TESMEC

TESMEC
BULK EXCAVATION SOLUTIONS

TESMEC

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Tesmec S.p.A.
Grassobbio (Italy)

Saudi Tesmec
Riyadh (Saudi Arabia)

Tesmec USA
Alvarado, TX (USA)

Marais Laying NZ
Wellington, New Zealand

Tesmec SA
Edenvale (South Africa)

Tesmec Guinea
Conakry (République de Guinée)

Groupe Marais
Durtal (France)

Tesmec Peninsula
Doha (Qatar)

Tesmec Australia
Mount Druitt, NSW (Australia)

Tesmec Energy
Algeri, Algeria

Tesmec Maroc
Casablanca (Morocco)

Marais Cote D'Ivoire
Bietry (Cote D'Ivoire)

Tesmec New Technology
Beijing (China)

THE HISTORY

1951-1960

Pioneer in stringing solutions

Establishment of "CRF-Officina Meccanica di Precisione" Edison patent for the new tension stringing system

1984

TRENCHER product line development

Establishment of Tesmec USA Inc. in Texas, USA

2010

From family to public company

Entry in the Italian Stock Exchange (STAR segment)

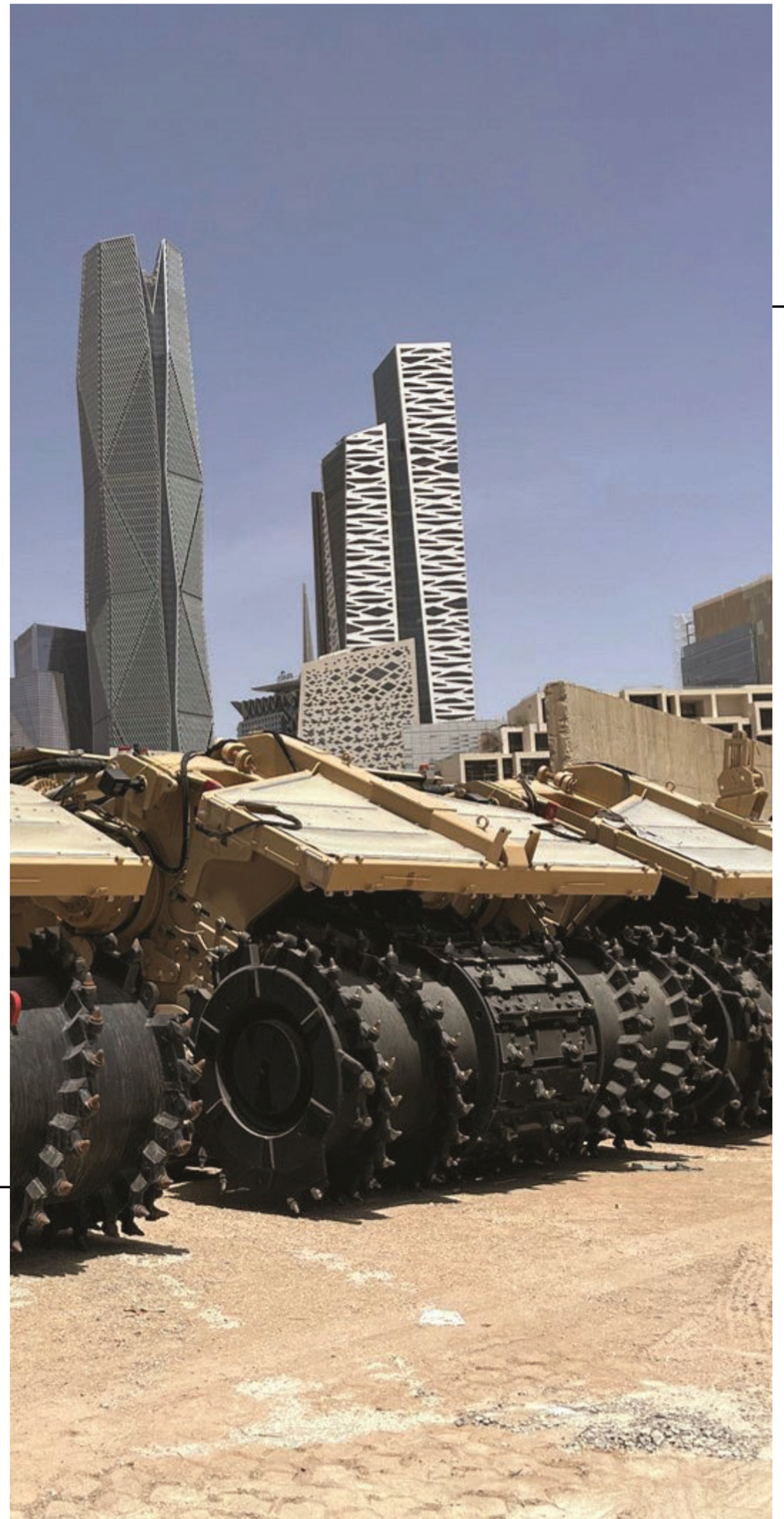
2012

Expansion strategy in the RAILWAY business

Leasing of AMC2 S.r.l (Monopoli - Italy)

2015

Acquisition of the French Group Marais



Tesmec Automation as a single Company

2017

Investments & acquisitions to complete the portfolio for SMART GRIDS

Opening of the new Tesmec Rail s.r.l. production site (Monopoli – Italy)

2018

Investments in R&D and DIAGNOSTICS

4Service, a Company dedicated to the rental business

Share capital increase

2020

Strengthening the Service and Rental Business

2021

ENERGY TRANSITION
DIGITALIZATION
SUSTAINABILITY

2024

SURFACE MINERS ADVANTAGES VS TRADITIONAL METHODS

Productivity

Experience unmatched productivity and efficiency with Tesmec cutting-edge Rock Hawgs. One trencher can outperform multiple traditional machines, making your projects faster and more efficient

Performance

Achieve high performances in all rock conditions, even hard and abrasive rock, including long-distance projects, ensuring exceptional results in the most challenging conditions

Logistics

Simplify your operations and reduce costs with our trenching technology. Fewer machines and operators are required, leading to lower logistics expenses, easier site management and safer operations

Flexibility

Tesmec trenchers are an incredibly reliable, high quality and versatile equipment, adaptable to several conditions and applications. You can rely on them to address your project's unique requirements

Sustainability & safety

By using a Tesmec Rock Hawg you reduce CO2 emissions and fuel consumption as one trencher replaces several conventional machines. Avoid the use of explosives, control the dust and noise and minimize vibrations and shocks

Traceability

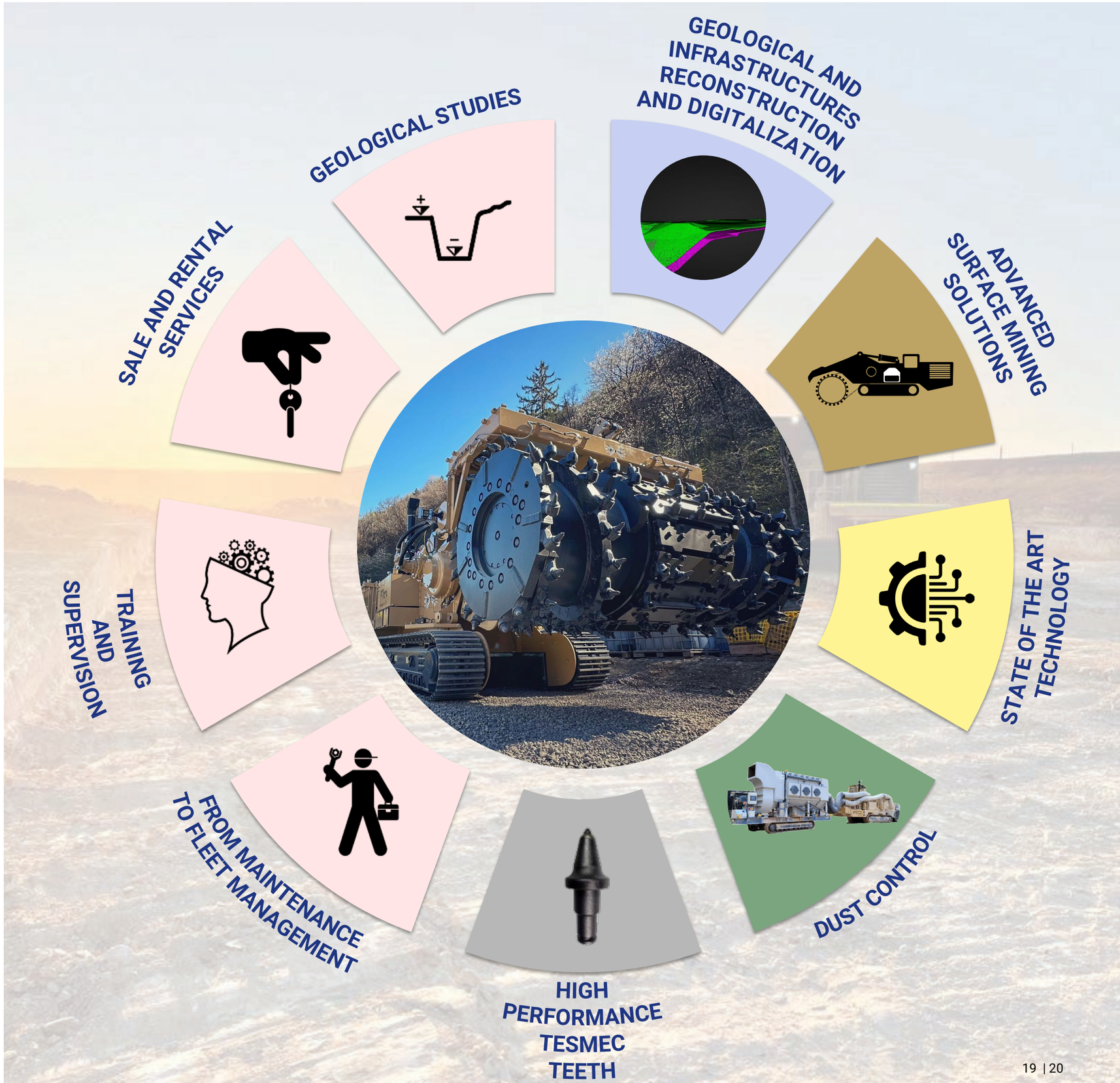
Stay in control of your projects with real-time traceability and georeferenced data of the operations, and successfully manage your site operations

INTEGRATED VALUE PROPOSITION

Tesmec Rock Hawgs are **clean and fast solutions** designed to facilitate bulk excavation projects replacing traditional machines and use of explosives, increasing overall productivity, overcoming levelling difficulties and safety issues, improving the site management and saving costs.

Tesmec provides, manages and supervises an **integrated value chain**, consisting of:

- Preliminary geotechnical evaluation and site survey
- Engineering and project study
- Bench, wall and face excavation
- Material crushing
- Dust control
- Site management

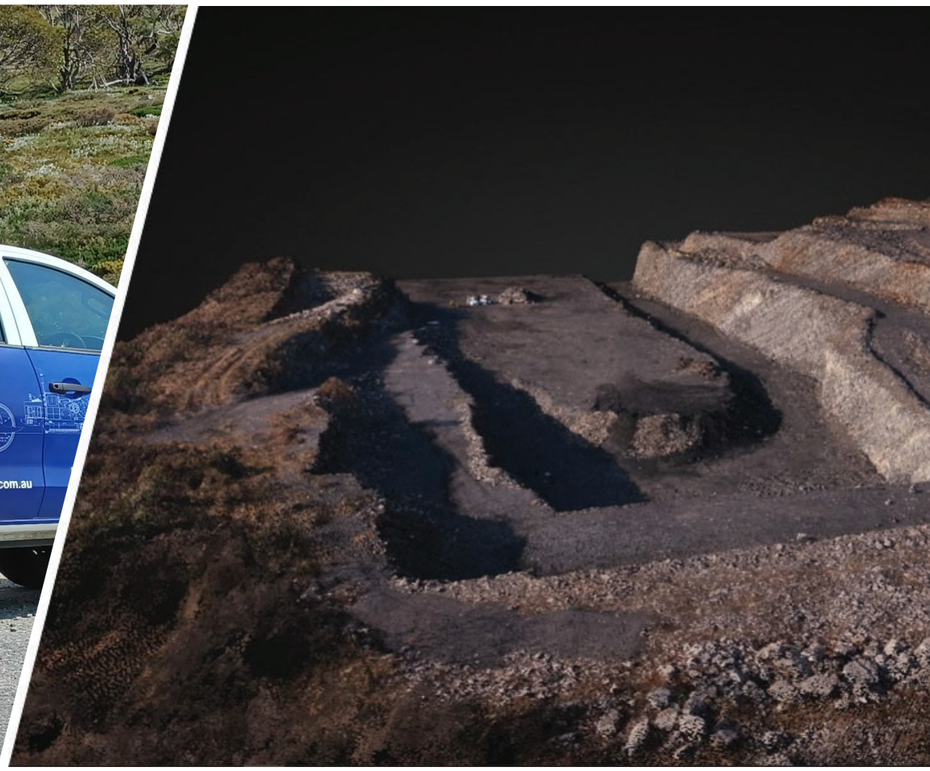


OUR METHODOLOGY

1. CONSULTANCY AND SITE SURVEY

2. GEOTECHNICAL ANALYSIS

3. DIGITAL SURFACE MODEL



4. EXCAVATION AND MATERIAL CRUSHING

5. DUST CONTROL

6. SITE MANAGEMENT

THE ADDED VALUE

Patented flywheel gearboxes

Final drive of 100% hydraulic power system, protecting the hydrostatic circuit from shocks and overloads and releasing accumulated energy by delivering extra torque on the digging shaft, granting higher productivity in hard rock

Excavation of vertical walls and square corners

Rear mounted drum wider than the machine and supported in the center

Rigid frame and undercarriage, no tilt

High stiffness and robustness, making Tesmec Rock Hawgs the ideal solution in hard rock excavation

Reduced steering radius

Rock Hawg can turn 360° on its central axes, maximizing maneuverability in very tight spaces, site efficiency and flexibility

Down cutting, up cutting and front excavation

The excavated material can be conveyed and loaded in upcutting configuration

State of the art technology

Rely on Tesmec's state-of-the-art technologies, which enables automatic excavation and self-diagnosis, extreme precise 3D-GPS automatic guidance system, remote monitoring and reporting, and as built data recorder

PRODUCTS
OVERVIEW


975 EVO RH
Pag. 33 - 38


1150 EVO RH
Pag. 39 - 44


1475XL EVO RH
Pag. 45 - 50

975 EVO RH

+ *SMALLEST TESMEC ROCK HAWG*

+ *EXCELLENT MANOEUVRABILITY*

+ *EASY TO TRANSPORT*

+ *IDEAL FOR TUNNELING APPLICATION AND CIVIL ROAD WORKS*

+ *MODULARITY: CHAINSAW AND ROCKSAW ATTACHMENTS*


290 cm wide rear mounted, chain driven drum
Pressurized, elevating cab with ROPS and FOPS protection
Tier 4/stage V and Tier 3 CAT C9.3B engine – 375 HP (280 kW)
TESMEC Trencher
975 EVO
Vertical wall and square corners capability
Two fully counter steering crawlers
Cross conveyor system

TECHNICAL DATA

Engine	Tier 4 Stage V	CAT C9.3B	**Digging depth**	35 cm | 1'2"
	Tier 3	CAT C9.3B	**Digging width**	290 cm | 9' 6"
Max Power		375 Hp (280 kW)		
Weight		44.000 kg | 97.000 lbs		

975 EVO is the smallest Tesmec Rock Hawg. The manovrability, ease of transport and compactness make it suitable for special bulk excavation projects, tunneling applications and civil road works. The up – cutting excavation mode, designed for hard/solid, not brittle rock, allows the excavated material to be loaded and laterally cast. Moreover, the face excavation mode makes 975 EVO RH suitable for underground face walls special applications. Thanks to the rear mounted drum larger than the track, benches, vertical walls and square corners can be excavated. 975 EVO is equipped with elevating cab module, to improve the operator visibility. The last generation laser system allows accurate and inclined surface/contrast excavation depth. The TrenchTronic 5.0, TrenchIntel and Smart Tracker systems maximize trenching efficiency.

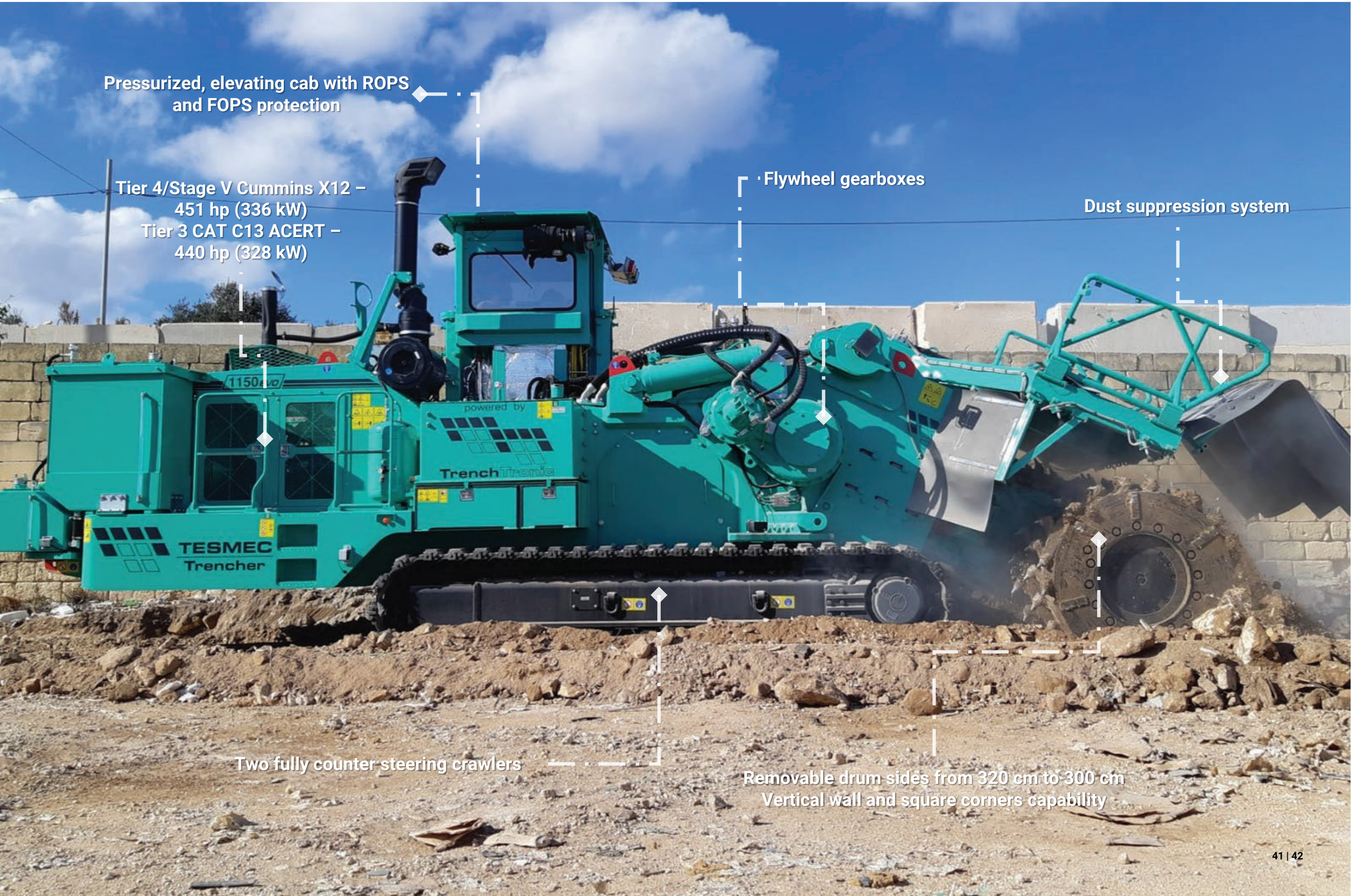
1150 EVO RH

+ *ADAPTED TO MANY APPLICATIONS*

+ *LOW LEVELS OF NOISE, VIBRATIONS AND DUST*

+ *THE WIDTH OF THE DRUM CAN BE REDUCED TO FACILITATE TRANSPORT*

+ *MODULARITY: CHAINSAW, ROCKSAW AND DYNAMIC DRIVE DRUM ATTACHMENTS*


Pressurized, elevating cab with ROPS and FOPS protection
Tier 4/Stage V Cummins X12 – 451 hp (336 kW)
Tier 3 CAT C13 ACERT – 440 hp (328 kW)
Flywheel gearboxes
Dust suppression system
Two fully counter steering crawlers
Removable drum sides from 320 cm to 300 cm
Vertical wall and square corners capability
1150 EVO
powered by
TrenchTronic
TESMEC
Trencher

TECHNICAL DATA

Engine	Tier 4/Stage V	Cummins X12	**Digging depth** Downcutting	50 cm | 1' 8"
	Tier 3	CAT C13 ACERT	**Digging depth** Upcutting	35 cm | 1' 2"
Max Power	Tier 4	451 Hp (336 kW)	**Digging width**	320 cm | 10' 6"
	Tier 3	440 Hp (328 kW)		
Max Weight	58.000 - 59.700 Kg |127.800 - 131.600 lbs			

The 1150 EVO Rock Hawg is a versatile trencher designed for multiple applications in bulk excavation, heavy civil and tunnelling projects. It combines high chain pull and low chain speed thanks to its upgraded flywheels gearboxes and new hydraulic components, guaranteeing the best performance on hard and abrasive rocks, increasing productivity and decreasing teeth consumption and maintenance costs. The ends of the digging drum are bolted on and, if necessary, the drum width can be reduced to 3.00 m for easier transport. 1150 EVO allows vertical walls and square corners cutting, thanks to the rear mounted drum larger than the tracks. Elevating cab equipped, this versatile trencher can work up-cutting or down-cutting. The last generation laser system allows accurate and inclined surface / constant excavation depth. The TrenchTronic 5.0, TrenchIntel and Smart Tracker systems maximize trenching efficiency. 1150EVO tractor can be set up also with chainsaw, rocksaw and dynamic drive drum attachments.

1475XL EVO RH

+ *LARGEST TESMEC ROCK HAWG*
+ *ADAPTED TO MANY APPLICATIONS*
+ *HIGH PRODUCTIVITY*
+ *SUPERIOR PERFORMANCES IN HARD AND ABRASIVE ROCK CONDITIONS*
+ *MODULARITY: CHAINSAW AND DYNAMIC DRIVE ATTACHMENTS*

Tier 4/Stage V and Tier 3 CAT C18 ACERT engine – 630 HP (470 kW)

Rigid frame and undercarriege

Cross conveyor system

Flywheel gearboxes

Water spray dust suppression system

420 cm wide cutting drum

Vertical wall and square corners capability

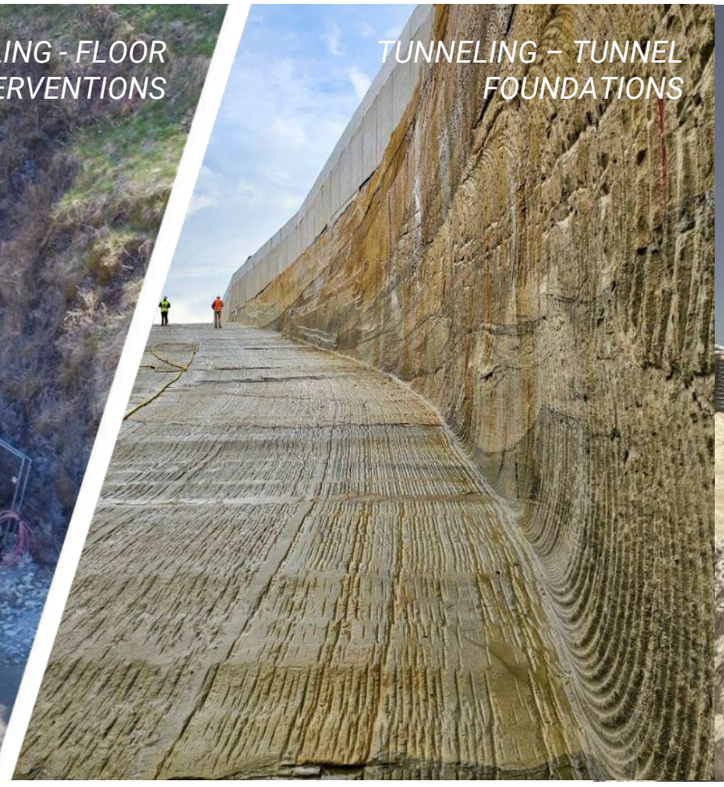
TECHNICAL DATA

Engine	Tier 4 Stage IV	CAT C18 ACERT	**Digging depth**	50 cm | 1' 8"
	Tier 3	CAT C18 ACERT	**Digging width**	420 cm | 13' 9"
Max Power	Tier 4	630 Hp (470 kW)		
	Tier 3	630 Hp (470 kW)		
Max Weight	108.861 - 115.665 Kg | 240.000 - 255.000 lbs			

1475XL EVO is the largest Tesmec Rock Hawg. With its 420 cm wide drum and 630 HP, this model is employed in a variety of large bulk-excavations, heavy civil and tunneling projects. 1475XL EVO RH allows vertical walls and square corners cutting, thanks to the rear mounted drum larger than the track. It can work up-cutting or down-cutting, it combines high chain pull and low chain speed thanks to its upgraded flywheels gearboxes and new hydraulic components. The EVO technology guarantees the best performance on hard and abrasive rocks, increasing productivity and decreasing teeth consumption and maintenance costs. It is equipped with TrenchTronic 5.0, TrenchIntel and Re.m, to maximize excavation efficiency and fleet monitoring. The last generation laser system allows accurate and inclined surface / constant excavation depth. The modular approach with chainsaw swap kit make it a versatile trencher designed for multiple applications.

EXPERIENCE & APPLICATIONS


TUNNELING - FLOOR INTERVENTIONS


TUNNELING – TUNNEL FOUNDATIONS


HEAVY CIVIL - BUILDINGS FOUNDATIONS


HEAVY CIVIL – ROAD CONSTRUCTION


TUNNELING – METRO FOUNDATIONS


HEAVY CIVIL– UNDERGROUND FOUNDATIONS


AGRICULTURE - SOIL RECLAMATION


HEAVY CIVIL - AIRPORTS RUNWAYS PREPARATION

STATE OF THE ART TECHNOLOGY

TESMEC

TrenchTronic

The automatic trenching and self diagnostic technology. It is an electronic control system designed to improve the ease of use of the trencher and increase productivity by making it less dependent on operator skills

TrenchIntel

The 3D-GPS automatic guidance system.
It is the satellite guidance system capable to automatically control machine steering, trajectory and trenching depth with extreme precision

Re.M

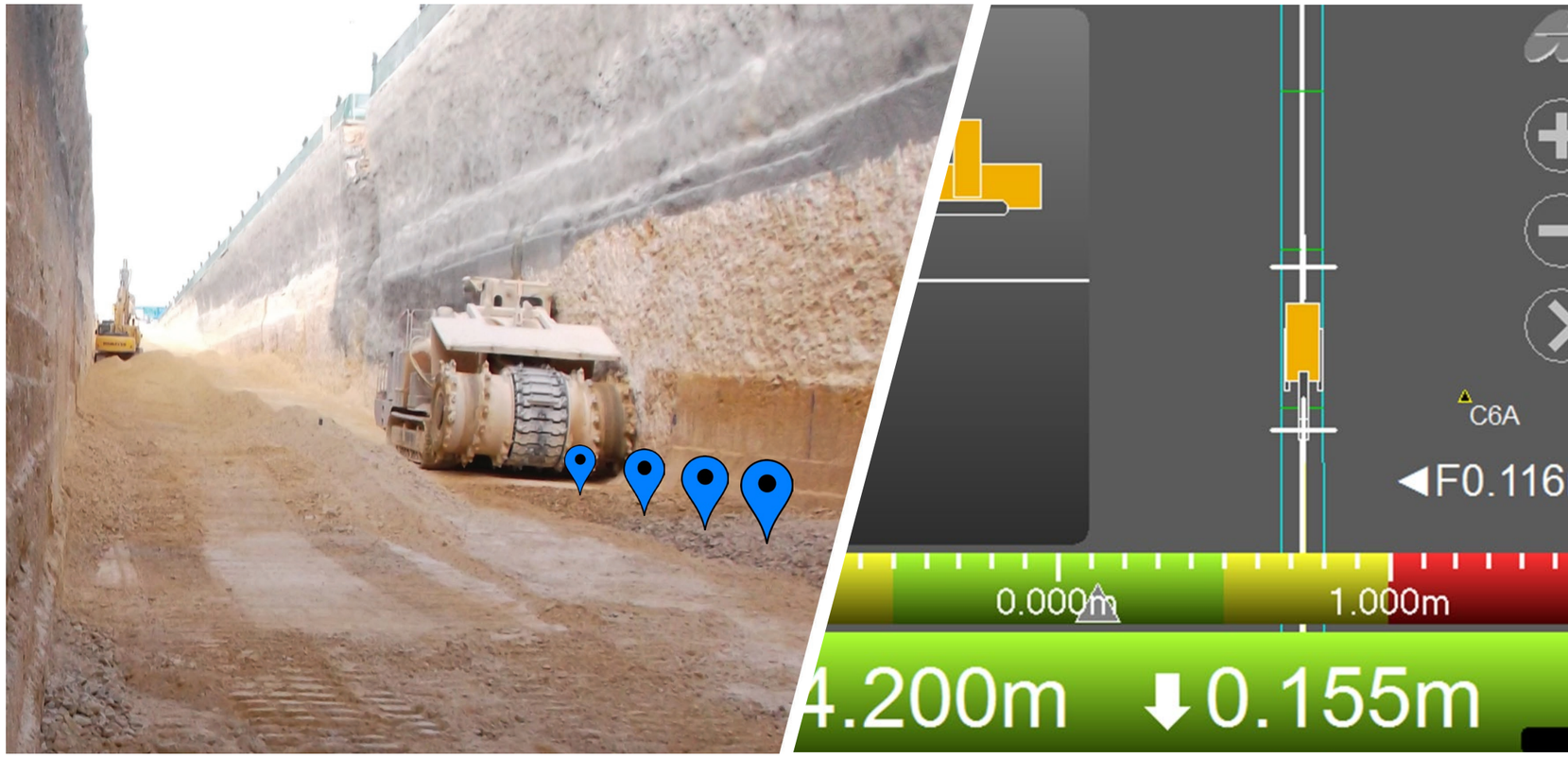
The remote monitoring and reporting technology.
It provides on-demand retrieval of operating, maintenance and troubleshooting information to help improving each machine's bottom-line performance

Laser system

The Rock Hawg automatically adjust boom position.
It allows to keep a constant excavation depth, even if the ground is not properly leveled, working on a graded area, increasing productivity and reducing vibrations.

TRC

The trencher radio control system.
It enables the operator to control the machine remotely through a radio contro, increasing the safety in site, the visibility on the trenching area and tool



CUSTOMER SERVICE

After sales and customer service

- Inspections and machine Start-up
- Machine operation and repair
- Worldwide fleet remote monitoring and assistance
- Technological support, monitoring and analysis of machine data to optimize utilization
- Jobsite management
- Machine data monitoring

Consultancy and studies

- Expertise
- Know-how
- Feasibility studies
- Technical advice and consultancies
- Geotechnical analysis

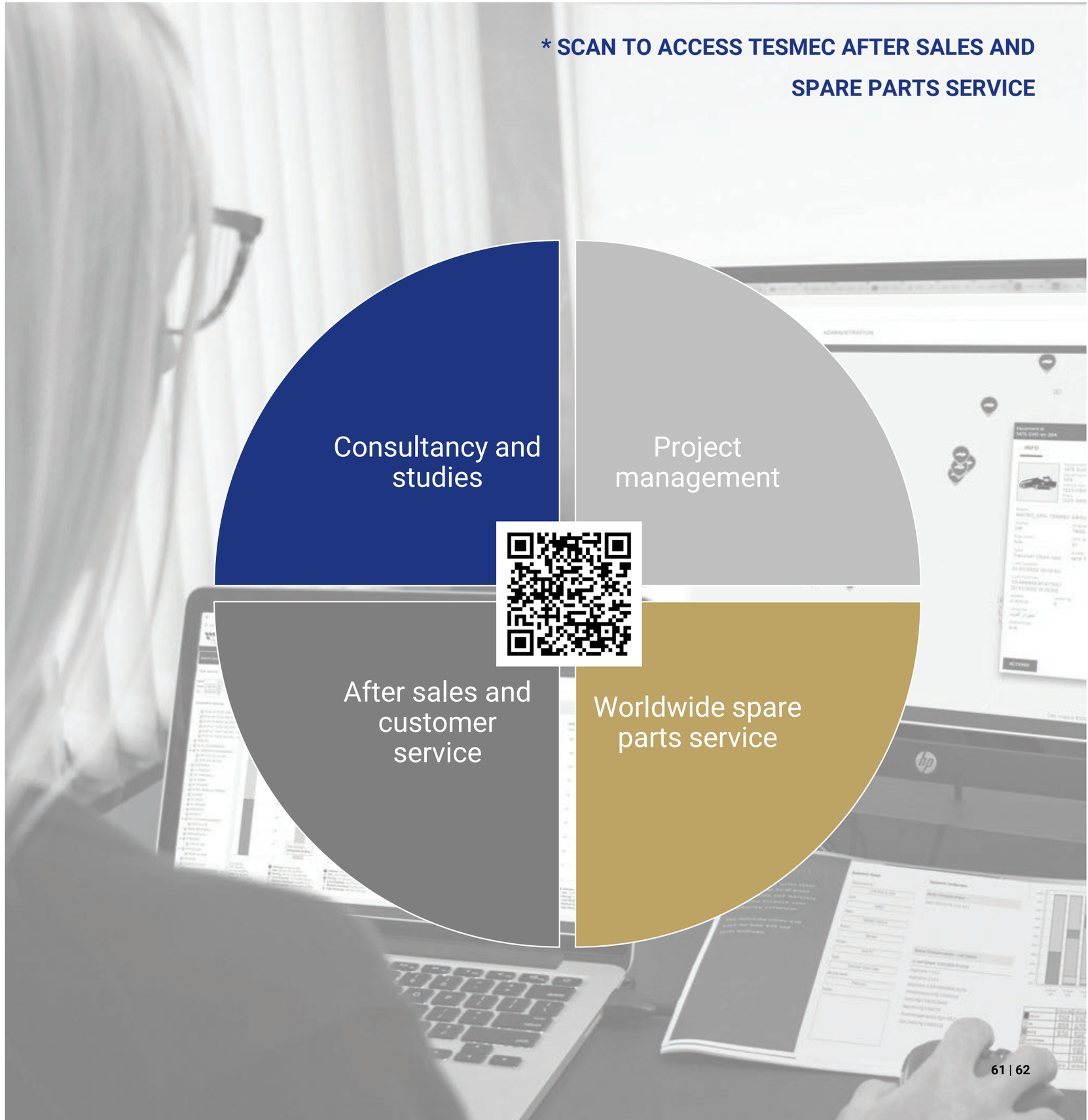
Project management

- Services and solutions for all digging projects
- Work site control and experienced operators
- Spare parts management
- Specialized Tesmec team for mechanical assistance

Spare parts service

- Worldwide reaching
- Support in defining jobsite spare parts assortment
- Mobile workshops and mobile warehouses
- Interparts portal for original Tesmec spare parts

*** SCAN TO ACCESS TESMEC AFTER SALES AND SPARE PARTS SERVICE**



TESMEC

Discover Tesmec unique Customer Experience