

MODULE 1m

**MERLOMOBILITY
SERVICE**



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Activating the service

MerloMobility is a telemetry service capable of monitoring one or more machines in real time (in the case of fleets) and providing the owner with data and detailed information regarding the use conditions.

Registration

To activate the MerloMobility service, it is necessary to download the MY MERLO app via the Apple  or Google  platforms.

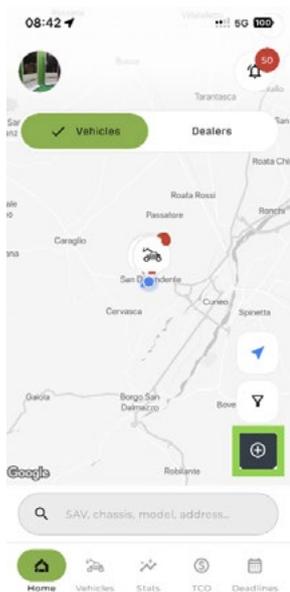
Log-in to the downloaded application and fill in the required data in order to receive access credentials by e-mail.

First access

Enter the access credentials received by e-mail in the appropriate fields:

- **Username**
- **password**

Replace the password received during registration with a new personal one and log-in to access the App Homepage.



At this stage, the application is without monitored vehicles. To enter your vehicle, click on the icon  and enter the chassis number.

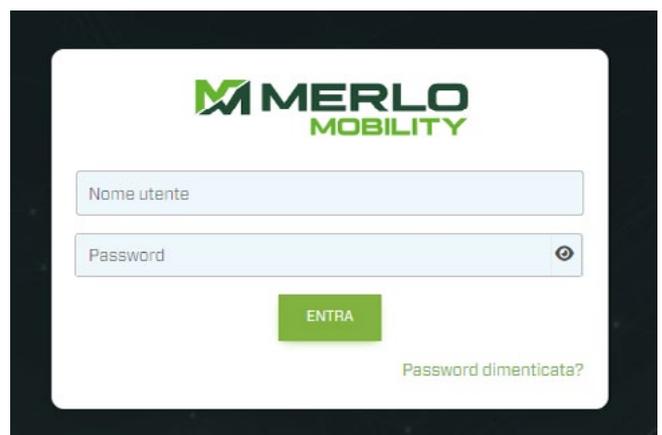
You are then asked to scan the QRcode on the business card included in the Instruction Manual (see example).



The combination of the chassis number and the QR-code now allows you to upload your vehicle and display it within the App.

The same credentials used for access via the App can also be used for the Desktop version of the MerloMobility service. In this case, it is necessary to log-on to the site:

<https://merlomobility.merlo.com>



By accessing the desktop platform, one can view the vehicles that have been uploaded through the mobile app.

Homepage

A. Vehicles

display of monitored machines.

B. Fleets

List of machine fleets created by the user.

C. Logistics

Geolocation of all vehicles in your fleet and of all Merlo area distributors or dealers.

D. Notice board

Display area for notifications and alerts relating to your machine.

E. Maintenance

Monitoring the status of routine maintenance of vehicles belonging to your fleet.

F. My account

Management of your account.

Z. Search filter

Search for machines by NAME, COUNTRY or FAMILY.

B. Account

Account settings in use.

Vehicles

This page displays all machines available for remote monitoring.

Press the button [Z] to open the vehicle search panel. It is now possible to filter the search according to certain parameters:

1. Free text (e.g. SAV, CHASSIS, MACHINE NAME, etc.).
2. Country.
3. Machine family.

Confirm your choices with the button [W] or exit the screen with the button [X]. By confirming the search parameters, the system proposes a screen with the list of searched machines.

Modello	Tipo	Telaio	SAV	Data	Luogo	Nazione	h
TF85.9 TCS - 170 - CVTRONIC - HF	Turbofarmer	D000XXXX	D0XXXX	14/10/23, 02:29:52	Lubow 16, Lubowo	Polonia	1.610
TF85.9 TCS - 170 - CVTRONIC - HF	Turbofarmer	D000XXXX	D0XXXX	31/12/22, 12:02:01	SS12, Castelpietra	Italia	1.028
TF85.9 TCS - 170 - CVTRONIC - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:26:20	Entra-deux-Boles 2, La Côte-aux-Fées	Swizzera	1.634
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:29:21	Via per Castiglione, Medole	Italia	3.170
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	03/08/23, 09:30:30	Via Alberto da Giussano 29, Fontanella	Italia	1.788
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:40:55	Avon-la-Péze	Francia	1.491
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:39:56	Via Cerba 9, Ravenna	Italia	2.172
TF85.9 TCS - 170 - CVTRONIC - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:40:50	Via Stradellazzo, Minarbio	Italia	1.442
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 02:19:30	Via Fratelli Kennedy 9, Castruzzato	Italia	3.672
TF85.9 TCS - 170 - CVTRONIC - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 01:42:33	Via Nazionale, San Defendente	Italia	48
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:39:05	Cascina Moraro Giovine I, Maleo	Italia	3.846
TF85.9 TCS - 170 - CVTRONIC - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 08:43:21	Route de Marche 104, Barvoux-sur-Ourthe	Belgio	547
TF85.9 TCS - 170 - CVTRONIC - HF	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:22:33	Chemin Saint-Landry, Soignies	Belgio	1.395
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	14/10/23, 09:51:59	Piazza San Martino 105, Cavallermaggiore	Italia	1.155
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	13/10/23, 13:26:29	Dramas-Serron, Nea Zichni	Francia	498
TF85.9 TCS - 170 - HF	Turbofarmer	D000XXXX	D0XXXX	14/10/23, 10:41:05	Serron-Strymona, Nea Zichni	Grecia	322
TF80.BTCS-170-CVTRONIC	Turbofarmer	D000XXXX	D0XXXX	16/10/23, 09:35:36	Raymond Demy, Ernée	Francia	503

Choose the machine model from the proposed list to display the vehicle information screen.

Home / Mezzi / D210323

27232

TF38.10CS-145

Media capacità



SAV: DOXYZXW

Telaio: D000ABCD

Ore motore: 3.114

Nazione: Italia

Indirizzo: Nazionale 9, Cervaasca

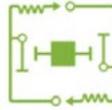
Aggiornato il: 24/01/24, 16:32:04

Garanzia: Scaduta

Nota:

Tracciabilità

4



Powertrain

7



Riepilogo

5



Geometrico

8



TCO

6



Manutenzioni

9



4. Traceability

Software Log: list of firmware updates of the various control units; furthermore the monitoring of the various control units is also displayed through the traffic light indication: ● OK ● ERROR

Storico Software										
Timestamp	ECU Name	SW Version	Merlo Code	Serial Number	Err	Cal	Cfg	Cfg Dyn	Del	
20/04/2021 10:50	Q_BLOG	1.2.0	105030	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_SABR1	1.0.0	110855	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_SABR0	1.0.0	110855	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_SHPD4	1.0.0	103240	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_SHPD3	1.0.0	103239	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_SHPD2	1.0.0	103238	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_SHPD1	1.0.0	103237	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_M5	2.1.0	108437	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_PLUG_SA	1.1.0	CU533	n/a	●	●	●	●	●	
20/04/2021 10:50	Q_UFD	1.0.6	089003	n/a	●	●	●	●	●	

Configuration: configuration parameters installed on the machine.

Configurazioni attuali				
Timestamp	CFG Name	Merlo Code	CRC	
09/11/2023 11:20	M55	109102	687C42BA	
09/11/2023 11:20	ENGINE	123128	32202858	
09/11/2023 11:20	FUELTANK	103639	8087D34D	
09/11/2023 11:20	JOYSTICK	123398	D219AD4D	
09/11/2023 11:20	BTSR	137316	17AD142B	
09/11/2023 11:20	DISTR	140481	02F9E382	
09/11/2023 11:20	GEOMDIAG	137307	5C668015	
09/11/2023 11:20	GEOMCAL	128743	E3F82803	
09/11/2023 11:20	LAYOUT_SAFE	129771	E668FC61	

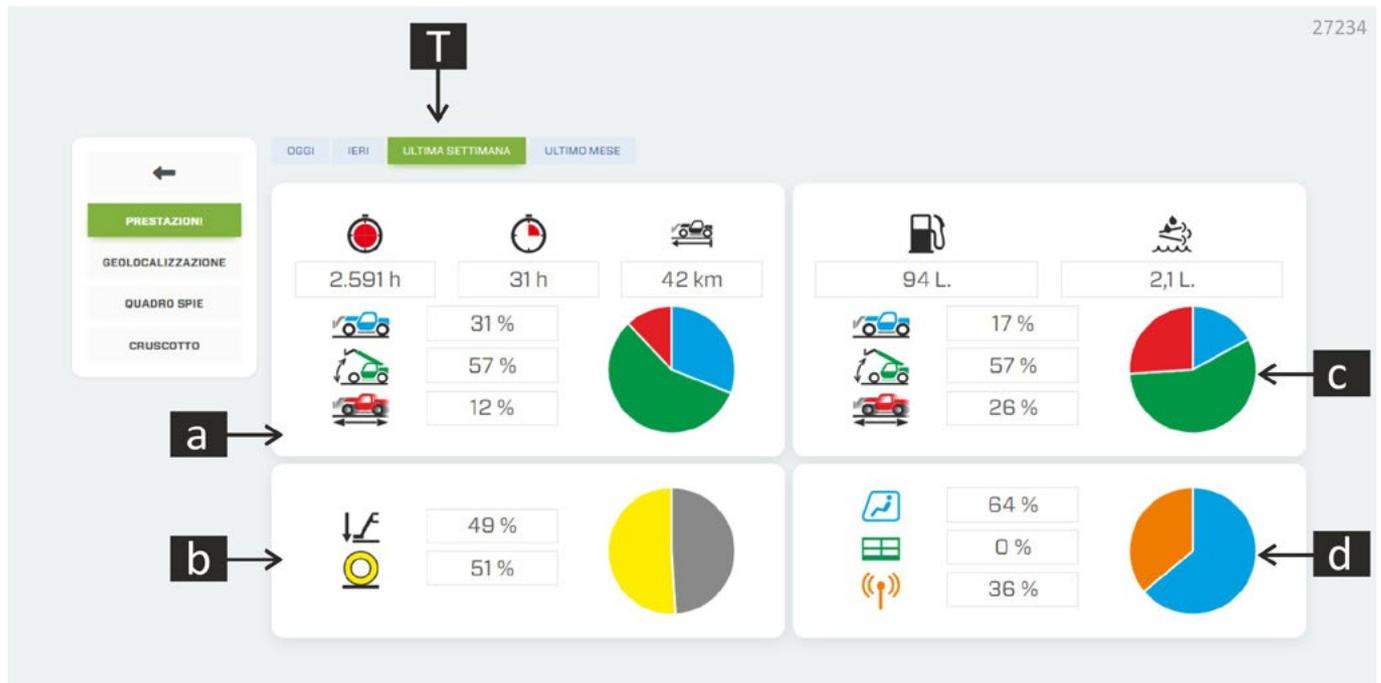
Faults: list of faults detected by the various electronic control units.

Storico				
Da	Ai	Filter ECU Name		
25/12/2023	24/01/2024	Tutto	🔍	↺
ECU Name	Errore	Data / Ora	Descrizione	
UCT1	36	16.01.2024 13:44:42	Velocità eccessiva sul motore idrostatico: rallentare	
Troubles				
ECU name	Data / Ora	SPN	FMI	Occurrence count
SBZ2	22.01.2024 15:00:00	158	18	127
SBZ3	22.01.2024 15:00:00	158	18	127
SBZ1	22.01.2024 15:00:00	158	18	127
SBZ4	22.01.2024 15:00:00	158	18	127
ENGINE	22.01.2024 15:00:00	0	0	0

5. Use

Display of the main information relating to the use of the machine.

- SUMMARY



Move the pointer over the graphic elements to read the description.

a. Machine use

Display of working hours, km travelled, static machine use, boom movements.

b. Use on stabilisers / wheels

Percentage of machine work on wheels and stabilisers (if installed)

c. Machine's consumption

Fuel and AdBlue consumption at various stages of machine use.

d. Command station

Percentage of use of the machine in the cab, platform or radio control (if installed).

T. Period search

Search filter for a specific period of time.



- MAINTENANCE

Data	Service	Seriale chiave	Contaore
20/12/2022 11:24	NA		1041
14/06/2022 08:39	NA		500
14/02/2022 11:35	NA		0

27239


e

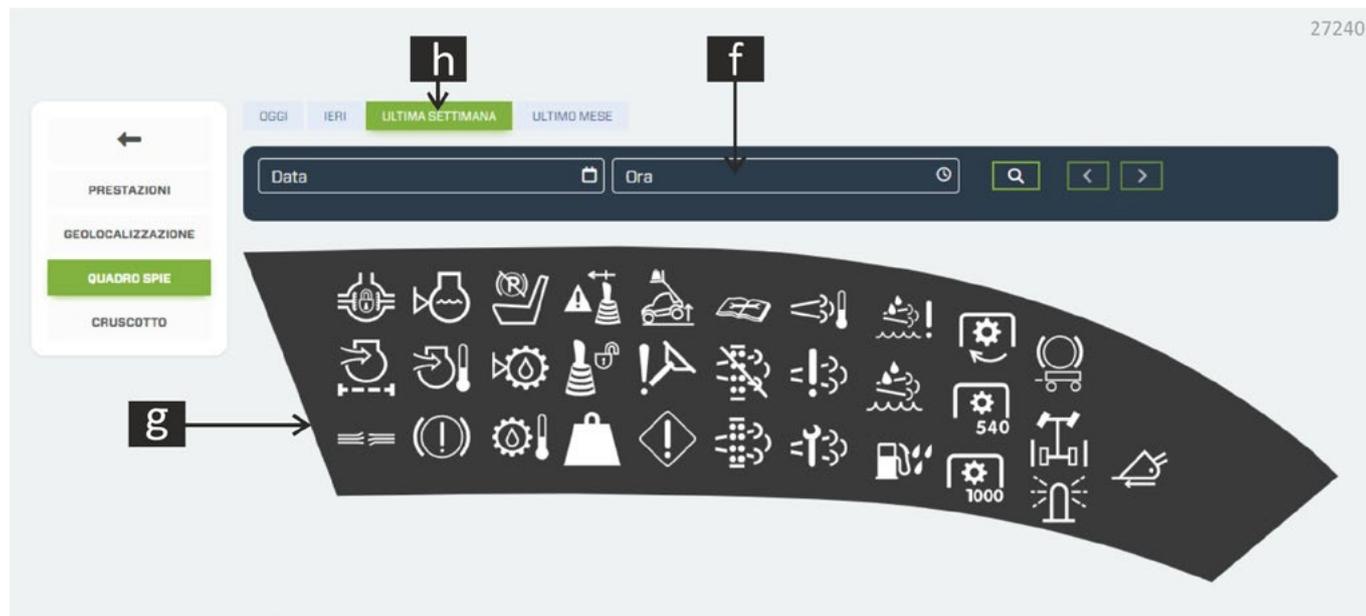
e. Maintenance list

Summary list of alerts on scheduled maintenance and on the history of interventions. The system notifies you when a check is needed, based on the time, distance travelled or faults.

- INDICATOR LIGHT PANEL

The indicator lights keep track of a series of parameters related to the mechanical part of the machine, including the attachments mounted on it, for example:

- level of fuel, AdBlue and other liquids.
- temperatures of various parts of the machine.
- possible overloading of the attachment.
- possible fault or dangerous situation for the machine and for the operator.



f. Instant search

Display of the data in real time.

g. Indicator lights

Select an indicator light to consult the history of the status and alerts.

h. Period search

Search filter for a specific period of time.

- INSTRUMENT PANEL

The instrument panel shows the same indicators visible on the machine. Thanks to the possibility of studying the trend over time, it is possible to conduct in-depth analyses of unusual signals or to trace the cause of a fault.



i. Instant search

Display of the data in real time.

m. Instrument panel indicator lights and indicators

Select an indicator light or and indicator to consult the history of the status and alerts.

n. Additional indicators

Select an indicator to consult the history of the status and alerts.

o. Search period

Search filter for a specific period of time.

6. TCO

TCO (Total Cost Ownership) information to calculate all life cycle costs of the machine.



p. Purchase price of the machine (if you do not know this value, the system will automatically enter the list price of the machine).

q. Cost of annual insurance (in Euro).

r. Cost of annual taxes (depending on country of use) (in Euro).

s. cost of fuel (expressed in €/l).

t. cost of Urea liquid (expressed in €/l).

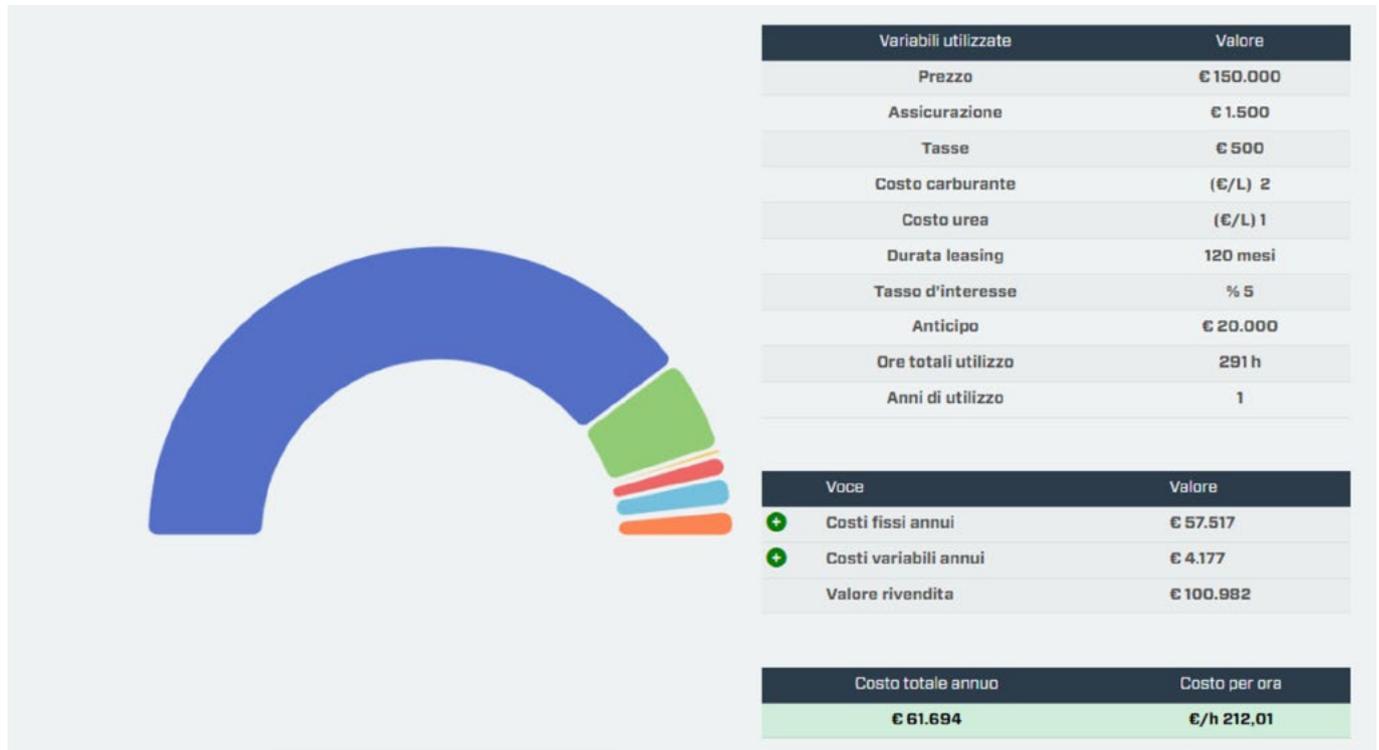
u. lease term (expressed in months).

v. interest rate (%).

w. deposit (€).

Once you have entered all the required data, press the CALCULATE button; the system draws up a cost statement and displays it in a table and a graph.

NOTE! The image below is an example of a TCO calculation and does not reflect the actual values of the machine.



IMPORTANT

The application for calculating the Total Cost of Ownership was created in order to offer a purely indicative simulation of the costs incurred for vehicle ownership. The values indicated should not be used for public reporting or documents.

Merlo S.p.A. declines all responsibility for any inaccuracies in the calculation, anomalies in the software, malfunctions depending on the site server or the user's browser, as well as for technical disruptions of any kind, modifications to the software, and for the interruption or suspension of the service.

For a more accurate calculation it is advisable to enter the required parameters for the calculation of the Total Cost of Ownership. However, the result of the calculation can also be obtained by leaving the fields blank; In the latter case, the calculation will be elaborated considering the default parameters established through Merlo's experience.

The TCO of a machine is not stored, so each time you want to calculate it, you will have to re-enter the parameters.

7. Powertrain

Information on the engine installed on the machine.

- TECHNICAL DATA

This section contains the data of the engine installed on the machine:

- Manufacturer.
- Engine code.
- Serial Number.
- Displacement.
- Power.
- Maximum torque

If installed, the technical data of the exhaust gas treatment system are also given:

- Diesel oxidation catalyst.
- Particulate filter.
- UREA catalytic reduction.

←

DATI TECNICI

PARAMETRI

GUASTI



Dati tecnici motore		27242
Costruttore	FPT	
Codice motore	NEF 4.5	
Numero di serie		
Cilindrata	4,5 l	
Potenza massima	125 kW / 170 CV	
Coppia massima	710 Nm	

Sistema di post trattamento	
Catalizzatore di ossidazione Diesel	
Filtro anti-particolato Diesel	
Riduzione catalitica selettiva tramite urea	



- PARAMETERS

Select a time period to be monitored and then choose the type of information to be displayed:

- Engine status.
- Engine rpm.
- Machine speed.
- Air intake temperature.
- Engine coolant temperature.

The system will display the search results graphically.

- FAULTS

ECU name	Data	SPN	FMI	Occurrence count	27246
	12.01.2024 15:20:00	158	18	127	
	12.01.2024 15:20:00	158	18	127	
	12.01.2024 15:20:00	158	18	127	
	12.01.2024 15:20:00	158	18	127	
	12.01.2024 15:20:00	158	18	127	
	12.01.2024 13:44:00	0	0	0	
	12.01.2024 13:44:00	0	0	0	
	12.01.2024 13:35:00	0	0	0	
	12.01.2024 13:34:00	0	0	0	

Display panel of engine errors detected and stored in the control unit.

8. Geometric

Display of machine data in real time (only when the engine is running and the control unit firmware is updated) or at the last connection made on the date below the machine model.

To view the real-time data on the various screens, press the orange button  located at the bottom right of the screen.

- BOOM DATA



- Telescopic boom lifting angle (in degrees).
- Telescopic boom extensions (expressed in metres).
- Carriage inclination angle (expressed in degrees).
- Weight lifted on the attachment installed on the carriage (expressed in kg).
- Attachment installed on the carriage.

- CHASSIS



- Crosswise inclination (expressed in degrees).
- Longitudinal inclination (expressed in degrees).
- Turret rotation angle (for ROTO models only) (in degrees).

- COMMANDS



- Position of the COMMAND SOURCE SELECTOR
- Position of the OPERATING MODE SELECTOR
- Operator seated indicator light.
- Joystick control enable indicator light.

- STABILITY



- Stability indicator lights.
- Machine capacity information bar (in kg)
- Attachment overload indicator light.
- Anti-overflow control indicator light.

- STABILISING



The information displayed on this screen is only available for machines equipped with stabilisers.

- Machine status.
- Enabling of automatic stabilisation commands.
- Base chassis suspension block (for ROTO models only)
- Positioning of wheels/stabilisers.



- LOAD CELL

		uA	uB			uA	uB		
<ul style="list-style-type: none"> DATI BRACCIO TELAIO COMANDI STABILITA STABILIZZAZIONE CELLE DI CARICO 		Offset cella stabilizzatore 1		53.0	45.0	Offset cella stabilizzatore 2		56.0	48.0
		Carico cella stabilizzatore 1		1.0	1.0	Carico cella stabilizzatore 2		1.0	1.0
		Offset cella stabilizzatore 3		49.0	46.0	Offset cella stabilizzatore 4		50.0	45.0
		Carico cella stabilizzatore 3		1.0	1.0	Carico cella stabilizzatore 4		1.0	1.0

- Data on load cell offsets.

9. Maintenance

Monitoring of scheduled maintenance alerts.

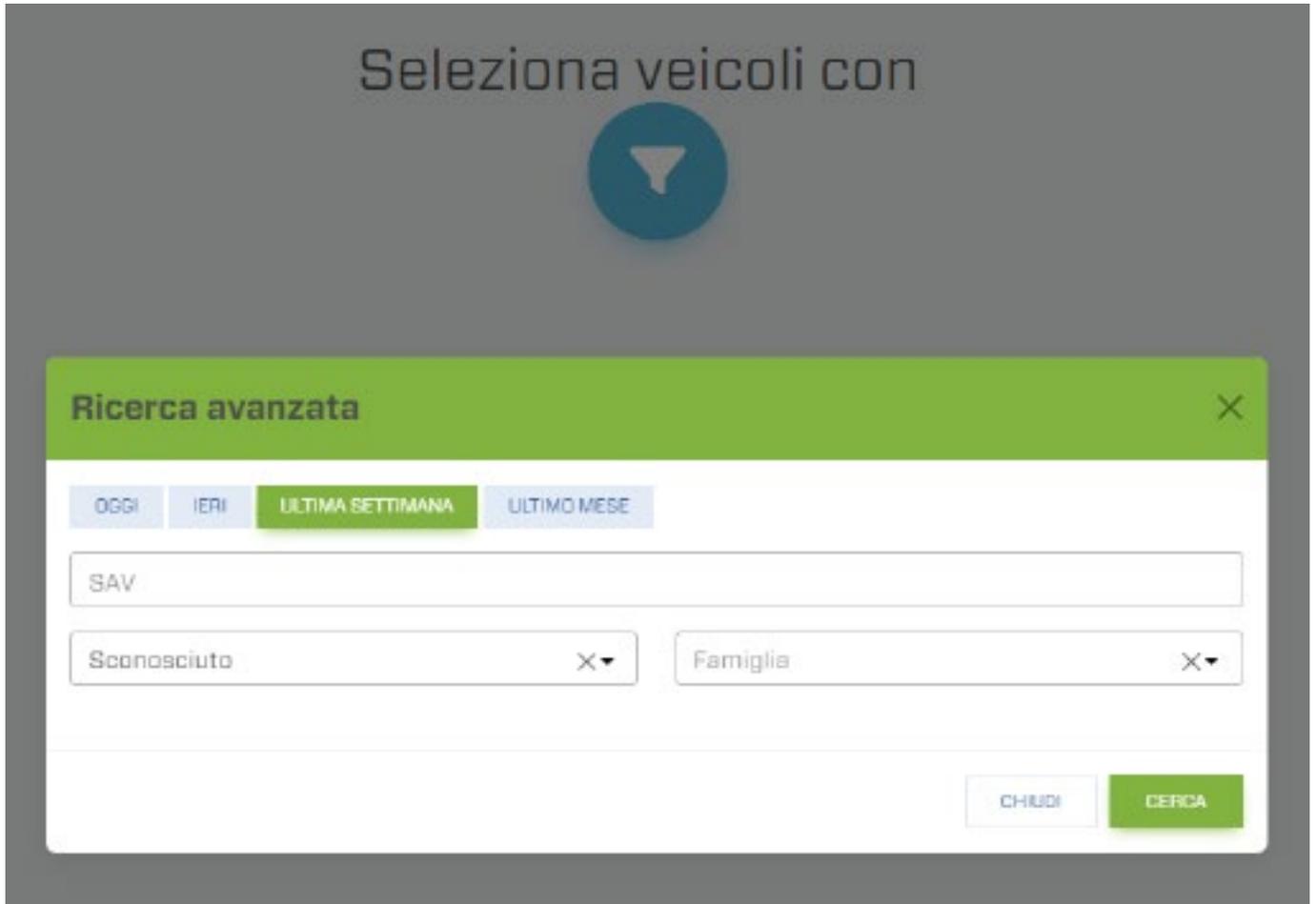
Please refer to the instructions in POINT 5 - USE in paragraph MAINTENANCE.



Fleets

This page displays the performance of the machines in your fleet over a specific time period.

Press the button  at the bottom right of the page to open the vehicle search panel. It is now possible to filter the search according to certain parameters:



Seleziona veicoli con

Ricerca avanzata

OGGI IERI **ULTIMA SETTIMANA** ULTIMO MESE

SAV

Sconosciuto X

Famiglia X

CHIUDI CERCA

1. Selection of the search time period.
2. SAV number.
3. Country.
4. Machine family.

Confirm your choices with the button [W]; the system proposes a screen with the list of machines searched. To exit the screen press the button [X].



This screen displays:

- Engine operating hours.
- Total fuel consumption (expressed in litres).
- Hourly consumption (expressed in litres/h).
- Use percentage of the machines in static, dynamic and boom use mode.

Logistics

Location function of all vehicles in your fleet, identified by the icon  and location of all area Distributors or Dealers, identified by the icon .

Machine icons are displayed with colours that identify the status of the engine at the last connection to the control unit:

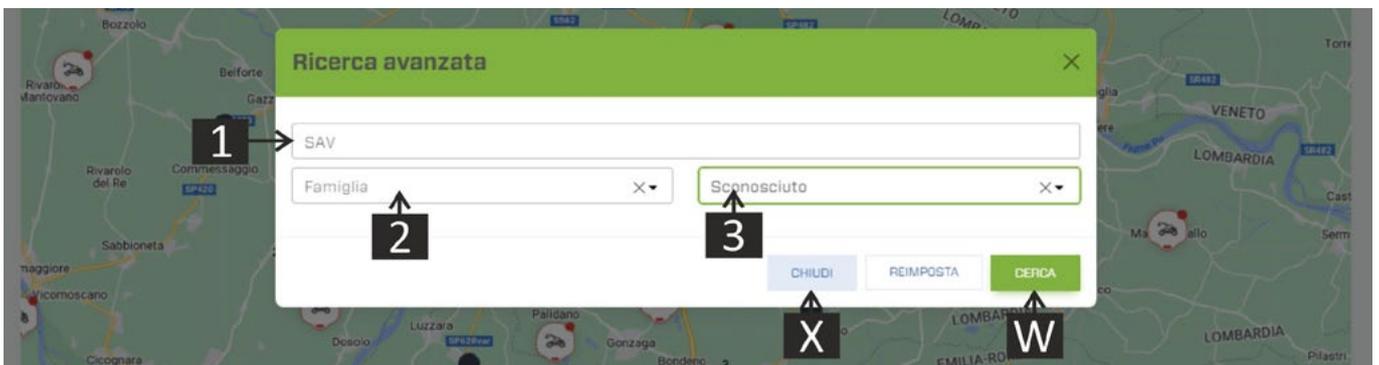
- green: engine started.
- red: Engine off.

Select the relevant machine to display the vehicle's information screen.



There are two buttons in the bottom right-hand corner of the page:

- (A): activation/deactivation of the location of the area Distributors or Dealers.
- (B): activation of the search filter panel (next photo).

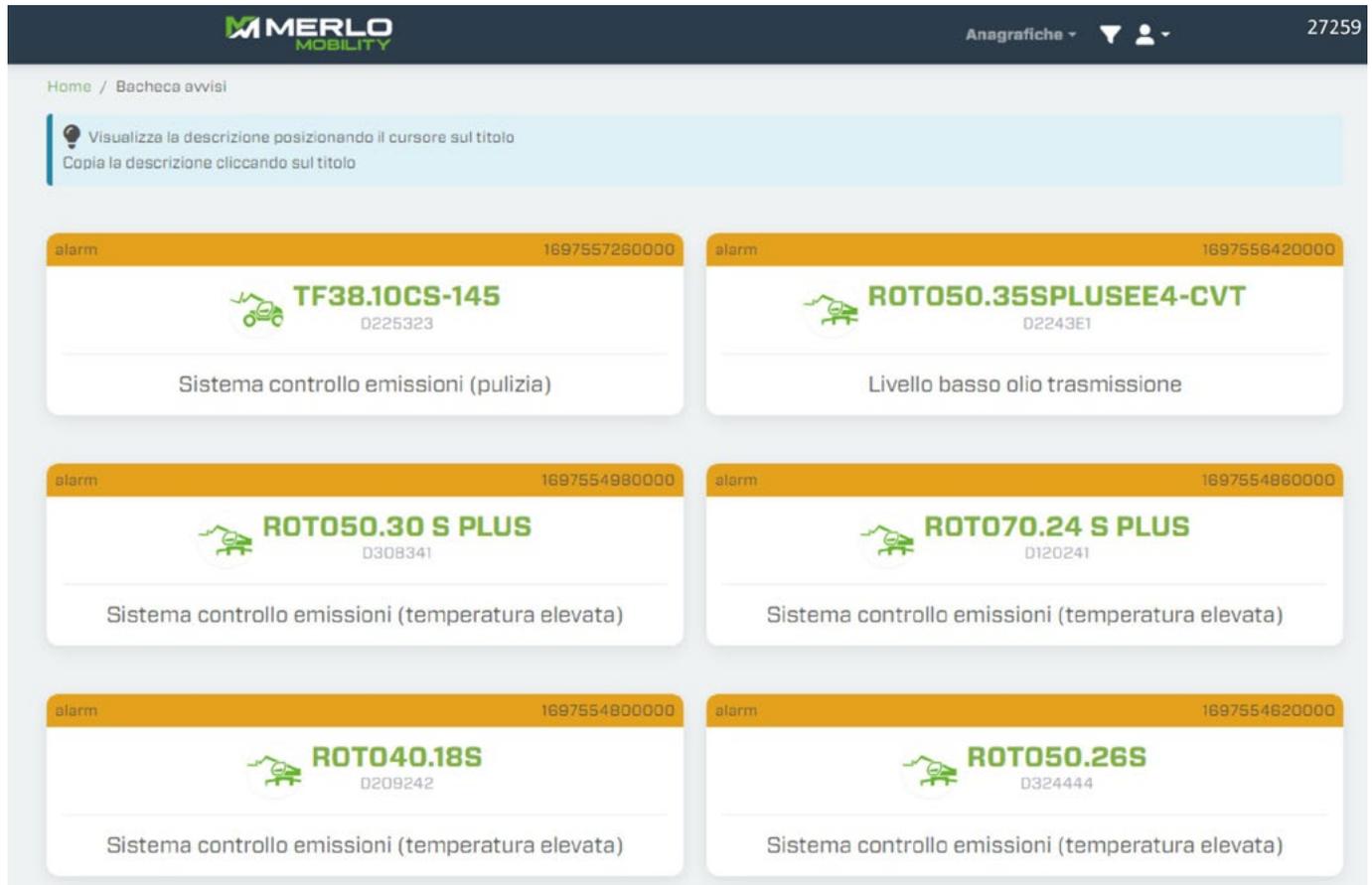


1. SAV number.
2. Machine family.
3. Country.

Confirm your choices with the button [W] or exit the screen with the button [X].

Notice board

This page displays all notifications concerning your machines.



Home / bacheca avvisi

Visualizza la descrizione posizionando il cursore sul titolo
Copia la descrizione cliccando sul titolo

alarm	1697557260000	alarm	1697556420000
 TF38.10CS-145 D225323 Sistema controllo emissioni (pulizia)		 ROTO50.35SPLUSEE4-CVT D2243E1 Livello basso olio trasmissione	
 ROTO50.30 S PLUS D308341 Sistema controllo emissioni (temperatura elevata)		 ROTO70.24 S PLUS D120241 Sistema controllo emissioni (temperatura elevata)	
 ROTO40.18S D209242 Sistema controllo emissioni (temperatura elevata)		 ROTO50.26S D324444 Sistema controllo emissioni (temperatura elevata)	

The notices cover the following topics

- Routine maintenance of a machine.
- Possible problems / faults on the machines.
- Correct use on the machines in your fleet.

The following data will be indicated in each notice:

- Model.
- SAV number.
- Notice category.
- Notice title.
- Description.
- Date and time.



My account

This page displays the personal and master data of the logged-in user.



The screenshot shows the user account page for Mario Rossi. The page header includes the Merlo Mobility logo, the text 'Anagrafica', a user icon, and the number '27261'. The main content area displays 'Ciao Mario Rossi' and a message: 'Qui puoi gestire il tuo account e modificare le tue preferenze.' Below this is a section titled 'Dati personali' with a list of options: 'Gestisci i tuoi dati anagrafici e l'accesso al servizio.', 'Preferenze notifiche', 'Cambia password', 'Cambia nome utente', 'Cambia numero di telefono', 'Cambia lingua', and 'Termini e condizioni'.

- Notification preferences.
- Change password.
- Change user name.
- Change phone number.
- Change language.
- Terms and conditions.

Data transfer protocol

The MerloMobility system supports the protocol for transferring data between different logistics platforms called REST (Representational State Transfer). For more information and technical details go to the site www.merlo.com and then click on DEVELOPER at the bottom of the page.

