TESMEC Stringing Machines

Tesmec Generation 4.0 machines with the Digital Human Interface

PT2451 - 100kN Digital Puller Tensioner

Digital Human Interface (HMI)

The digital HMI (Human Machine Interface) is a significant innovation on the 4.0 stringing machine. The control panel is drastically simplified.

The innovative graphic display shows all the information, including diesel engine parameters, machine performance, and diagnostic output.

This digital technology eliminates most of the instruments and devices installed on the previous control panel.

The remote operates up to a distance of 100m from the machine in line of site. It can also be connected by cable, both options give the operator full control of the machine in a position that offers a better overview of the worksite.

Note:
Pullers equipped with reel-winders feature automatic back-pull control for optimal performance and simple operation.

Full Function Remote Control

Diagnostic Features

- Maintenance interval scheduling, with countdown and alerts.
- Machine alerts display errors with detailed description.
- Alerts recording option for authorised service inspection.
- Automatic self-diagnosis at machine start.

Efficiency

- Automatic diesel engine rpm setting maximises stringing speed and offers better oil cooling and fuel savings.
- Automatic oil cooling according to oil viscosity.
- Reduce operator errors and maximise uptime.
- Analog Circular chart displays operating parameters and machine limits.
- Automatic cutting pressure device, to avoid any possible overload on the machine.

Re.M. (Remote Monitoring System) - ALL270

Remote monitoring package for main performance and diagnostic parameters, including alarms and a GPS localization, available on request.

Integrated Recorder

Integrated pull recorder stores the operational data. Downloadable using a simple USB flash drive. Printer also available as an option.

Digital Stringing Machines Main Features

Configuration

Full package in the standard version configuration.

The standard machine includes a complete package of devices:

- Integrated pull recorder.
- Radio remote control.
- Conductor clamp.
- Low range gearbox (50 kN range).

Range of available options include: preheating device for extra cold ambient temperatures, road transportation package, electronic connection of modular machines, remote diagnosis package and low range solution (100 kN range and higher).

Power Unit

Diesel engine: Stage 4, tier 4f and Stage 5

Each machine is also available with engine equivalent to the previous Stage emission level for markets where ultra high grade fuel is not available.

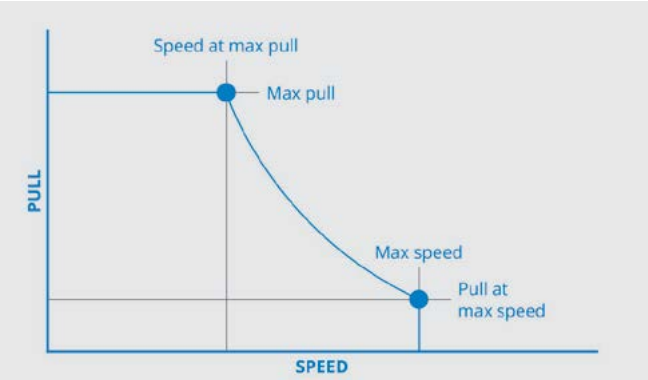
Integral cover of the whole power unit and modularity in single components.

Integral Cover

The integral cover of the whole power unit grants:

- Best protection of all the installed components.
- Reduction of noise emission.

Modular design and standardized components reduces spare parts and simplifies maintenance.



Performance

Operating pull vs speed

Unique hydraulic circuit for stepless speed variation. Automatic management of the diesel engine for highest possible operating speed depending on work conditions.

Mobility

Two travel configurations

The machine layout allows the installation of rigid or road axles configurations.

Road axle with EU type approved is available.

Re.M (REMOTE MONITORING SYSTEM)

All you need to use Tesmec Re.M is an Internet connection and a browser!

The interface will give you all the machine information (engine parameters, pressures and temperatures), included the geofencing (GPS coordinates).

The remote monitoring system, RE.M, acquires, analyzes and manages information from our pullers, tensioners and puller-tensioners.

This system allows a fleet management time saving of 25%.

All the information is forwarded to a cloud platform through a data connection and is available using an Internet connection and browser.

The remote access option is the easiest way to check machine data.

In case of failure, service technicians can obtain the situation analysis before they reach the job-site reducing problem resolution and next step timing.

Daily Control Of All Machines

Data collected by RE.M allow a reduction of data processing errors and a daily fleet control through:

- Statistics of machine use
- Monitoring of operating parameters such as temperature, pressure of hydraulic system and working hours
- Monitoring machine status
- Monitoring of productivity

Proactive Maintenance Management

- Automatic acquisition of engine hours.
- Reduction of time dedicated to finding equipment for maintenance.
- Monitoring of machine status in order to prevent failure and to reduce downtime.

Geofencing

With RE.M you can define virtual fences that allow monitoring of machines' position on job-sites and whenever a machine is leaving a geofenced area the system sends a text message and/or an email that can help tracking and recovering the machine; reducing theft related costs.

Reliable Technical Assistance

Thanks to electronic error notification, RE.M simplifies problem resolution process, reducing troubleshooting and allowing speed and focused technical assistance with the possibility of problem resolution by remote.

System Availability

RE.M is available on all the digital stringing machines. Following customer authorisation, the system will be activated and data access will be possible through a customer private account. During machine warranty period, Tesmec S.p.A. can access and use all the data transmitted by RE.M for problems resolution or for maintenance. On request, the system can be installed on existing machines.

TEN Hire (SRT) offers 24/7 back-up repair and trouble shooting service. Maintenance and Repairs can be carried out on-site or at the TEN Hire facility.

See TEN Hire & SRT information at the end of the Transmission Stringing section.