, wet surface 1035
- 6 pcs Wencon UW Coating Brown, wet surface 1036
- 1 pcs Wencon set Application Tools
- 1 pcs Tercoo Duo Disc 620101
- 3 pcs Wencon Reinforcement Tape 100mm x 20m 1122
- 1 xPackage (60x40x20cm) 11,5 kg
- 1 xPackage (28x25x10cm) 1,0 kg

#### Article 8742 GRE Pipe Repair Kit Ø1000mm contains:

- 12 pcs Wencon UW Coating orange, wet surface 1035
- 12 pcs Wencon UW Coating Brown, wet surface 1036
- 1 pcs Wencon set Application Tools
- 1 pcs Tercoo Duo Disc 620101
- 5 pcs Wencon Reinforcement Tape 100mm x 20m 1122
- 1 xPackage (60x40x20cm) 10,6 kg
- 1 xPackage (60x40x20cm) 11,2 kg

#### Transport information:

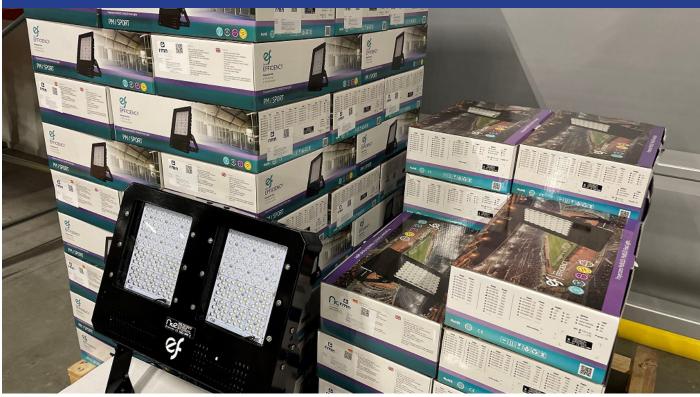
Can be shipped without Dangerous Goods Documents











### **NTE SISTEMAS PM BASIC AND PM PRO**

#### Why making the choice to install NTE LED Floodlights

The NTE SISTEMAS PM-Series is a great LED solution for Floodlight on board of vessels. Many customers already changed to this brand since last year due to all the positive properties such as, compact design, high Lumen/Watt output ratio, extreme low energy consumption, price level, availability and especially the optional Marine Protective Coating. The fixtures are available from 6.000 up to 40.000 lumen light output. In March this year **RMN is awarded** for a PO of the supply of **>60 pieces PM-PRO** to replace all conventional floodlight on an Offshore Vessel.

#### What is the special Marine Protective Coating

For seagoing vessels, offshore and port areas, we can **optionally** supply every NTE light fixture with a special **Anti-Saline Coating**. This coating has been developed to protect the luminaires in salty environments without affecting the heat management of the LED fixture. **This special coating holds a certificate of durability in Marine Environments Manufactuered in Spain** 

NTE Sistemas also has the advantage that the luminaires are produced in their own factory in Spain, which means that the delivery times are very short.

RMN keeps various NTE LED Floodlights on stock in order to be able to meet the customers demand immediately. (The picture above shows also a PM-Colossus 2-module providing up to 65.595 lumen light output).



### **MIKO MARINE TANK SEALER KIT**

#### What is a Miko Marine Tank Sealer Kit

The Miko Marine Tank Sealer Kit is a quick, easy and flexible first barrier against leakage on storage tanks and oil cisterns.

#### How does it work

The two sizes of Miko Plaster® included in the kit are fitted with a neoprene sheet in the centre and magnetic nitrile rubber along the edges. The magnetic rubber will adhere to the steel surface of the tank while the soft neoprene centre will seal against the damage, preventing leakage into the environment. External anchor magnets (MAM-003 and MAM-Light) are applied to the outside of the neoprene centre to compress the patch against the damaged area and limit the leakage.

#### Where can it be used

The equipment can be used both above and below the waterline. The Miko Marine Tank Sealer Kit combined with the Miko Marine Pipe Sealer Kit serves as a comprehensive preparedness tool for oil spill prevention at any tank farm or processing plant. For seagoing vessels the kit is also very useful in case of a leakage on a tank on deck.

Large companies such as Statoil invested in this emergency repair kits and distributed it around its tank farms and refineries. The kits are seen as a valuable form of insurance against environmental damage and the loss of expensive product that would result from a leak opening in a storage tank.



- 1 pcs IP 54-rated Storage and Transport case
- Total weight 56 kg, dimensions 785x525x450mm

### SURFACE TREATMENT TOOLS FOR SMALL APPLICATIONS

#### **TERCOO DUTCH DESIGN AND CRAFTSMANSHIP**

Tercoo® rotating discs, an ideal series of tools for surface preparation on areas without raised edges, such as hexagon bolt heads, flange edges which can result in breaking the tool tungsten metal pins. For Wencon Epoxy Repair Jobs we recommend this tool due to the final result of the surface after using the tool. It removes paint, rust, tar, epoxy etc. and leaves a clean surface with a good roughness (as SA2.5-SA3.0 shot blasting), makes it ready for the application of paint or epoxy products. Cleanliness an roughness is important to ensure a proper adhesion of this products. Over many decades the tool has proven its value on board of vessels and in the toolbox of service engineers. The Tercoo Rotating Disc is available for use in combination with a hand drill with it 6mm connection shaft and is available in a 1, 2 and 3 layer version. The 1 layer disc is very suitable for corners and small pittings in steel surfaces. The best result is achieved using the drill on 2.500-3.000 rpm but in small areas 1.200 rpm is recommended.

For larger surfaces there is a special Tercoo Machine for a 8-layer disc. Due to safety the tool is fitted with a M12 female thread, which fits on the M12 male spindle of the Tercoo machine. The machine has an adjustble speed from 900-2.700 rpm. RMN is already for a long time distributor and stockholder for the Marine & Offshore Industry for Tercoo.





#### **BRISTLE BLASTER**

The Bristle Blaster is a tool designed to achieve both corrosion removal en an anchor profile on the surface. The bristle tips are designed to strike the corroded surface with kinetic energy that is equivalent to grit blast media, thereby generating a texture and visual cleanliness that mimics the grit blast process. It cleans the surface up to SA2.5-SA3.0 with a roughness from 40-120 microns. The tool is available as an Electric Machine, a Pneumatic Machine and a Cordless Machine. The bristle blaster is intended to use on small areas and can also be used to clean raised edges, bolt heads, screw thread of the bolt, flanges etc. The Machine comes in a set complete with the desired brushes for steel surfaces or for stainless steel surfaces.



#### **PFERD POLICLEAN PLCD + PLCD PLUS DISCS**

POLYCLEAN discs are a non-woven cleaning glued on a glass-fabric base material designed to remove paint, scale, rust and adhesive residues. The PLUS (Blue) disc has an even higher stock removal rate than the Black version with a very long toool life. They are for use on slow-runing angle grinders performing the best result on 1.800-2.100 rpm. They are designed for quick cleaning of surfaces without polishing but doesn't produce a rougness in the surface what the Tercoo and the Bristle Blaster does. For Epoxy Based Repair jobs it is hardly recommended that after cleaning with the Policlean disc to treat the surface with one of the other two possibilities to achieve the desired surface roughness.

### **SEALITE BARGE LIGHTS**

Sealite offers 2NM and 3NM battery and solar powered barge lights that are certified to UL 1104 and COLREG-72 photometrics. Under international standards, barge lights with 2NM visible range are generally suited to vessels 12 meters or more in length, but less than 50 meters in length. Barge lights with 3NM visible range are generally suited to vessels 50 meters or more in length.



#### SEALITE 2NM Bargesafe Solar Barge Light

The Sealite BargeSafe<sup>™</sup> Solar 2NM is a solar-powered barge light designed to meet UL 1104 and COLREG-72 standards. The LED barge light sets a new standard and incorporates a host of innovative features designed to make the unit extremely user-friendly. The world-class LED lens is designed and manufactured by Sealite and achieves precise intensity and sectoring requirements from a single LED light source. It is made from tough, durable polycarbonate and uses the latest high intensity LED and a uniquely designed lens. As a result, the BargeSafe<sup>™</sup> Solar 2NM light has an incredibly low power consumption. The light can be installed in minutes, requires no operator intervention and has a permanent ON/OFF switch for easy storage.



#### SEALITE 3NM Bargesafe Solar Barge Light

The Sealite BargeSafe<sup>TM</sup> Solar 3NM solar-powered LED barge light is certified to UL 1104 and COLREG-72 photometrics,and is completely self-contained with solar premium-grade modules and battery.

The LED barge light is one of the most advanced in its class, and incorporates a host of innovative features designed to make the unit extremely user-friendly. The world-class LED lens is designed by Sealite and achieves precise intensity and sectoring requirements from a single LED light source. This design helps achieve a lower operational current compared with alternative LED barge lights – making the unit ultra-efficient.

Available as a 360 degree all round light with flashing or steady-on flash characteristics and optional Peep-light.

#### SEALITE 3NM LED Barge Light (Battery Powered)

The Sealite BargeSafe<sup>™</sup> 3NM battery powered LED barge light is certified to UL 1104 and COLREG-72 compliant with >3NM visible range. The LED barge light is one of the most advanced in its class, and incorporates a host of innovative features designed to make the unit extremely user-friendly. The world-class LED lens is designed and manufactured by Sealite and achieves precise intensity and sectoring requirements from a single LED light source. This design helps achieve a lower operational current compared with alternative LED barge lights – making the unit ultra-efficient and offering a battery run time of up to 45 nights.

Sealite

A magnetic base provides strong fixing in position to the barge deck. Available as a 360 degree all round light with flashing or steady-on flash characteristics.

