



Reliable **partner** for your **project**

www.mepserve.com

CABLE REEL

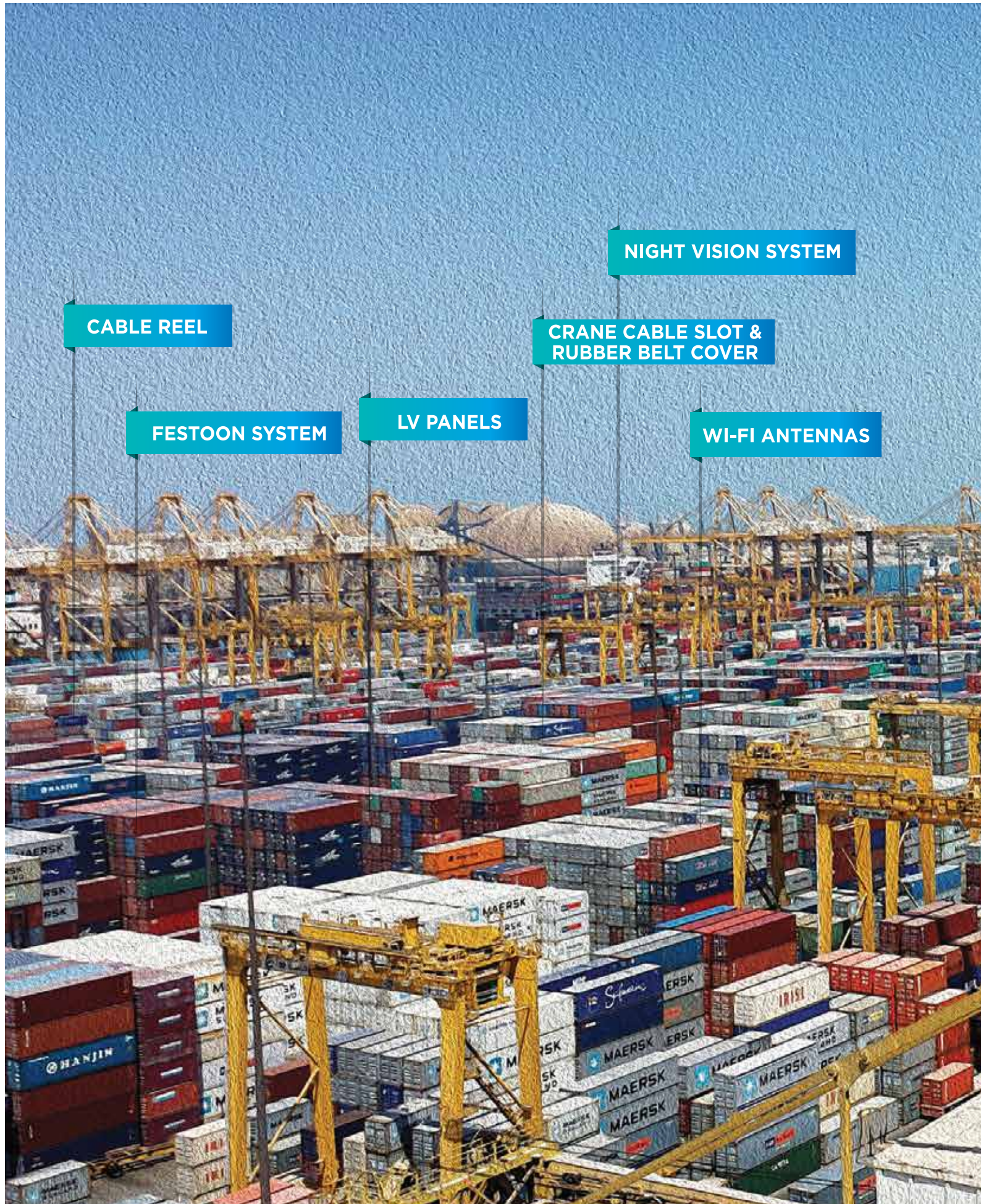
FESTOON SYSTEM

LV PANELS

NIGHT VISION SYSTEM

**CRANE CABLE SLOT &
RUBBER BELT COVER**

WI-FI ANTENNAS



CONTENTS

Section 1	Company Profile	01 - 02
Section 2	Our Products	03 - 18
	Energy Monitoring and Reefer Communication System	03
	Energy Monitoring and Reefer Container Communication	04
	Motorized Cable Reels	05 - 08
	Spring Driven Cable Reels	09 - 10
	Industrial Plugs and Sockets	11
	Cable Protection System	12
	Cable Accessories	13 - 15
	Customised Enclosures / Fabrication	16
	Software / Hardware Division	17 - 18

COMPANY PROFILE



WE HAVE BEEN ASSOCIATED WITH SOME OF THE LANDMARK PROJECTS SUCH AS,

ABU DHABI AIRPORT MIDFIELD TERMINAL COMPLEX

We have closely worked with the Electrical Contractors for the Electrical Identification, BMS & Identification of HVAC Piping & Equipment as in line with the Project Specifications.

DUBAI AIRPORT EXPANSION PROJECT CONCOURSE C&D

We have supplied Cable Markers, Cable Ties and Identification Labels for this Project. The timely deliveries for this Project was much appreciated by the Electrical Contractor.

AL MAKTOUM INTERNATIONAL AIRPORT

We have supplied Cable Glands & Lugs, Cable Markers and Cable Ties for this Prestigious Project.

AL SUFOUH TRAM PROJECT DUBAI

The supply of Cable Glands, Special type of Control Cable Lugs and Heat shrink sleeves has been completed in a timely schedule for this fast track Project.

CLEVELAND CLINIC PROJECT

High Quality Cable Ties and Cable Markers has been supplied for this Hospital Project at Abu Dhabi.

ADNOC HQ PROJECT

We have Supplied Cable Markers, Cable Ties and Glands for this Project.

ONYX TOWER DUBAI

Cable Ties, Cable Markers and Heatshrink Sleeves has been supplied for this Project at Sheikh Zayed Road.

DAMAC TOWER BY PARAMOUNT

Supply of Cable Glands & Lugs and Cable Ties for this Project

BOROUGE INNOVATION CENTRE

We have Designed and Supplied Fabricated Lifting Mechanism and other Units for Special Purpose Applications.





AN AUTOMATION & DESIGN SPECIALIST AND ENGINEERING SERVICE PROVIDER

associated with various prestigious projects in EPC, Oil & Gas and Ports & Maritime industries since 2008. We provide turnkey solutions for the following areas in Port & Maritime industry:

- Refrigerated container (Reefer) Automation (EM-RCS®)
- Damage Container Detection System (DCD® System)
- Cable Reeling Solutions (Cable Reels)
- HV Cable Trench Protection System

We are committed to Our Environment and we provide eco-friendly solutions in Renewable Energy and Clean Drinking Water Projects.

Our Fields of expertise are,

- Solar Energy
- Water treatment solutions
- Intelligent lighting system (ILS®)

Our Trading division represents some of the reputed Brands from Europe supplying quality products for Mechanical & Electrical Identification, Cable Terminations & Marking Solutions.

Our in-house Fabrication and engineering department evolves our commitment in achieving utmost customer satisfaction.

"Our vision is to ensure that we build long term relationship with our partners."

EM-RCS

ENERGY MONITORING AND REEFER COMMUNICATION SYSTEM

Main Function

- Monitors alarm and temperature conditions
- Send commands such as change of set-point temperature
- Generates user friendly reports
- Registers the history of each container
- Measures power consumption
- PTI - Pre Trip Inspection
- CO2
- Set Temperature / Actual Temperature
Frozen / Chilled Mode
- 32A,400V,6h power socket

Mode of Communication

- Fiber Optic / LAN / Wi-Fi

Advantage

EM-RCS enables just one operator to monitor entire container terminal.

This system allows two-way communication between the TOS and each reefer containers. This system records all required data in detail and generates alarm when there's any problems in the reefer container.

- Multi-Port monitoring through single application.
- Simple Operation
- Simultaneous Communication
- Convenient System Expansion
- Reduction in Labour and Expense

Applications

- Container Port, Container ship



EM-RCC

ENERGY MONITORING AND REEFER CONTAINER COMMUNICATION

Main Function

- Monitors alarm and temperature conditions
- Send commands such as change of set-point temperature
- Generates user friendly reports
- Registers the history of each container
- Measures power consumption

Mode of Communication

- Fiber Optic | LAN | Wi-Fi

Applications

- Container Port, Container ship



RCC

REEFER CONTAINER COMMUNICATION

Main Function

- Monitors alarm and temperature conditions
- Send commands such as change of set-point temperature
- Generates user friendly reports
- Registers the history of each container

Mode of Communication

- Fiber Optic | LAN | Wi-Fi

Applications

- Container Port, Container ship

MOTORIZED CABLE REELS

Cable reeling drums with motor drives are used to supplying consumers that change their local positions.

- The drive is used for reeling the cable, whilst the drum body must provide the required storage volume.
- The drive always operates in the direction of reeling the cable.
- The drive always operates in the direction of reeling the cable.
- The drive always operates in the direction of reeling the cable.
- The drive always operates in the direction of reeling the cable.
- The drum body is supported on a drive shaft. At the output drive stage, however, opposite the drum body, the slip ring body is mounted in separate housing.
- Power transmission is provided via copper graphite brushes and slip rings with finely turned surfaces.



THE DRUMS CONSIST OF THE FOLLOWING MAIN ASSEMBLIES

DRIVE MOTORS

- Standard three-phase current motors designed with stop brake 100% duty cycles, IP55 (also higher possible) and power 0.37 - 7.5 kW.
- If the motor has no brake (e.g. in connection with turbo coupling drives, see below), it will be provided with one separately.
- In any case, the brake prevents uncontrolled unreeling of the cable when the drive is switched off.

MAGNETIC COUPLING

Magnetic couplings are available in diverse power classes (nominal torques). The coupling has the tasks of torque transmission and slip regulation as well.

The magnetic couplings are driven via three-phase asynchronous motors, always in the sense of cable reeling. In addition, the torque level is based on the size of the air gap.

The incurred generation of heat is conducted outwards via a suitable housing surface

TURBO COUPLING

There are different power classes at disposal. Turbo couplings are also suitable for high accelerations due to their low moments of inertia. Due to corresponding housing surfaces as well as sealing, the couplings are also suitable for on board operation and rough ambient condition.

HYDRAULIC DRIVES

Both the motor as well as the stop brake are hydraulically pressurised, preferably via the hydraulic system mounted on the mobile device.



MOTORIZED CABLE REELS

GEARBOX

The gearboxes are designed as an enclosed housing version for industrial application. They are delivered filled with oil. The driven side is provided with diverse attachment lanterns for couplings and motor drives.

The following reduction gear sets are at disposal:

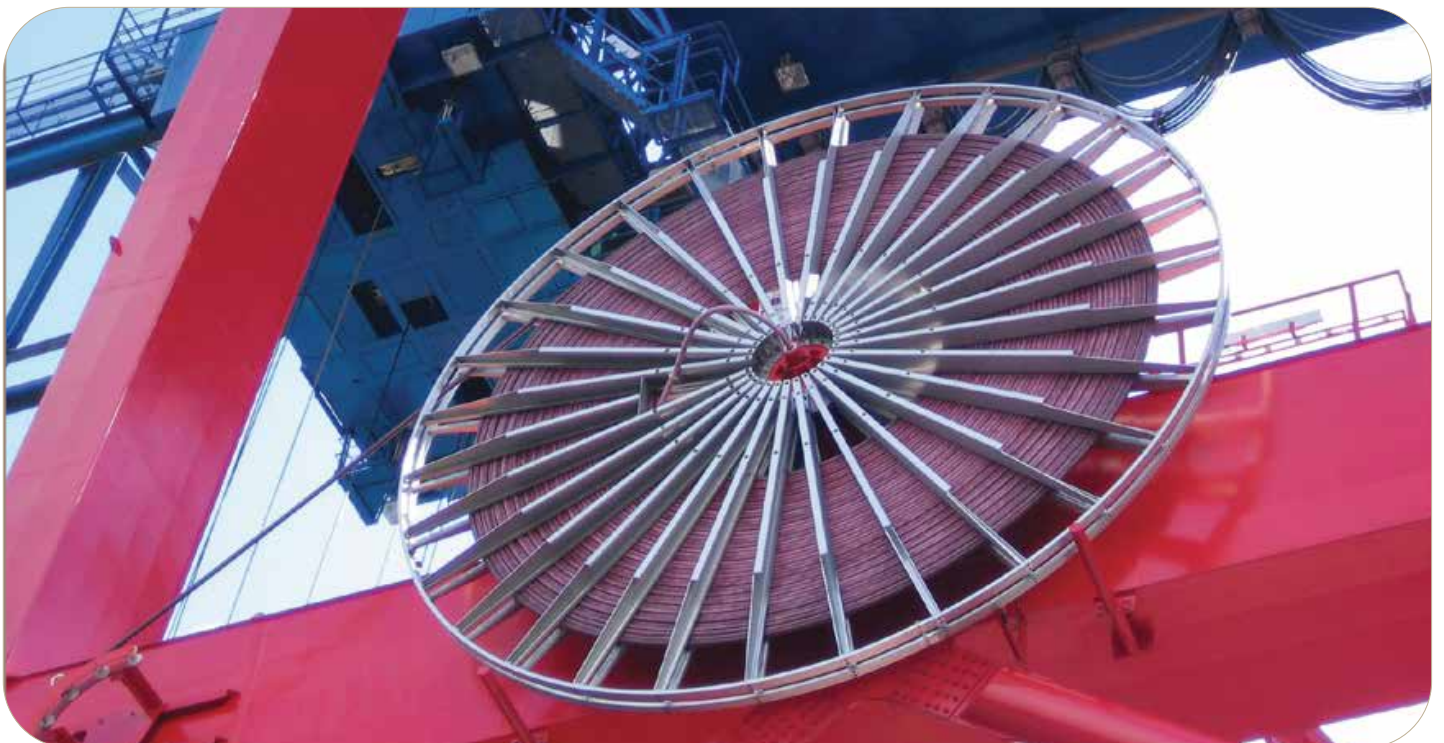
- Flat gearbox,
- Bevel gearbox,
- Spur gearbox with roller chain.

FREQUENCY INVERTER DRIVES

Three-phase-current asynchronous motors or servomotors are driven via an inverter or an amplifier device. These motors are used both as constant drives and as variable torque drives. The latter is particularly used for plants with great driving distances (for instance, container crane plants) and for comparably



small cable cross sections (medium voltage hawsers). The drives are suitable for highly dynamic processes (accelerations or velocities). Separately speed fans are used for cooling. The motors and inverters have power outputs ranging from 1.5 kW to 22 kW.



MOTORIZED CABLE REELS

DRUM BODY

Mono spiral coiling, radial arm, drum body can be fabricated as a screwed or welded version. In a screwed design the coiling width can be adjusted and hence be adapted to different cable diameters. The coiling diameter is adapted to the minimum bending radius of the cable, outer diameter up to 8000 mm.

Drum body in 3-2-3 coiling. Cylindrical, wildy reeling drum body up to 1100 mm outer diameter from deep-drawn, galvanized steel sheet.

Cylindrical, wildy reeling drum body in a welded spoke design. Cylindrical, wildy reeling drum body with reeling apparatus for accurately positioned coiling of cable suitable for reeling.

SLIP RING BODY

Pivotally supported inside the protective housing. The standard protection class is IP54, higher protection classes available upon request.

The slip ring bodies are equipped with a protective earth conductor (earth). The slip ring contacts are suitable for current transmissions from mA up to 1000 A as well as low voltage and medium voltage. Special slip ring contacts are also used for data transmission.

SURFACES

- Paints in 1- or 2 component colours
- Senzimized parts with or without painting
- Hot-dip galvanized
- Upon request in stainless steel version

The cable drum is designed according to the following items

CUSTOMER SPECIFIC APPLICATION

The electrical Design is based on:

- Consumer power rating,
- Type of coiling or number of layers,
- Thermal ambient condition,
- Duty cycle, cross-section of the cable,
- Number of loaded wires.



SPRING DRIVEN CABLE REELS

APPLICATION

Cable reeling drums with spring drive are used for current supply to mobile consumers that need automatic winding of flexible energy or control lines.

APPLICATION AREAS

Portal and slewing cranes of all types, deck cranes, Mobile cranes, construction cranes, loading plants, magnet and grab cranes, E-trains, travelling platforms, lifting platforms, stapler, longitudinal scrapers in sewage treatment plants, charging plants, palletising plants, aisle stackers etc. Our cable reeling drums conform to VDE or EN and accident prevention regulations (UVV) regulations.

SPECIAL CASES OF USE

Drums for installation on board sea ships or for applications in the tropics.

Drums for aggressive operating conditions acid baths, in galvanising trades, sewage treatment plants.

Drums for measuring current, signal current or high-frequency transmission.

Drums for the supply of liquid or gaseous media (hose reeling drums).

Drums for the application with flexible wire rope (rope drums) e.g. for road indicators in connection with copying works and potentiometer or for easing grippers.

PROTECTION CLASS

The housing of slip ring body is encapsulated according to protection system IP55 (higher protection systems available on request).

DRIVE

The spring cable reeling drum is driven by means spiral leaf spring. The durability of drum-drive springs is dependent on the type of operation. The expected number of spring oscillations is approx. 120.000. For this purpose, we use only special spring steels in order to attain longer service life of the spiral leaf spring.



SPRING DRIVEN CABLE REELS

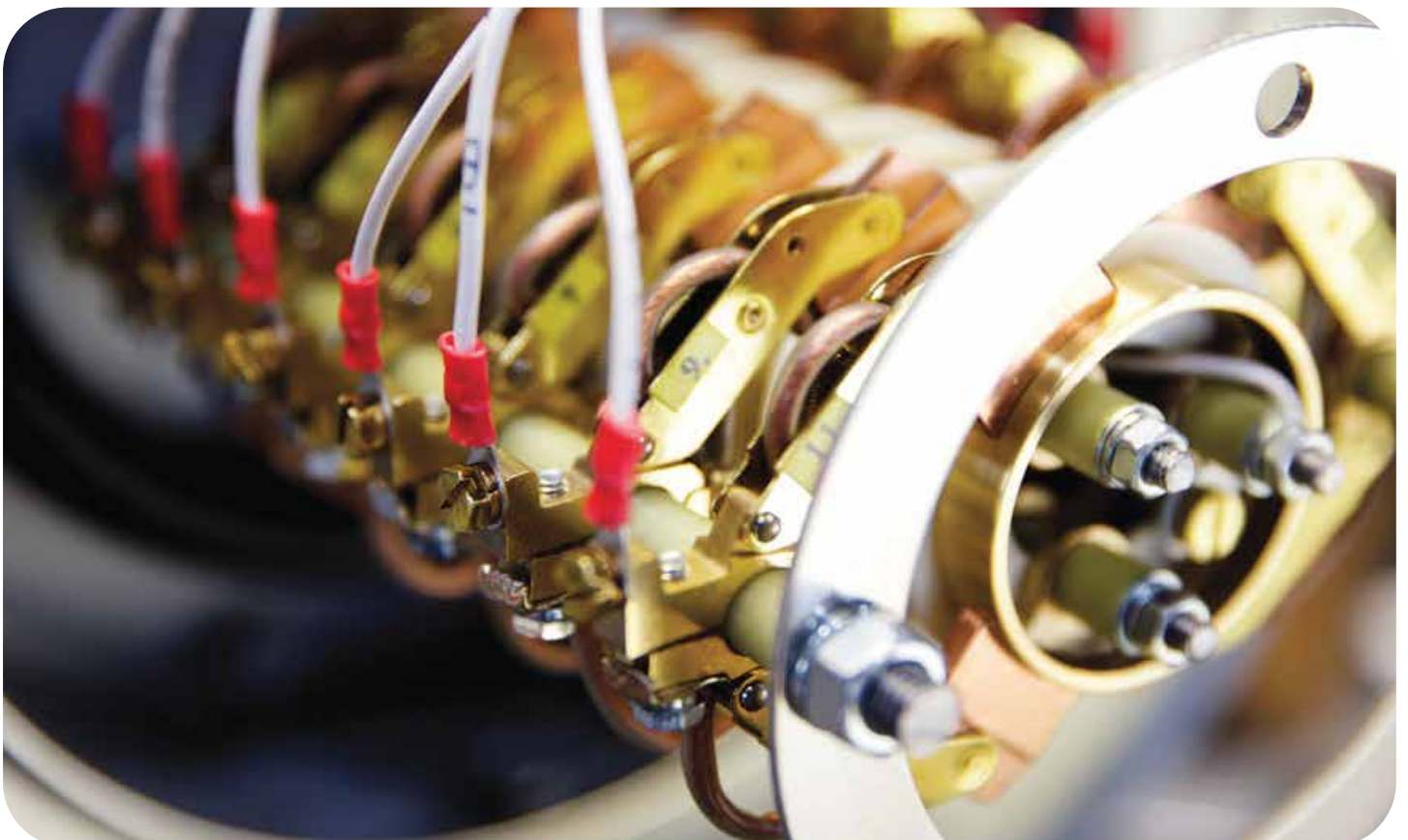


DRUM'S DIRECTION OF ROTATION

In standard configuration, cable pay-out occurs on the left of the slip ring body or rotary valve, and it is depicted in the dimension drawings. Opposite alignment can also be supplied.

MEASURES FOR ACCIDENT PREVENTION

For the drums with chain drive, it is provided with cladding so that the drums can be used in accordance with the accident prevention regulations and the law about technical working means in traffic or working area. Further protection measures, like the possibly required cladding of a revolving storage drum body, must be provided on both sides and adjusted to the respective mounting conditions.



INDUSTRIAL PLUGS AND SOCKETS

PLUGS & SOCKETS:

We represent Marechal Electric products who are market leaders in the field of low voltage LT connection systems in industrial environments with or without the presence of an ATEX explosive atmosphere. The product range is intended for all sectors of industrial activity where safety and endurance are required. We also supply medium & high Voltage Plugs & sockets.

TECHNOLOGY:

MARECHAL® DECONTACTOR™

The only electrical connector that combines a connector and a switch. Our unique technology allows you to connect and disconnect electrical connectors from 5A to 250A on load.

BENEFITS:

These technical choices provide connectors and with unparalleled performance:

- Absolute safety after thousands of connections /disconnections,
- The ability to withstand repeated overloads, particularly on power supplies to motors with frequent starting,
- Perfect operation in the presence of vibration and variations in temperatures,
- Resistance to shocks, falls and climatic variations,
- Amperage of 1000Amps for safe area & 680Amps in ATEX environments can be achieved,
- A perfect resistance to corrosion and the most severe chemical agents.



CABLE PROTECTION SYSTEM

MEP SERVE cable trench protection system is an engineering solution to protect high powered cables against the traffic through high graded Stainless steel channels with specially designed multi-layered rubber belt for STS, RMG Cables.

The cable protection system also prevents the power cable from spillage, waste accumulation and trip hazards.

Our efficient engineering team could offer various designs & tailor-made solutions specific to project requirements.



CABLE ACCESSORIES



CABLE GLANDS

Our range of cable glands has now been expanded to offer the most high quality glands available. Our wide range includes BW, CW, Al /A2 and E I W/ F gland kits, with matched accessories.

We also offer a comprehensive range of reducers and thread adaptors.



CRIMPING SOLUTIONS

Our crimping solutions include a wide range of cord end terminal's, pre-insulated terminals, and copper tube terminals.

We also offer a complete range of matched tooling for all of our terminals, from hand and ratched operated to hydraulic crimping tools.



CABLE MARKING SOLUTIONS

Our popular ranges include Easi-Lok, Easi-Mark, Z-Type and K-Type markers and cable marking kits.

We also have a wide range of hand held printers, computerised and thermal printing systems, and a pre-print service is available for a wide range of cable markers including Stainless Steel.



CABLE CLEAT & SUPPORT SOLUTIONS

The all new cable cleats and support solutions section features a complete range of cleats including cling strop, two bolt, trefoil cleat, aluminium claw cleats and the highly specified multi-cleat system.

CABLE ACCESSORIES



CABLE TIES & FIXING SOLUTIONS

Our extensive range of high quality cable ties includes metal content, LFH and Polypropylene types. Our stainless steel ranged are ideal for more demanding applications and include self-locking, ladder and nylon coated cable ties. A range of cable tie tensioning tools are also available.



HEAT SHRINK & CABLE REPAIR SOLUTIONS

Our range of heat shrink and cable repair solutions includes Easi-Shrink standard and Easi-Shrink Halogen-Free sleeving, which are also available in kits and mini boxes, ideal for on site requirements.



CABLE SLEEVING & PROTECTION

We stock a complete range of sleeveings including spiral binding, PVC and halogen free sleeving, polyester braided sleeving, Easi-Zip, neoprene sleeving and tooling. We also offer a brand new range of high temperature specialist sleeveings.



CABLE JOINTING SOLUTIONS

Cable jointing solutions includes a range of cable jointing kits for straight joints, branch joints, low voltage industrial cable jointing and low voltage universal cable jointing. We also offer a range of jointing accessories for use with our kits.

CABLE ACCESSORIES



DIN RAIL MOUNTED TERMINALS & ACCESSORIES

We offer a complete range of DIN Rail Mounted Terminals including standard, double, triple and miniature terminals, our new range of premium quality enclosures are ideal for use in demanding environments.



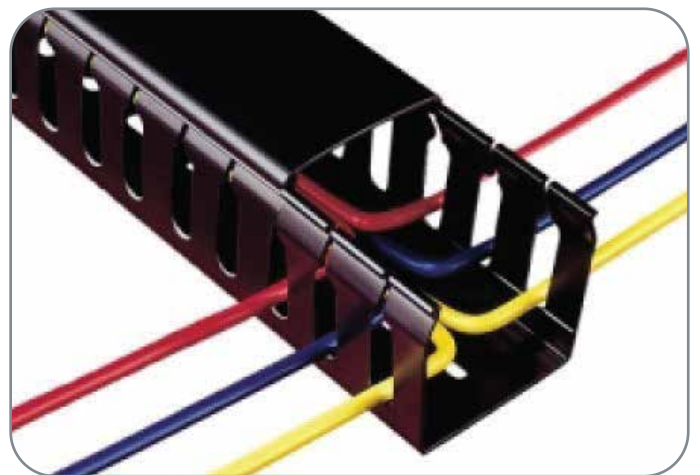
CABLE PREPARATION & TOOLING

Our range of cable preparation tools includes hand operated cutters, Rennsteig's range of cable cutters, ratchet operated CRC cutters for copper and aluminium cables, and cutters suitable for SWA cables. We also offer a range of hydraulic cutting tools.



FLEXIBLE CONDUIT SOLUTIONS

Our flexible conduit solutions include four complete new ranges; Betaflex 1, Betaflex 2, Betaflex 3 and Betaflex 4, suitable for a host of applications. A wide range of matching glands, connectors and accessories are also available.



CONTROL PANEL TRUNKING

Our control panel trunking section includes the premium quality Betaduct range in PVC, Halogen-Free and Noryl with matched accessories and tooling. We also offer the full range of products including ducting and accessories.

CUSTOMISED ENCLOSURES/FABRICATION

MEPSERVE is recognized as one of the largest and most technically advanced specialist in steel fabrication.

This reputation has been earned by consistently exceeding the expectations of our customers with regard to manufacturing and product excellence supported by an exceptional technical service team.

- Cutting-edge equipment.
- Deep expertise.
- Agile production.

We have the right formula to exceed your quality and quick-turn around fabrication and assembly needs.



SOFTWARE / HARDWARE DIVISION

OOG (OUT OF GAUGE)

Drive through

- Cargo Measurement
- Space allocation
- Billing

1

RORO

- Auto gate-GATE IN/OUT
- Location Finder
- Vehicle count
- Driver Details

2

DCD[®] (DAMAGE CONTAINER DETECTION SYSTEM)

Damage Container Detection System (DCD[®]) for gate and crane operations,

Recognition of container damages, such as

- Bulges
- Dents
- Tears
- Holes.

3

REEFER-WIFI MONITORING

- Temperature set point
- Actual running temperature
- Ventilation settings
- Return
- Humidity
- O2 & CO2
- Connection Status
- Alarm E-mail Notification
- Power consumption

4

CONTAINER DIRECTION

Truck will have containers in front, centre and aft direction. Scanners mounted in the gate capture multiple images of the container and the algorithm will give the result on container presence of direction to the security system.

5

SEAL PRESENCE

Software system will find the seal presence in the containers. Scanners mounted in the gate take the images of the container and the algorithm will give the result on presence of seal or not to the security system

6

SOFTWARE / HARDWARE DIVISION**OCR-CONTAINER NUMBER RECOGNITION**

OCR Engine created to extract and read the container number of ISO 6346 intermodal containers. This container number reading capability of shipping containers makes logistic environments more intelligent by building comprehensive databases of traffic movement.

7**OCR-ISO, ITV NUMBER RECOGNITION**

Camera will record the live video/image of the truck, which passed in the gate. OCR engine software will find the ISOCODE, ITV of the truck from the extracted frame of the video/recorded images and give the result to the security system.

8**OCR -NUMBER PLATE RECOGNITION**

Camera will record the live video/image of the vehicle, which passed in the gate. OCR engine software will read the plate numbers remarkably fast and with the highest recognition accuracy in its class from the extracted frame of the video/recorded images and give the result to the security system.

9**NIGHT VISION SYSTEM**

Optimized system for efficient "EEZ" Management and preparation for international disputes with search or surveillance and evidence recording function.

- High performance Thermal camera.
- Detect vessel within 10KM and identify it within 4 Km
- Detect Man within 3 KM and identify it within 1 km
- ECDIS system linked with AIS, RADAR,GPS and GYRO
- Automated target tracking system Stabilized function

10**OCR-RAIL NUMBER RECOGNITION**

RAILWAY CODE RECOGNITION (UIC) created to extract and read the UIC numbers from rolling stocks. By recognizing the UIC codes on train cars, OCR Engine UIC provides unparalleled accuracy and rapidity for railway transportation applications.

11**CCTV SURVEILLANCE & LATCH MONITORING**

We provide you the best security systems for port on latch monitoring purpose using CCTV cameras. CCTVs allows you to remotely monitor gate areas where the container arrives via video feed from security cameras. We offer great varieties in cameras and related equipment's.

12

SEAPORTS

OIL & GAS

AIRPORTS

CONSTRUCTION

GENERAL INDUSTRY

MINING

RAILWAYS



CCTV

EM RCS

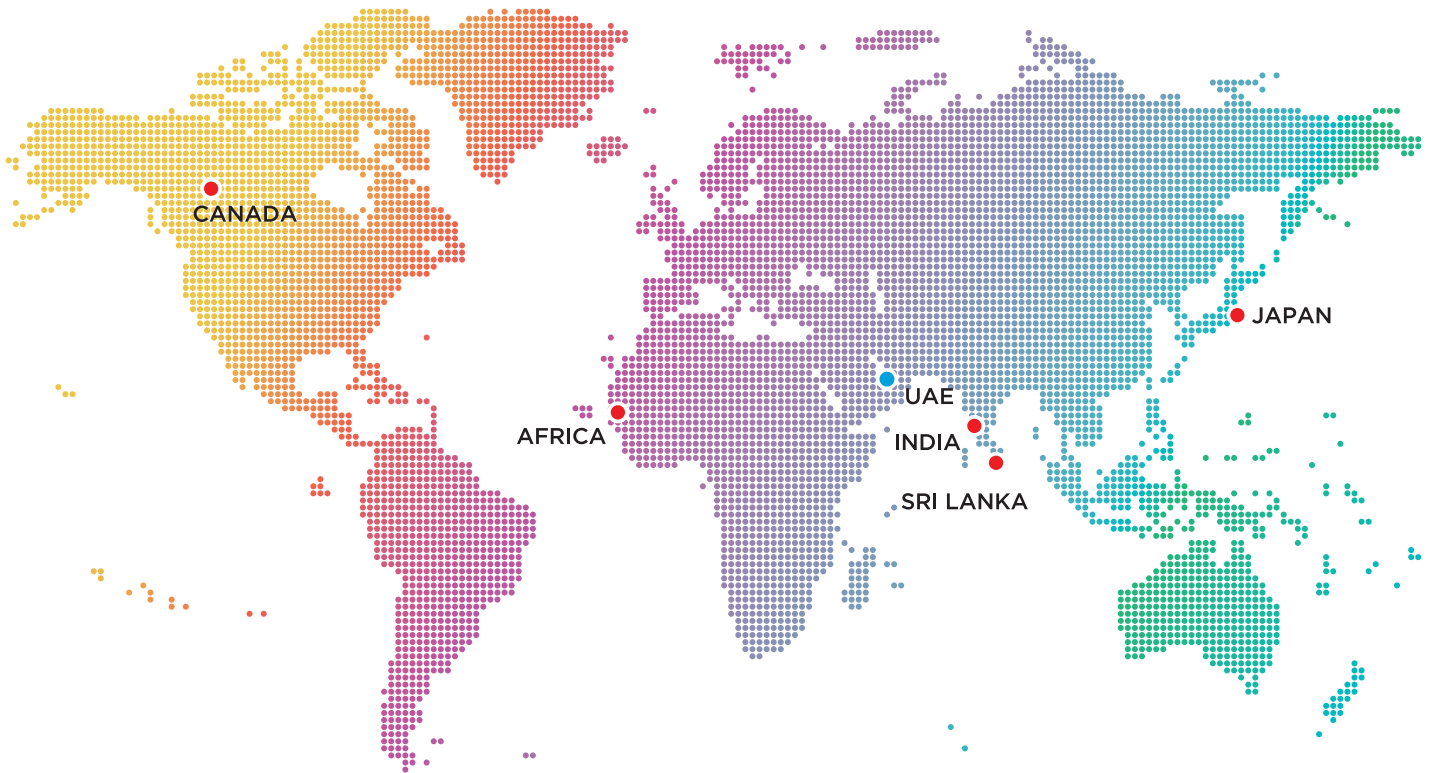
**OCR
GATE IN / GATE OUT**

**SHIP TO
SHORE POWER**

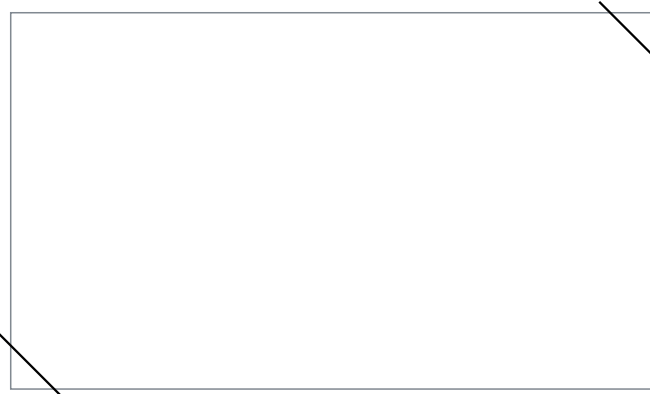
REEFER SOCKETS

DCD

**RORO CARGO
HANDLING**



Reliable **partner** for your project



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