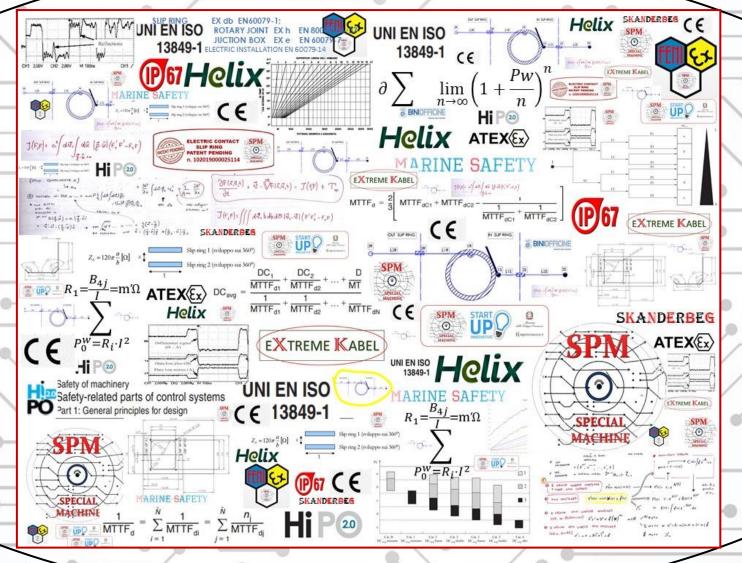


## SLIP RING & CABLE REEL



## THE COMPANY

**SPM Special Machine** is a young company from Milan (Italy) specialized in slip ring and cable reel.

The strength of the SPM is the twenty-year experience of Teem working in different industrial sectors (mining, marine and industrial, automotive and testing).

Thanks to their creative ability, the teem over the years has revised all the products on the market in terms of technology, quality, reliability and safety, differentiating themselves from competitors with extremely different and effective solutions.





## Mission, Vision and Values

**ENG** 

**MISSION** 

 Building devices and electromechanical systems, in an innovative way and with materials of excellence. The main business objective is that all products manufactured by SPM must function reliably and safely in hazardous and harsh environments in compliance with international standards.

VISION

 Designing and building devices and electromechanical systems by focusing on customer needs, structuring together with him a vision of continuous improvement of the product and the service.



- -Transparency;
- -Professionalism;
- -Continuous improvement;
- -Customer satisfaction;
- -The reliability;
- -The responsibility;
- -Innovation and creativity.

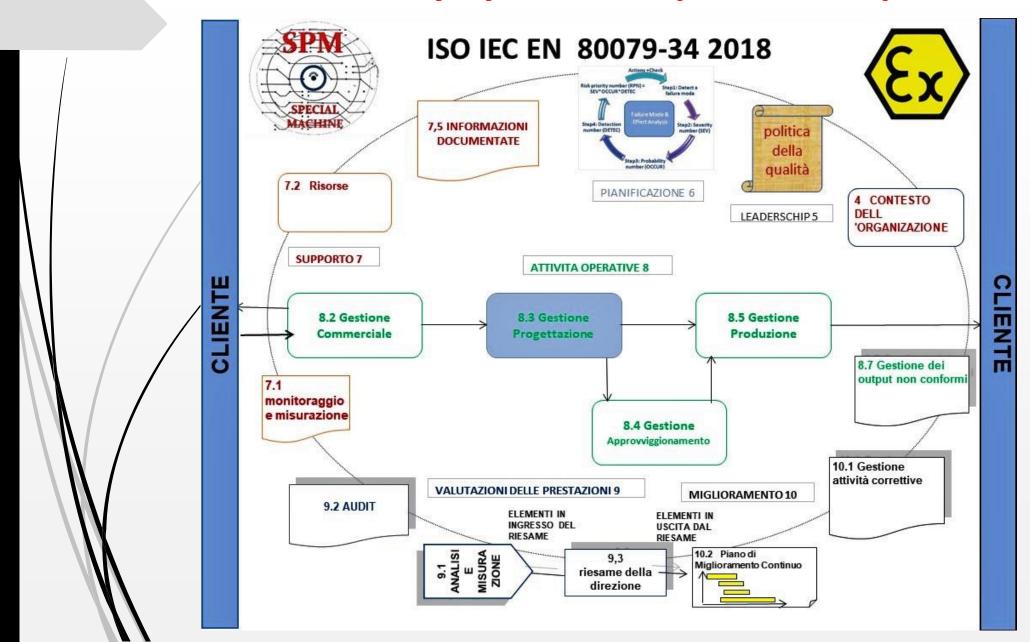


**VALUES** 

**VISION** 

MISSION

## The Quality System and production processes



#### ISOIEC EC 80079-34:2018

Explosive atmospheres --Part 34: Application of quality systems for ex product manufacture

**CESI** 0722





#### ELECTRIC CONTACT SLIP RING PATENT PENDING PCT/IT2020/050320

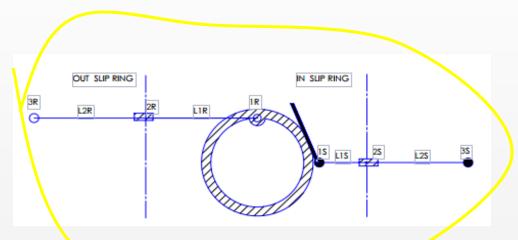


The leaf foil brush system is a particular brush that slides on a surface of a brass or bronze ring.

It has the function of transmitting power electricity, analog and digital signals from a fixed point (brush) to a rotating mobile one (ring) (input = ring / output = brush)

The main advantages of the system are:

- 1) Compactness and constructive simplicity;
- 2) Ease of maintenance;
- 3) Low electrical resistivity values (0.2 <R <6 mohm)
- 4) Good values of the characteristic impedance of the ring / brush system
- 5) Low friction value (Good ring / brush smoothness).
- 7) Low overheating at the contact point.
- 8) Low overtemperature values of the terminals in case of failure
- 9) Rapid cooling in case of failure at the contact point



### **OUR PRODUCTS**



## 0

MACR. MCDR. SCRWS. SCR-SP. MHCR. SERIES



SHE-SREX150. SREX506. SCREX. MCREX. SERIES

HYDRAULIC /ELECTRIC SYSTEM EXPLOSION PROOF

SHE-SREX150 SERIES @ NI

SLIP RING EX db EN60079-1; ROTARY JOINT EX h EN 80079-36/37

SEH ELECTRIC HYDRAULIC SYSTEM EXPLOSION PROOF

#### SREX506 SERIES FENI @

SLIP RING EX db EN60079-1; ROTARY JOINT EX h EN 80079-36/37 JUCTION BOX EX e EN 60079-7 ELECTRIC INSTALLATION EN 60079-14



SPRING CABLE REEL EXPLOSION PROOF

#### SCREX SERIES FENI @

II 2G Exh IIB T5 Gb Tamb (-30+60) II 2G Exdb IIB T5 Gb Tamb (-40+60C°)

#### MOTOR CABLE REEL EXPLOSION PROOF

#### MCREX SERIES FENI 6

II 26 Exh IIB T5 6b Tamb (-20+60) II 2G Exdb IIB T5 Gb Tamb [-40+60C\*] 2014/34 ALLEGATO III : TUV CY 18 ATEX 0206117X



MOTOR CABLE REEL EXPLOSION PROOF

#### SCREX SERIES FENI

II 2G Exh IIB T5 Gb Tamb (-20+60) 2014/34 ALLEGATO III : TUV CY 19 ATEX 0206212 X



POWER SLIP RING SR400 IP66 SERIES &

In max = 600 A DNV GL -RU-SHIP PTA CH.8 Ed 2019 07



#### Marine Safety



SR400 IP66. SERIES

#### SPRING CABLE REEL HYDRA

**IP67 SERIES** 



#### Marine Safety SPRING CABLE REEL HYDRA

AISI 316L IP67 SERIES



#### Helix

SPRING CABLE REEL SCR IP66 SERIES



#### MOTOR CABLE REEL MCR SERIES



POWER MOTOR CABLE REEL

MCR SERIES

VERTICAL MOTOR CABLE REEL MCR SERIES

POWER CABLE REEL MEDIUM VOLTAGE **OPS** (on shore power supply) SERIES

#### System description OPS

The OPS (On shore power supply) allows you to electrically connect ships stopped for repairs to shore, and to power them using the shore power network. In this way ships can switch off their auxiliary generators reducing polluting emissions and noise. The mobile structure is placed, using telescopic cranes; on the dock near the ship's power supply door.



MOBILE DRILLING STATION AUTOMATIC MOTOR HYDRAULIC CABLE REELVERTICAL APLICATION

MINE & EHART MOVING MOTOR CABLE REEL

MINE & EHART MOVING MOTOR HYDRAUL CABLE DISTRIBUTION REEL

SPRING CABLE REEL WITHOUT SLIP RING

AUTOMATIC MOTOR SPRING CABLE

MACR SERIES

LOW VOLTAGE 06/1kV

MCDR SERIES LOW VOLTAGE 06/3kV

SCRWS SERIES

CABLE OPITAL FIBER

APLICATION: MULTI CABLE POWER /AUXILIAR

FOR MEDIUM VOLTAGE 3kV -36KV

MHCR SERIES

REELSHANDERBEG

SCR-SP SERIES

CABLE GUIDE













# SLIP RING & CABLE REEL EXPLOSION PROOF

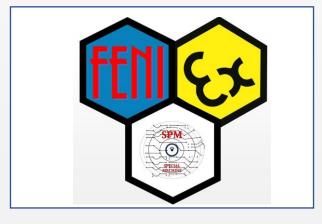


















# HYDRAULIC /ELECTRIC SYSTEM EXPLOSION PROOF SHE-SREX150 SERIES & NI





SLIP RING EX db EN60079-1; ROTARY JOINT EX h EN 80079-36/37





## **HYDRAULIC / ELECTRIC SYSTEM**

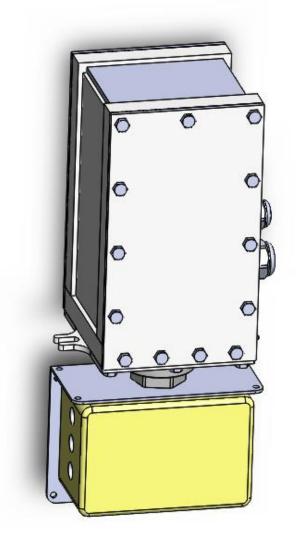
## **EXPLOSION PROOF**

SREX150 SERIES FENI





SLIP RING EX db EN60079-1; ROTARY JOINT EX h EN 80079-36/37 JUCTION BOX EX e EN 60079-7 ELECTRIC INSTALLATION EN 60079-14





# SLIP RING EXPLOSION PROOF SREX500 SERIES FENI





II 2G Exdb IIB T5 Gb Tamb (-40+60C°)

2014/34 ALLEGATO III: TUV CY 18 ATEX 0206117X





# SLIP RING EXPLOSION PROOF SREX150 SERIES FENI©





II 2G Exdb IIB T5 Gb Tamb (-40+60C°)

2014/34 ALLEGATO III: TUV CY 19 ATEX 0206212 X





### SEH ELECTRIC HYDRAULIC SYSTEM

# EXPLOSION PROOF SREX506 SERIES FENI





SLIP RING EX db EN60079-1; ROTARY JOINT EX h EN 80079-36/37 JUCTION BOX EX e EN 60079-7 ELECTRIC INSTALLATION EN 60079-14





# SPRING CABLE REEL EXPLOSION PROOF

**SCREX SERIES FENI ©** 





II 2G Exh IIB T5 Gb Tamb (-30+60)
II 2G Exdb IIB T5 Gb Tamb (-40+60C°)





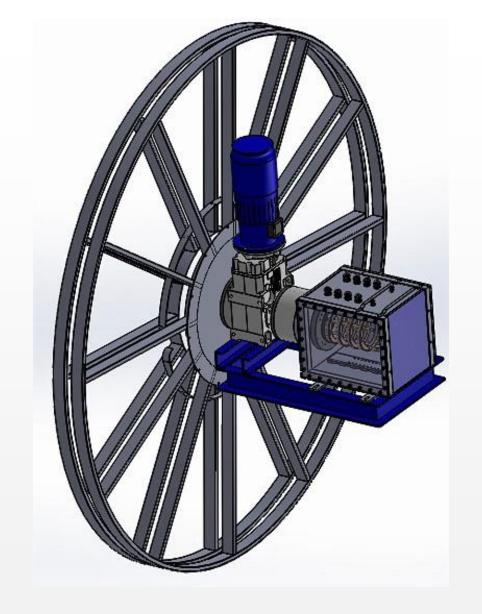
# MOTOR CABLE REEL EXPLOSION PROOF MCREX SERIES FENI©





II 2G Exh IIB T5 Gb Tamb (-20+60)
II 2G Exdb IIB T5 Gb Tamb (-40+60C°)

2014/34 ALLEGATO III: TUV CY 18 ATEX 0206117X





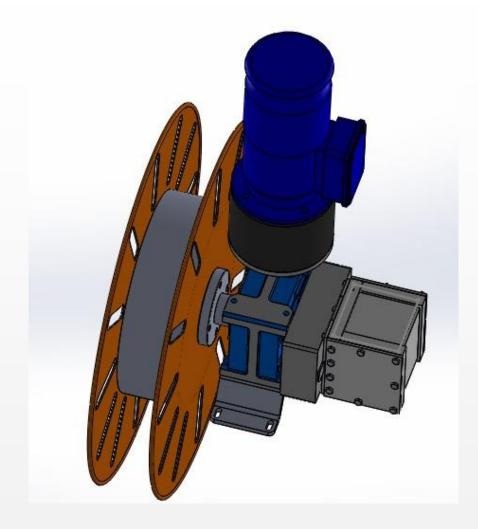
re un piè di pagina

# MOTOR CABLE REEL EXPLOSION PROOF SCREX SERIES FENI©





II 2G Exh IIB T5 Gb Tamb (-20+60)
II 2G Exdb IIB T5 Gb Tamb (-40+60C°)
2014/34 ALLEGATO III: TUV CY 19 ATEX 0206212 X





## SLIP RING SERIES SR MARINE SAFETY

### HYDRA

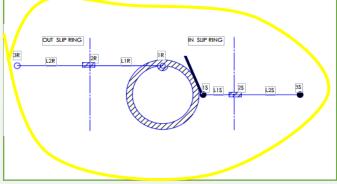






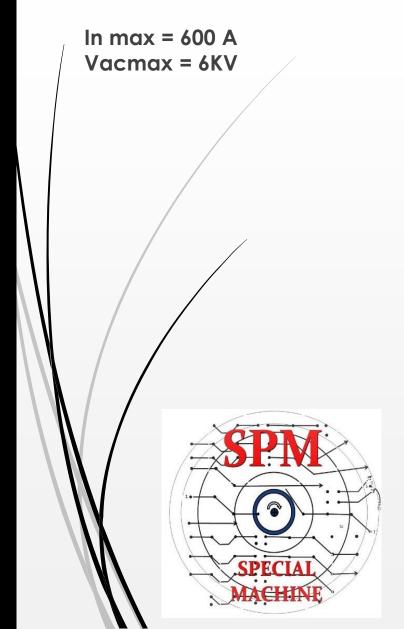








#### **ULTRA COMPACT POWER SLIP RING SR500**



## MARINE SAFETY

ISO EN 13849-1





#### **POWER SLIP RING SR400**



## MARINE SAFETY

**DNV GL -RU-SHIP PT.4 CH.8 Ed 2019 07** 

**DNV·GL** 



#### **ULTRA COMPACT POWER SLIP RING SR400**





#### **ULTRA COMPACT POWER SLIP RING SR320**







#### SR250 ULTRA COMPACT POWER SLIP RING SR250







#### **ULTRA COMPACT POWER SLIP RING SR250**

In max = 250 A Vacmax = 3KV

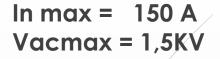
















#### SLIP RING HYDRA IP67 SERIES SR130

In max = 50 A Vacmax = 1,5KV







#### SPRING CABLE REEL HYDRA IP67 SERIES







#### SPRING CABLE REEL HYDRA IP67 SERIES



## HYDRA AISI 316L (P)67





# CABLE REEL Motor and Spring













## SCR ULTRA COMPACT SPRING CABLE REEL

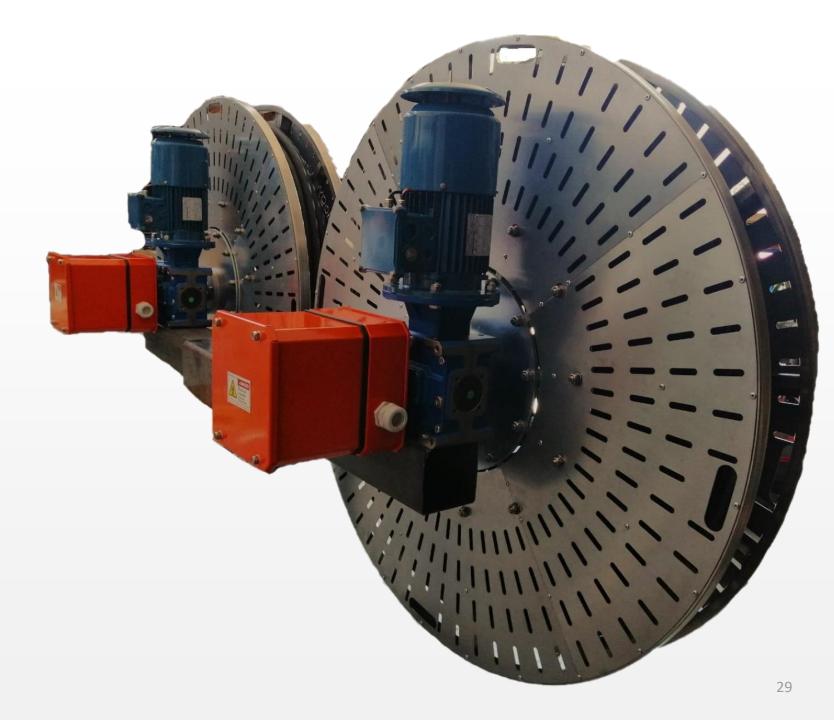


# Helix

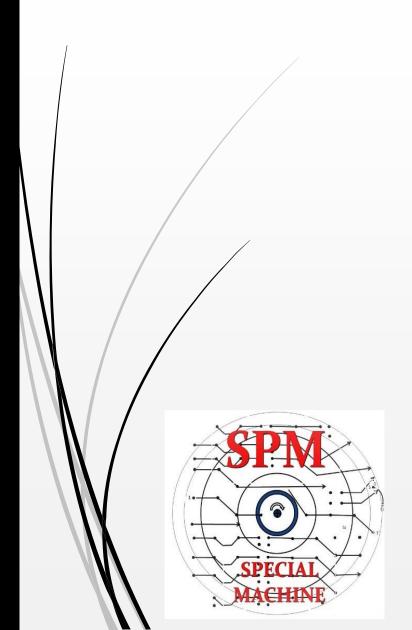


## MCR MOTOR CABLE REEL





## MCR MOTOR CABLE REEL

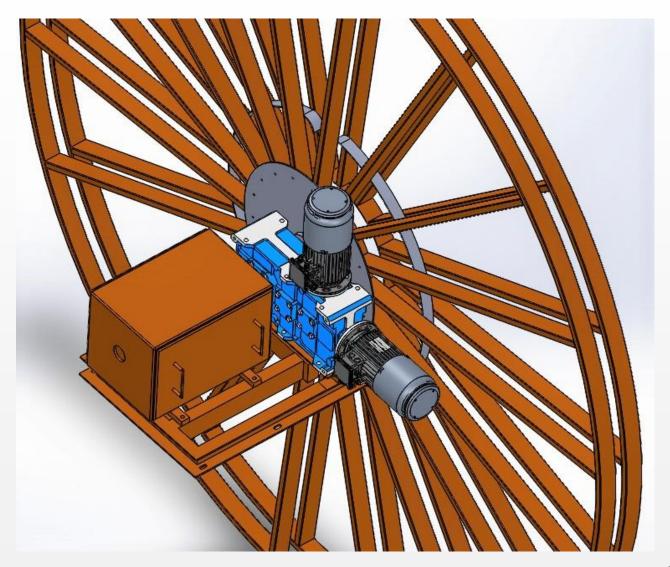




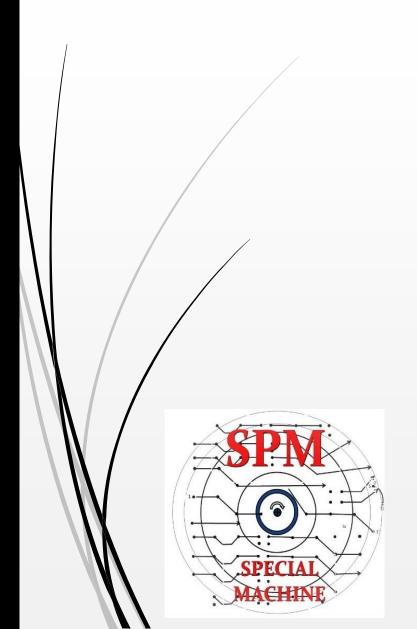


## MCR POWER MOTOR CABLE REEL





## MCR VERTICAL MOTOR CABLE REEL





#### POWER CABLE REEL MEDIUM VOLTAGE

**OPS** (On shore power supply)

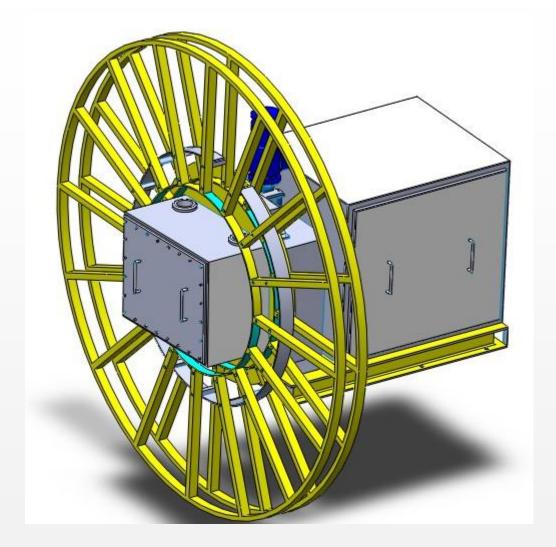
#### -System description OPS

The OPS (On shore power supply) allows you to electrically connect ships stopped for repairs to shore, and to power them using the shore power network.

In this way ships can switch off their auxiliary generators reducing polluting emissions and noise.

The mobile structure is placed, using telescopic cranes; on the dock near the ship's power supply door.





## MACR MINE & EHART MOVING MOTOR CABLE REEL



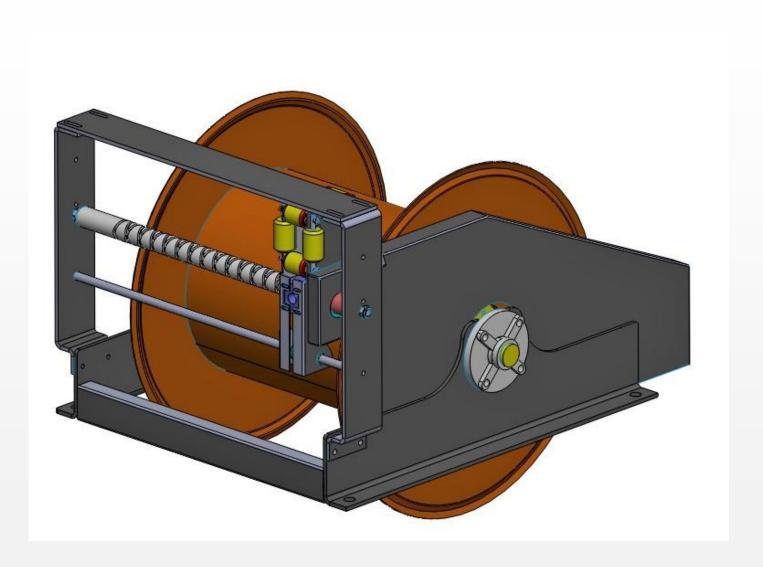
- FOR MEDIUM VOLTAGE 3kV -36KV



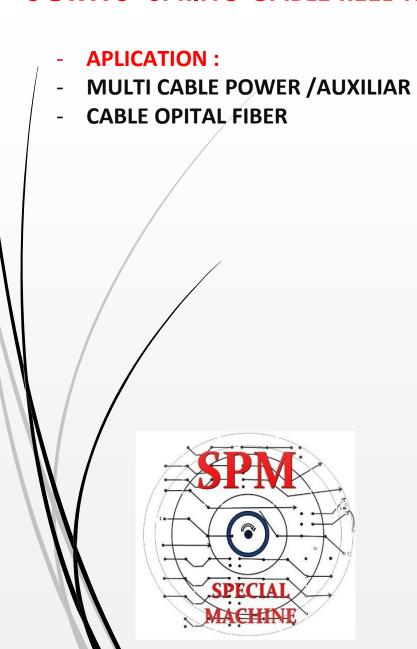


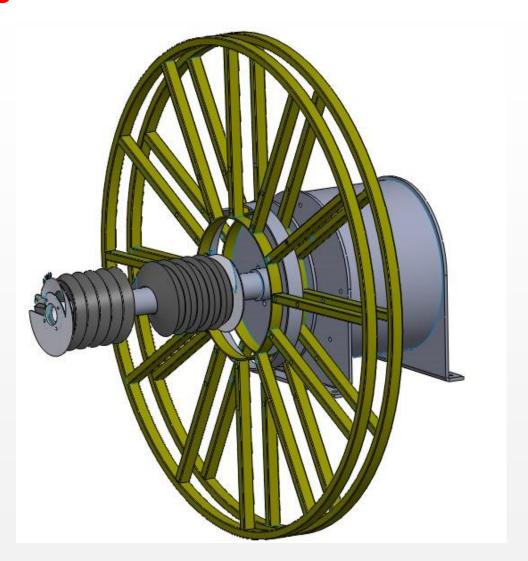
## MCDR MINE & EHART MOVING MOTOR HYDRAULIC CABLE DISTRIBUTION REEL





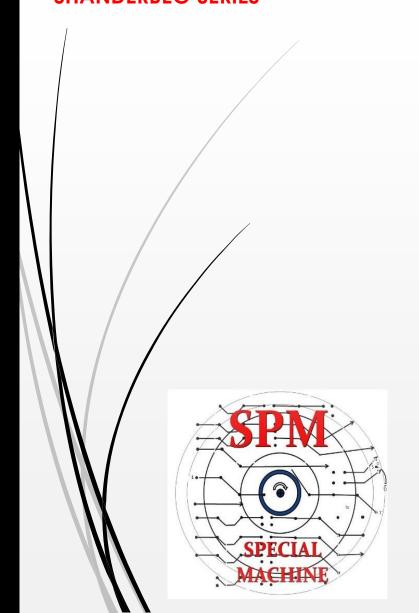
### **SCRWS** SPRING CABLE REEL WITHOUT SLIP RING





## SCR-SK AUTOMATIC MOTOR SPRING CABLE REEL SHANDERBEG SERIES

## SKANDERBEG





# MHCR MOBILE DRILLING STATION AUTOMATIC MOTOR HYDRAULIC CABLE REEL VERTICAL APLICATION



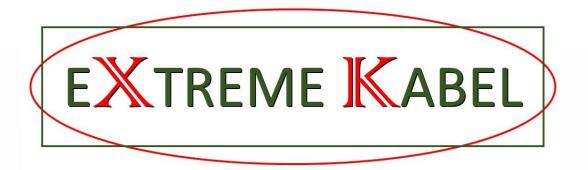


## **ACCESSORIES**

**CABLE GUIDE** 







## **High Performance Cables**





CESI S.P.A.

#### TUV NORD

#### (1) EU-Type-Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, Directive 2014/34/EU

(3) Certificate Number TÜV CY 19 ATEX 0206266 X (4) for the equipment: Power Slip Ring Type: SREX150 series

5) of the manufacturer. SPM Special Machine Srl ) Address: Via Padana Superiore 38 Inzago (MI)- 20065 - ITALY

Order number: 0206266 Date of issue: 2019-12-23

The design of this equipment or portactive system and any acceptable variation thereto are specified in the schedule to this ELT ype-Eximination Certificate and the documents therein referred to TUV CYPRUS Ltd. notified body No. 2361 in accordance with Article 17 of the Council Discipled to comply with the Essential Health and design equipment or protective system has been found to comply with the Essential Health and design Requirements relating to the design and construction of equipment and protective systems intended for use in potentially systosive atmospheres given in Annex It to the Directive. The examination and test results are recorded in the confidential report No. 19 0206266. 9 02/09206.
Sompliance with the Essential Health and Safety Requirements has been assured by compliance

N 60079-0:2012/A11:2013 EN 60079-1:2014

¥ 60079-0:2012/411:2013 EN 60078-1:2014 he sign "Y: is placed after the called number, it indicates that the equipment or protective term is subject to special conditions for safe use specified in the schedule to this certificate. It is EU-type-Examination Certificate relates only to the design, examination and tests of the offset equipment in accordance to the Directive 2014/3/EU. Evither requirements of the clive apply to the manufacturing process and supply of this equipment which are not covered by certificate. marking of the equipment or protective system must include the following:

JI 2G Ex db IIB T5 Gb



X-01)-11-ND\_Rev01\_24.05.2016

### TUV NORD

EU-Type-Examination Certificate (2) Equipment and protective systems exposite atmospheres. Directive 2014/34/EU

(4) for the equipment:

TÜV CY 19 ATEX 0206265 X (5) of the manufacturer: Power Slip Ring Type: SREX506\* series

SPM Special Machine Srl Date of issue:

Stras Special Macrime Str Via Padana Superiore 38 litzago (MI) - 20065 - ITALY 2019-12-23



#### SPM SPECIAL MACHINE s.r.l

Via Padana superiore 38 20065 Inzago (MI)
C.F P.iva 11025160968 SDI M5UXCR1
Tel +39 0209948040 cell.+39 3286972169
sales@spm-slipring.it www.spm-slipring.it

