

- Stringing
- Energy Automation
- Railway
- Trencher

Mediobanca MidCap

TESMEC Presentation



www.tesmec.com



- Corporate Strategy
- > 2019.9M Results
- > Outlook



VISION

 To be a technological partner in a changing world

VALUE PROPOSITION

To supply addedvalue integrated solutions for our customers



MISSION

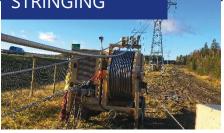
To operate in the market of infrastructure for the transport of energy, data and material (oil and derivatives, gas, water).

STRATEGY

InnovationInternationalizationIntegration



STRINGING



- Overhead power lines construction & maintenance
- Advanced methodologies for powerlines improvement
- Zero emissions underground cable laying



- Catenary lines construction & maintenance
- Diagnostics systems
- Big Data integrated solutions for safe infrastructure

ENERGY





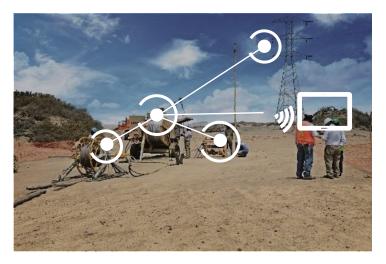
- Telecommunications solutions for **HV** Grids
- Grid Management: protection and metering solutions
- > Advanced sensors for fault passage indication, protection and monitoring



- > Telecom networks, FTTH & long distance, power cable installation
- Oil & Gas, Water pipelines
- Bulk excavation, Quarries & Surfaces mining



COMBINE OPERATIONAL DATA IN THE CLOUD AND APPLY ADVANCED ANALYTICS













✓ Grassobbio, Patrica and Monopoli plants are fed by solar panels



All Italian plants are certified according to ISO 9001-14001-45001



The whole production process takes care of waste and complies with recycling regulations





ALTERNATIVE POWER

Tesmec Green products





> FULL ELECTRIC MACHINE

Zero emissions underground cable laying









> Hybrid and electric railcars



SUPER GRID AND SMART GRID RENEWABLE ENERGIES DIGITAL FOR GREEN



- Custom solutions for Smart Grid management
- > Energy consumption optimization through carbon footprint equipment



- > Low pollution and low impact on environment
- Complete value chain for renewables





		TRS	RAIL	STR	AUT
	Tesmec SPA Grassobbio				
	Tesmec SPA Endine				
in	Tesmec SPA Sirone (precision machining work)				
	<i>Marais</i> Durtal (FR)				
	<i>Tesmec USA</i> Alvarado (USA)				
	<i>Tesmec Rail</i> Monopoli				
	Tesmec Automation Patrica				
	<i>Tesmec Automation</i> Padova-Fidenza				





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Digital Machines & Jobsite
Management Services,
Innovative methodologies for
transmission lines construction &
refurbishment.

"

TECHNOLOGY FOR FAST EFFICIENT STRINGING OPERATIONS

A new concept of integrated systems 4.0 for energy transport and distribution: **Simple, Safe and Reliable**

A COMPLETE PACKAGE OF SOLUTIONS

Machines equipment and accessorizes specifically developed to face every jobsite conditions

CUSTOMIZED SOLUTIONS & R&D

Continuous improvement of methodologies and technologies in order to offer the best solution

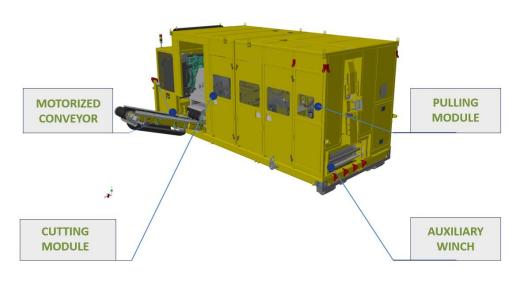
EFFECTIVE & RELIABLE AFTER SALES SERVICE

Speed and focus technical assistance with a global network





A new reconductoring process: CONTINUOUS LINEAR PULLER







FASTER



Time reduction in outage period and in jobsite operations.

CHEAPER



Less vehicles, equipment and operators for a costeffective jobsite.

SAFER



No more working at height and minimum level of risks for operator.

DIGITAL HUMAN MACHINE INTERFACE (HMI)



Unique user-friendly controls provide advanced automation.

ENVIRONMENTALLY FRIENDLY



- Integral cover
- Reduction of vehicles on jobsite grant less pollution and noise.



A solution for tomorrow: FULL ELECTRIC MACHINE



Full electric machine with no heat engine on board.
Battery storage (LiFePO4) on board.
Plug-in charging system.

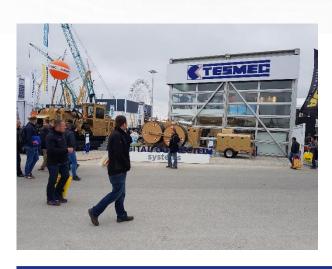




Designed for urban projects of cable laying and pipe rehabilitation. While pulling the machine makes no noise at all.



No more hydraulic circuit. The hydraulic components (motors, pumps and valves) have been replaced by electric components, consequently the oil pipes are missing.







Main worldwide experience



Reconductoring - USA

NHPL Texas jobsite Live line reconductoring operations (with a by-pass phase); CTC ACCC conductor



Top efficiency - BRAZIL

500 kV line, 6 T&D lines, 5000 km long 70 sets of stringing equipment



In altitude - PERU

500 kV line at 1000 mt a.s.l., 900 km long 2 modular machines for stringing 4 bundled conductors per phase



Fjord crossing - NORWAY

Special machines for fjord crossing and modular machines



Line construction - SAUDI ARABIA

Yanbu-Madinah 380 kV line Longest project portion: 230 km 4-500mm² AAAC conductors per phase



Extreme temperature - RUSSIA

Huge crossing of Lena river Two bundled conductors 220 kV Extreme conditions: -50°C (-58F)



Tower erection - INDIA

Technical advice and training activity for tower erection works



UG Cable Laying - UK

Romford 3 x 33 kV cable pulling



Stringing Machines 4.0 - FRANCE

New single line double circuit aacsr PHLOX conductor



Helicopter stringing - CHINA

Extreme project in Zhejiang Province Tower height: 380 m Four bundled conductors 500 kV







Grid Reliability,
Efficiency and Security:
providing tailored and integrated
solutions to face fast-changing
grid challenges.

PROTECTION & METERING SOLUTIONS FOR SMART GRID

From selectivity to reliability providing **uninterrupted operation** and increasing **grid efficiency**

TELECOMMUNICATION SOLUTIONS

Performance improvement, reliable operation and enhanced management of the grid

EXCELLENCE IN SENSOR TECHNOLOGY

From fault passage indication and protection to smart metering with **high accuracy solutions**

TECHNICAL EXPERT SUPPORT

Technological support by well experienced engineers







Smart Metering solution for MV Grids - RUSSIA

Real-time accurate measurement of energy parameters in 6-10kV power lines and identification of technical and non-technical losses



Protection and Control solution for MV substations - ITALY

Automation and distributed generation management



Teleprotection solution for HV Grids - ITALY

Advanced power grid protection to ensure a secure and uninterrupted supply of electricity



Fault Passage indication (FPI) for MV Grids - SOUTH AMERICA

Monitoring of line status. Fast, accurate and efficient fault detection

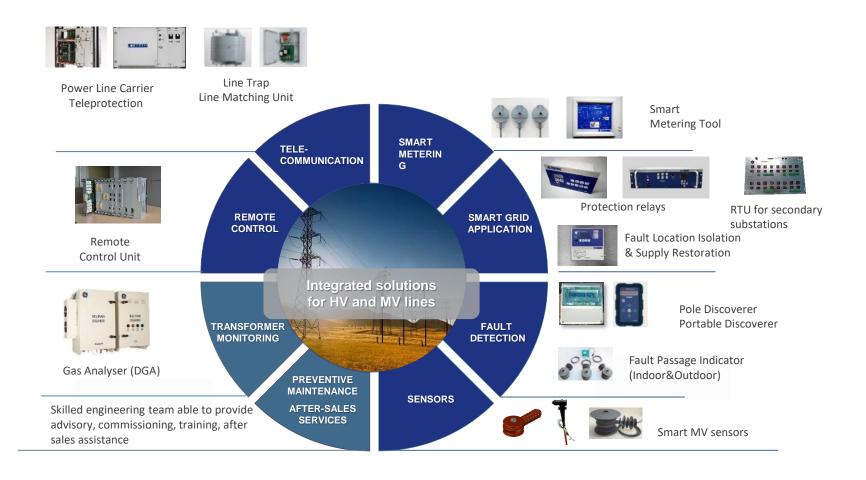


Telecommunication solution for HV Grids - ALGERIA

Secure communication solution for reliable operation and enhanced management of the grid







- ✓ Grid management
- ✓ Distributed intelligence

- ✓ Substation automation
- ✓ Continuous monitoring

- **✓** Telecommunications
- ✓ Data analysis





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Fleet management and **diagnostic** of infrastructures for **safety**, through integrated platform for data management

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GLOBAL CATENARY SPECIALIST

Global catenary specialist for the installation and maintenance of railway lines

CONNECTED VEHICLES

High technological solutions for efficient working methodology

HIGH MOBILITY

High Mobility as passenger train on active lines

DIAGNOSTIC & SMART PLATFORMS

Diagnostic for infrastructure & Certification of works for safety



Main worldwide experience

TESMEC

Safety of Railway Infrastructure - ITALY

2 Diagnostic Vehicles



Catenary maintenance - ITALY

88 Multipurpose railway vehicles 16 Revamping maintenance units 1 Constant tensions stringing unit Full maintenance service



Snow removal - NORWAY

3 Snow removal vehicle

Maintenance unit operative at low temperatures



RER Catenary renewal - FRANCE

9 vehicles (n.6 different models)

Engineered to allow a correct execution of the works of catenary replacement



Stringing of 3 independent wires & recovery of 2 - RUSSIA

10 stringing units

Extreme temperature Compliance with Russian Standards



Stringing and recovering wires - USA

1 Work car + 1 Reel car with 6 reels

1 Catenary maintenance vehicle

Huge, top performing units Designed according to US Standards



Electrification of new lines High speed - CHINA

> 30 stringing units

1,318 km BEIJING-SHANGHAI



Installation of the contact line and catenary maintenance "Eagle P3 Project" - USA

1 Stringing unit & 1 Catenary maintenance vehicle A very fast rail wire installation



Customized solutions - POLAND

4 Stringing units

Tensioning system for railway wiring operations composed by working units mounted on ISO 20 size flat modules





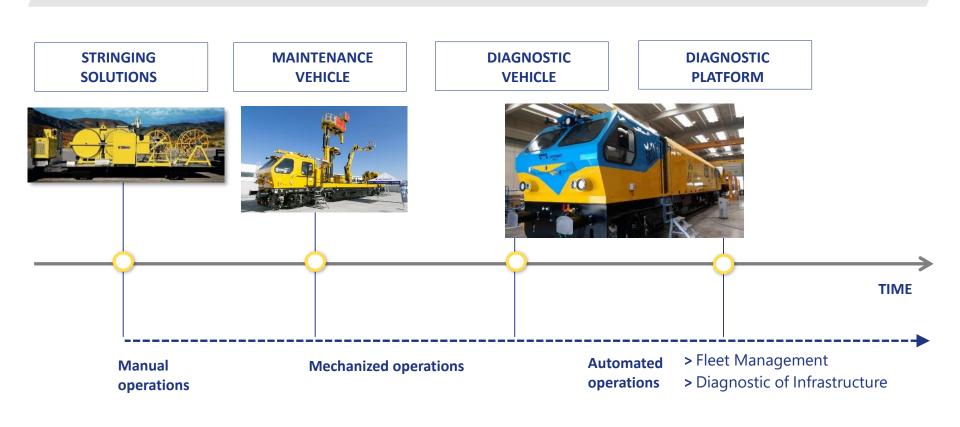
Railway Segmentation



5 STREAMS:

- 1. Stringing
- 2. Maintenance
- 3. Diagnostic
- 4. Components
- 5. Full Maintenance Service (FMS)





Railway Business: 2019-2020



Catenary installation & Maintenance

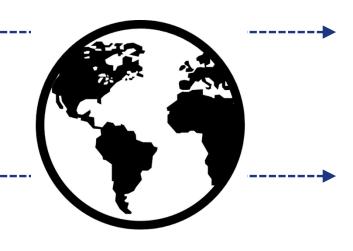


Special Technological vehicles - Stringing



FALCO - Diagnostic vehicles





- FALCO Developments:
 - Bimodal vehicle
- CENTRALIZED PLATFORM Unmanned diagnostic (software + devices)
 - > New Markets
 - > Cooperation with **Accenture**

2019 2020's





Advanced working methodology: integrated systems & technological solutions for a complete jobsite management

VALUE CHAIN

Complete offer package combining internal and partner's solutions

DIGITALIZATION

Complete range of machines equipped with the latest digital technologies to allow:

- √ higher reliability
- √ easier management
- √ maintenance costs reduction

CLEAN & FAST SOLUTIONS

Business model as service provider and proposal of the **innovative "clean** & fast" methodology, especially in the new 5G market segment



Main worldwide experience



Fiber Optics Laying - GERMANY



South Mutlaa project - KUWAIT



Riyadh metro station - SAUDI ARABIA 1475 Rock Hawg



Surface mining Gold - RUSSIA

Limestone quarry - UZBEKISTAN 1475 Rock Hawg



Gas Pipeline - USA

Fiber Optics Laying - SOUTH AFRICA Tunneling project - AUSTRALIA Sidecut



1475 Rock Hawg EVO



UltraFastBroadband project - NEW ZEALAND Cleanfast



Wind Farms Projects - AUSTRALIA





Towards 5G – Next generation of broadband connection





Main features

- Massive device connectivity
- Ultra reliability
- High speeds
- Low communication latency

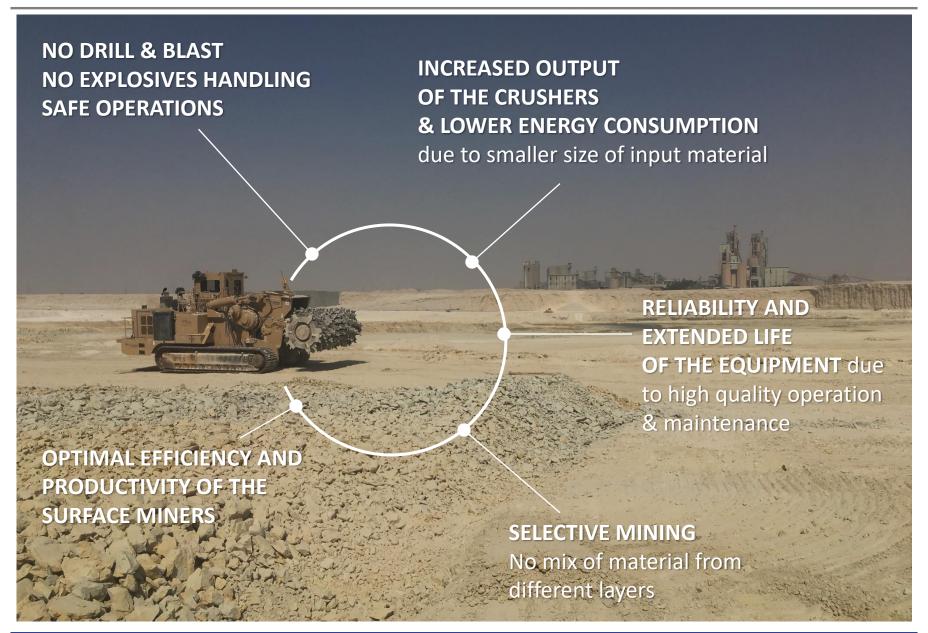
The costs and speed of building new 5G networks depend to a large extent on how quickly broadband providers can dig trenches along roads to lay fiber conduit.



- ✓ Digital & connected solutions: SAFETY first and easier PROJECT MANAGEMENT
- Better overall QUALITY
- Clean & Fast working methodologies
- ✓ INTEGRATED value chain:
 - underground utilities detection and mapping
 - trenching
 - vacuum systems
 - home connection
 - road surface finishing







Main opportunities







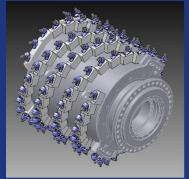






- ✓ Focus on: PRODUCTIVITY, EXCAVATED MATERIAL SIZE, OPERATIVE COSTS
- ✓ Safe & efficient working methodologies
- ✓ INTEGRATED solutions: EQUIPMENT + SERVICES
 - Project Analysis
 - Site survey
 - Rock analysis
 - Machine customization
 - Estimation department
 - Maintenance plan analysis
 - Site organization
 - Training

SMART MINING SOLUTIONS















- Corporate Strategy
- **> 2019.9M Results**
- > Outlook



NEW METHODOLOGY FOR RECONDUCTORING

- **Age of grid** in development Countries is higher than conductor lifespan
- Grant the quality of the network service, reducing outage period and related costs



NEW SAFER FASTER & CHEAPER METHODOLOGY





NEW DEAL FOR NORTH AMERICA MARKET

- Nesco Agreement
- ICUEE Expo (1-3 October): launch of the brand-new electric machine and innovative continuous puller
- Reorganization of our presence on energy sector



INCREASE MARKET SHARE AND REVENUES STARTING FROM 2020





KEY OPPORTUNITIES IN GROWING MARKET SEGMENTS

ENEL MARKET:

- Cybersecurity Integration in compliance with market requirements
- Continuous supplies of MV Smart devices in Italy and South America

ITALIAN MARKET:

Push on supplies for primary and secondary substation
 Automation by market diversification



KEY OPPORTUNITIES IN INTERNATIONAL MARKETS

HV MARKETS:

- Invasive activities in North Africa
- Awarded High Voltage telecommunications tenders in Eastern Europe with supply in Q42019
- Ramp-up activities in Middle East

RUSSIA:

- Key direct supplies of SMT on the Rosseti Grid
- Growing supplies to local players (Engineering companies, EPC, installators) and activities for the market consolidation





KEY OPPORTUNITIES IN 5G and RENEWABLES BUSINESS

- Digital & connected solutions: SAFETY first and easier PROJECT MANAGEMENT
- STRATEGIC RELATIONSHIP with Verax Network Solutions to provide effective solutions across the USA, utilizing line of fiber optic trenching solutions
- Growing recognition of Tesmec automatic cable laying technology for wind and solar farms
- ICUEE Expo (1-3 October): excellent results, great interest showed for Tesmec innovative solutions

KEY OPPORTUNITIES IN SURFACE MINING BUSINESS

- Focus on: PRODUCTIVITY, EXCAVATED MATERIAL SIZE, OPERATIVE COSTS
- Safe & efficient working methodologies
- INTEGRATED solutions: EQUIPMENT + SERVICES
- Bauxite project inauguration: Lizetta Project in Ivory Coast and key opportunities in African countries







INNOVATIVE FAST & SAFE METHODOLOGY

for CATENARY MAINTENANCE OPERATIONS

- Certified solution (with remote control systems) for replacement of the contact wires – RFI Italy
- Technological solutions for refurbishment of the line RER C network - RC2 consortium France
- Less people on track, higher efficiency & Safety



SOLUTIONS TO ASSURE RAILWAY INFRASTRUCTURES RELIABILITY & SAFETY

- Specialized vehicles equipped with DIAGNOSTIC DEVICES and DIGITAL PLATFORM to measure and to manage big amount of data in real time.
- Diagnostic systems to grant SAFETY of the railway infrastructures.



NEW CONTRACT WITH ELZEL Elektrizace železnic Praha in CZECH REPUBLIC - approx. Euro 8 million

Supply of 4 multi-purpose rail vehicles for the maintenance of railway lines, as well as for full maintenance service for 6 years

SOLUTION + DIAGNOSTIC SYSTEMS = guarantee operations in a SAFER, MORE EFFICIENT AND FASTER WAY



GROUP (€mln)	9M 2019	9M 2018	Delta %
REVENUES	144,2	140,5	2,6% (1)
EBITDA (2) (3)	17,4	12,2	42,2%
% on Revenues	12,1%	8,7%	
EBIT	3,9	1,4	169,8%
% on Revenues	2,7%	1,0%	
Differences in Exchange (4)	1,3	(0,4)	n/a
% on Revenues	0,3%	-0,3%	
PROFIT (LOSS) BEFORE TAX	1,4	(1,4)	196,6%
% on Revenues	0,9%	-1,0%	
NET INCOME/(LOSS)	0,7	(0,7)	195,6%
% on Revenues	0,5%	-0,5%	
GROUP (€mln)	9M 2019	9M 2018	Delta %
NFP ante IFRS 16	97,8	92,9	-5,3%
NFP post IFRS 16 (3)	115,6		

- (1) + 0,9% at constant currencies
- (2) The EBITDA has been growing due to management actions rolled out after the results of end 2018, not yet lined up with expectations, but with a positive outlook in Q4.
- (3) Starting from the 1st January 2019, the new IFRS 16 has been introduced. It impacts:
 - EBITDA +2,7 M€
 Depreciation 2,5 M€
 - Net Results 0,3 M€
 - Intangible assets + 17,5 M€
 - NFP + 17,8 M€

The EBITDA ante IFRS would have been 14,7 M€

(4) The positive exchange differences are positive due to the favorable effects FX





ENERGY	9M 2019	9M 2018	Delta %
Revenues	31,5	30,2	4,2%
EBITDA*	3,8	2,3	66,4%
% on Revenues	12,0%	7,5%	
* EBITDA ante IFRS 16 would have been 2,6 M€			

- > Energy Automation Growth
- > Driven by European Market



TRENCHERS	9M 2019	9M 2018	Delta %
Revenues	89,4	94,2	-1,3%
EBITDA*	9,8	7,7	27,1%
% on Revenues	10,9%	8,2%	
* EBITDA ante IFRS 16 would have been 8,6 M€			

- > USA Market Growth
- > European Market Growth
- > Less impacts of Australia Projects
- > USA & Italy Profitability Impact

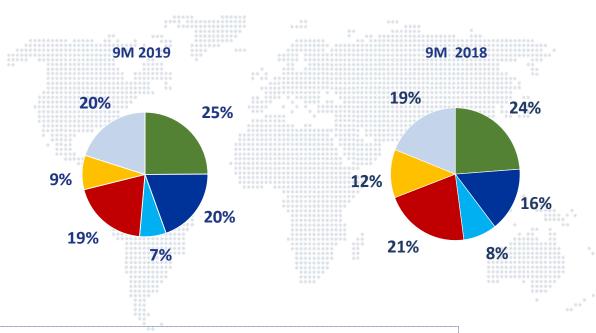


RAILWAY	9M 2019	9M 2018	Delta %
Revenues	23,3	16,1	44,6%
EBITDA*	3,8	2,3	65,2%
% on Revenues	16,5%	14,1%	
* EBITDA ante IFRS 16 would have been 3,4 M€			

- > RFI-OCPD: Execution delay
- > TSO: Project Execution delay
- > Awarded of new contracts postponed



INTERNATIONAL SCALE AND EXPOSURE TO GROWING ECONOMIES JOINT WITH A GROWING IMPORTANCE OF THE ITALIAN MARKET





ITALY: impact of railway business & automation



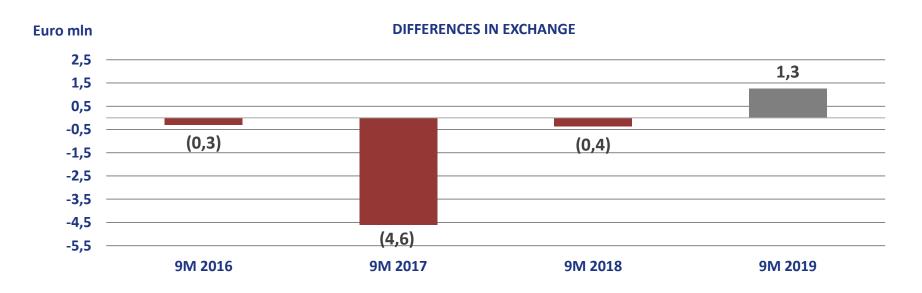
USA: TRS impact



EUROPE: TRS impact



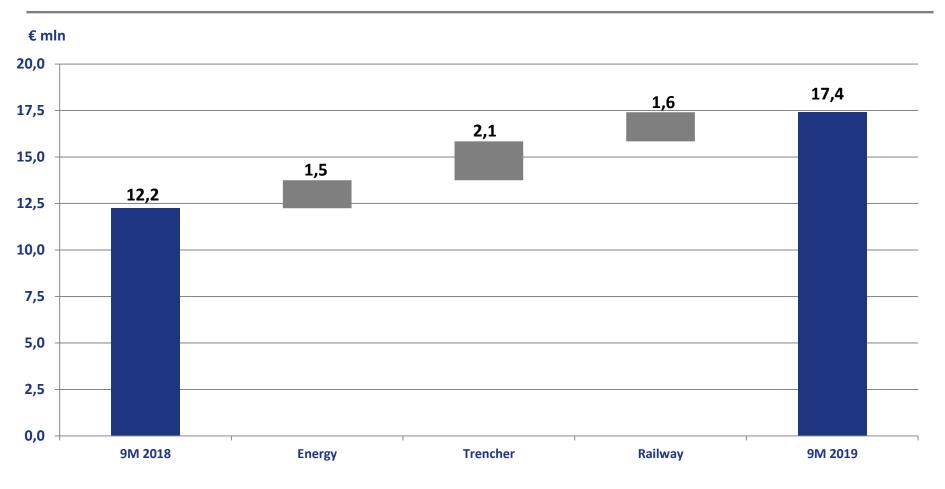




GROUP (Euro mln)	9M 2016	9M 2017	9M 2018	9M 2019
Differences in Exchange	(0,3)	(4,6)	(0,4)	1,3
of which:				
Realised	0,0	0,1	0,1	0,2
Unrealised	(0,3)	(4,7)	(0,5)	1,1
Differences in Exchange for currency:				
USD	(0,9)	(3,0)	0,6	0,8
ZAR	0,4	(0,6)	(0,6)	0,1
OTHER	0,2	(1,0)	(0,4)	0,4
Total	(0,3)	(4,6)	(0,4)	1,3

9M 2019 EBITDA





^{*} The impact of IFRS 16 is around 2,7 M€

9M 2018

The EBITDA is positively impacted by the results of the all segments

9M 2019



Financial Information (€ mln)	9M 2019	2018
Net Working Capital	70,1	48,9
Non Current assets	69,5	67,3
Right of use - IFRS 16	17,5	0,0
Other Long Term assets/liabilities	3,5	4,8
Net Invested Capital	160,6	121,0
Net Financial Indebtness	97,8	77,7
Lease liability - IFRS 16	17,8	0,0
Equity	45,0	43,3
Total Sources of Financing	160,6	121,0

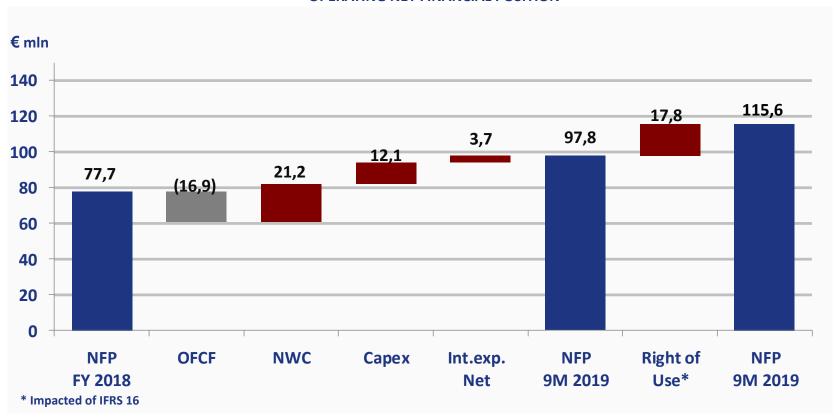
2018

Increase of working capital due to Railways Business and the stock to support the growth of the 4th quarter 2019

9M 2019



OPERATING NET FINANCIAL POSITION



2018

The positive operating free cash flow has been impacted by the increase of NWC related to Railways and the stock for the growth of the 4th quarter of the year that will generate a positive cash flow

9M 2019



OPERATING NET FINANCIAL POSITION



^{*} From 1st January 2019, the new IFRS 16 has been introduced, the impact is term of NFP is around 17,8 M€, otherwise the NFP would have been around 97,8 M€



- Corporate Strategy
- > 9M 2019 Results
- > Outlook



GREEN PRODUCT LINE

- ✓ Zero emissions product line dedicated for urban area
- ✓ Approach with marketing actions on specific areas:



USA



ΕU



NEW MARKET POSITIONING IN CHINA

- ✓ Tesmec New Technology antenna for green & digital technologies in cooperation with local manufacturer
- ✓ Hub for neighbour markets: Asia Pacific Countries starting from South Korea & Taiwan





TOWARDS CYBERSECURITY REQUIREMENTS

Focus on reliable solutions for secure communication and M2M and M2H interface in order to provide stability of strategic assets (utilities substations).

Main drivers:

- Efficient device access control
- · Compliance with cybersecurity standards
- Enhance infrastructure performance



FOCUS ON ENGINEERING SOLUTIONS

Development of an engineering solutions starting from Tesmec ready-to-go telecommunication systems to increase productivity and reliability of infrastructure.

Main drivers:

- · High control and automation capabilities
- · Increase plant productivity





TOWARDS 5G – NEXT GENERATION OF BROADBAND CONNECTION

The costs and speed of building new 5G networks depend to a large extent on how quickly broadband providers can dig trenches along roads to lay fiber conduit

Main features of the new generation network:

- Massive device connectivity
- Ultra reliability
- High speeds
- Low communication latency



TESMEC has the solution for a "clean & fast" network deployment



FOCUS ON DIGITAL AND SUSTAINABLE WORKING PROCESSES

The acceptance and use of Surface Miners in mining applications has increased and is continuously growing.

Main drivers:

- safe operations
- efficient and digital equipment
- sustainable technology



Tesmec is committed in a continuous improvement of his range of solutions to increase productivity, reliability and costs saving



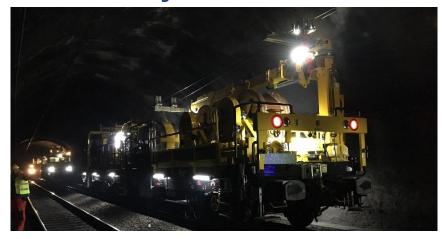


CERTIFIED & ENVIRONMENTALLY FRIENDLY METHODOLOGY

 INTERNATIONALIZATION OF HIGH-QUALITY SOLUTIONS



- Automated operations
- Fleet Management



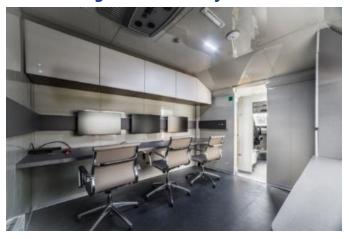


INFRASTRUCTURES RELIABILITY & SAFETY

CENTRALIZED PLATFORM Unmanned diagnostic (software + devices)



Verification and validation process through IoT, Big Data and Analytics tools







MACRO MARKET TRENDS



Digital Transformation & Industry 4.0

Telecom - 5G

Energy transition

Mines - new methodology



Economy is **slowing**

China – USA → commercial

Middle East, Iran → embargo

BUSINESS DRIVERS



> New products: impact on revenues

> New USA agreement: Transmission and Distribution

> Important development on digital grids with cyber-security needs

TRENCHERS

> New solutions for 5G & FTTx -> Clean & Fast methodology in USA, SA, UK, FR & DE

> Mining: development of special tailor made solutions with key market: Africa



RAILWAY

> Diagnostic market developments -> Full solutions in final test

> Diagnostic + Web Platform

ECONOMICS & FINANCIALS



2 EBITDA %: improvement in comparison to 2018 Results

3 NFP: improvement NFP/EBITDA ratio due to cash generation related to the WIP reduction

4 Expected BACKLOG: increase in comparison to H1.2019

5 Back to dividends distribution policy







Energy

Trencher

Railway

Total

BACKLOG





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