

Technical Presentation



MAIN FEATURES



Based on the current 2023 Apollo 26.6: same weight, same lifting capacity, same dimensions and attachments.

MAXIMUM CAPACITY
2600 kg

MAXIMUM LIFTING
HEIGHT 5,78 m

MASS
5100 kg



EASY AND SIMPLE LAYOUT:
**EASY MAINTENANCE AND
INTUITIVE DRIVING
EXPERIENCE**

Apollo/Mini Agri e 26.6

FULL  **LECTRIC**

BATTERY PACK

- **1 or 2 batteries** that can be inserted as required.
- **96 Volt powertrain**, in order to deliver high performance with an high level of safety.
- **Lithium (LiFePo4) Modular Battery Pack**, with innovative layout and special features, ready for future development.
- **3,2kW+3,2kW Internal Battery Chargers**, suitable to charge the machine from electrical grid, and also from **Mode 3 Type 2 Wallbox** (electric cars public chargers). All of the previous features included as standard.

PERFORMANCE

- 24km/h max speed and ~4000kg of pulling force.

HYDRAULIC CIRCUIT

- **Full electric proportional and flow sharing distributor** (that allow 3 simultaneous movements).
- **Special hydraulic patented features** designed to avoid power loss and to increase battery duration.

Modular and Adaptable concept

From «*How many hours of work can I make with the machine?*» to «*I have to do this work, Can I make it with this machine?*»

The machine has been designed to be suitable to many kind of different work, it's only a matters of configuration.

→ FIRST FLEXIBLE ELECTRIC TELEHANDLER

The concept of the machine is to be configurable and adaptable, matching the customer needs, from low power demand working types to intensive ones, including the rental market .

The machine should be ready to fulfill the different requirments from the market, with less possible compromise.

In the case of rental, possibility of offering customers the kit that best suits their specific requests.

Modular and Adaptable concept

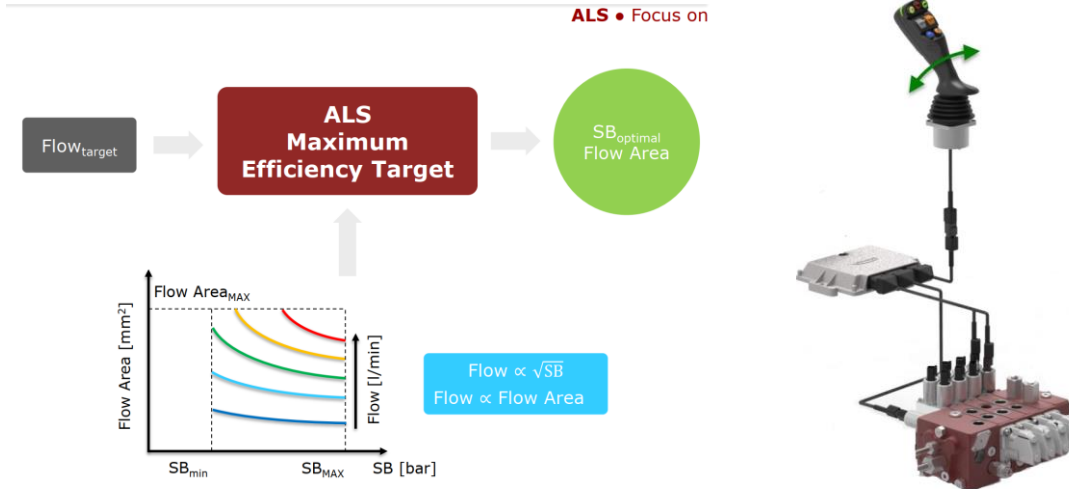
These are the Apollo/Mini Agri e 26.6 special features that enable the new modular approach:

- The **modular battery system**, with fast swap feature and the possibility to add or remove extra battery pack anytime (also with machine already on the field).
- The «**all in one**» **standard On Board charging system**, suitable any working place charging infrastructure.
- The special optional already available, as the **BIO ETHANOL heating system**, the non marking tyres, ecc.
- Some future innovative options, focus on machine range extension, that are currently under development.

Adaptive Load Sensing System

The main valve stand-by pressure, is managed to keep it as low as possible while driving the machine without moving the boom.

This systems, has been already tested on other Dieci machines, and it ensure a **big energy saving** → MORE WORK WITH THE SAME BATTERY SIZE



Adjustable Hydraulic System Pressure management (PATENT PENDING)

The pressure of the hydraulic system will be setted to a very low value when the movements goes to end stroke (telescoping boom closing, lowering the boom, moving the quick hitch).

Reaching end stroke with **low pressure** ensure a **power loss saving**, however in normal condition, the system is able to reach the max pressure. So it's possible to have a bigger pump for fast movements, with no risk to overload the electric motor, avoiding to waste energy.

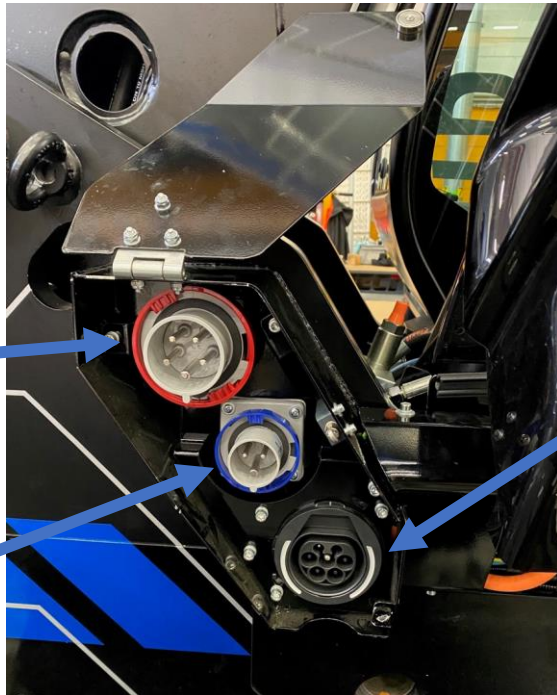
Smart Charging System

Through an innovative stackable battery charger, the machine can be charged directly from the electrical grid, with standard industrial plug.

Charging allowed monophase 110 or 220V , 3phases 380-400V and also through the passenger cars charging stations/wallbox→ IEC 61851 mode 2 and 3 with type 2 plug.

External fast chargers available as option up to 28kW.

INDUSTRIAL SOCKET
400V 32A ,220V 16A



IEC 61851 Mode 2 and 3
with type 2 plug

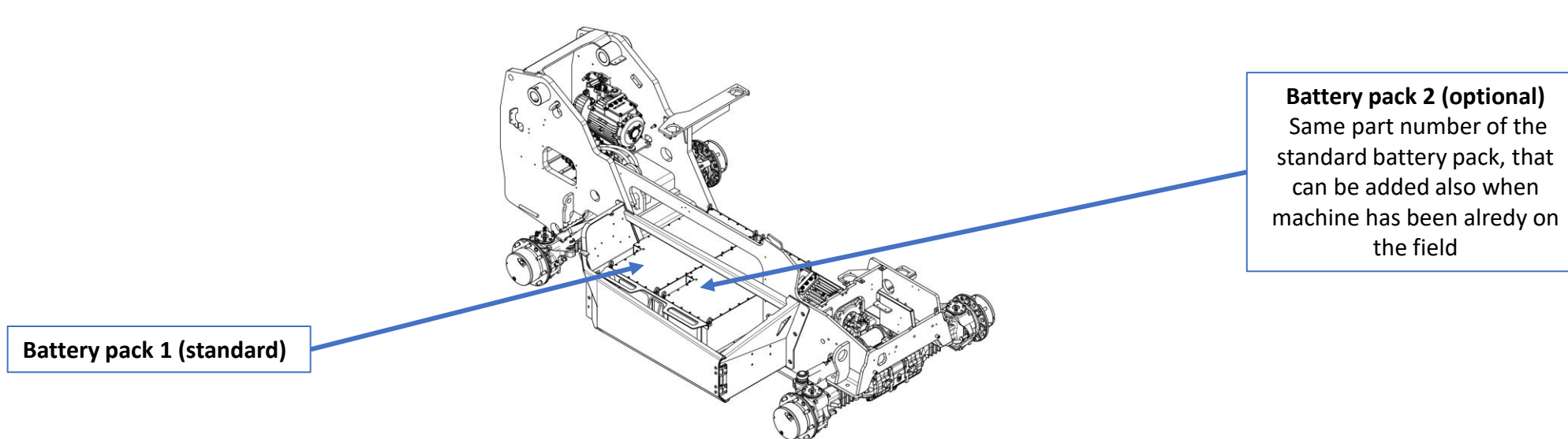


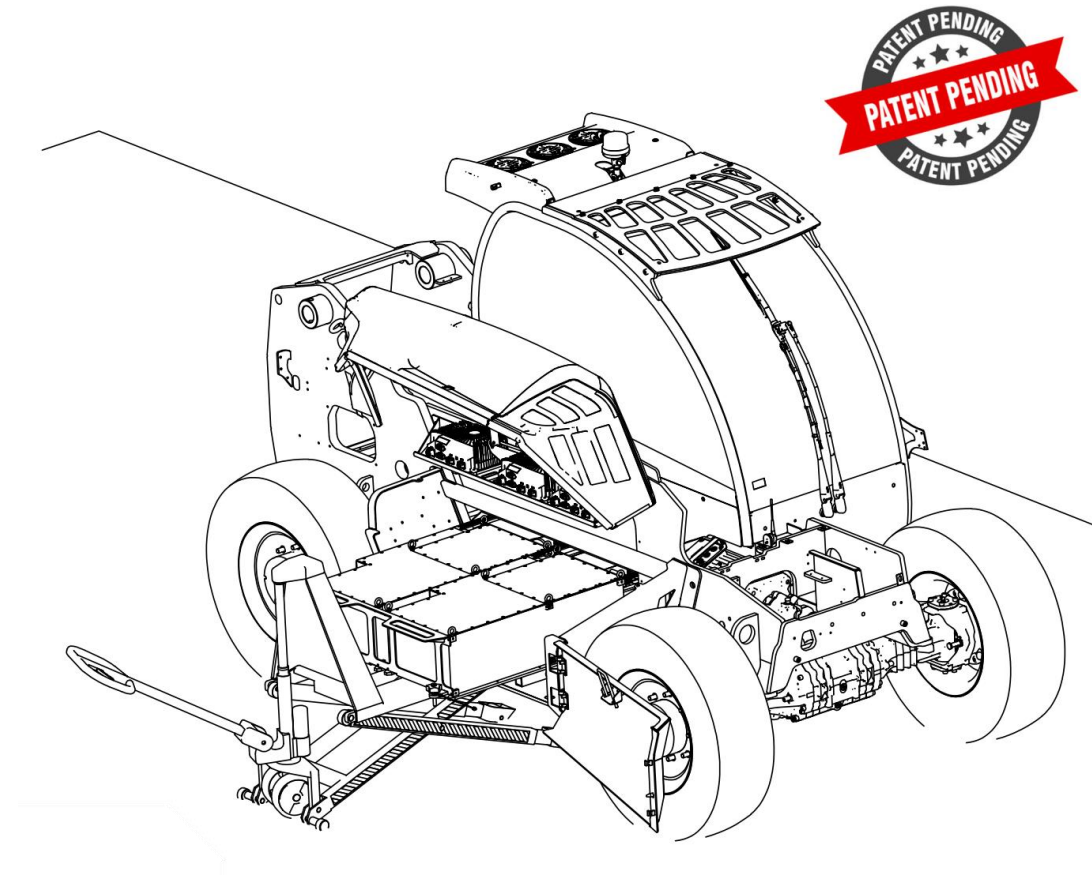
Modular Battery Layout

The machine has been designed with an **innovative battery position** (PATENTE PENDING).

The batteries are mounted in a very low position, between the bottom part of the frame and the lifting cylinder. The battery are also placed in transversal position and his center of gravity is very close to the center of the machine. **This special layout allow to easily remove the battery from the vehicle, without any special tools, and ensure also a better weight balancing that increase the machine lateral stability.**

The battery system is designed to be expanded also when the vehicle is already on the field, adding an additional battery pack at the side of the standard one. The standard lithium battery pack is 22kW/228Ah , which can be doubled adding an other pack (total 44kW/456Ah).





DIMENSIONI MACCHINA MACHINE DIMENSIONS	
ALTEZZA MAX CON CABINA (mm) MAX HEIGHT(mm)	1929
PASSO (mm) WHEEL BASE (mm)	2358,5
LARGHEZZA MAX (RUOTE STANDARD) (mm) MAX WIDTH (STANDARD TYRES) (mm)	1850
LARGHEZZA MAX (RUOTE OPT) (mm) MAX WIDTH (OPTIONAL TYRES) (mm)	1858
LUNGHEZZA ALL'ATTACCO RAPIDO (mm) LENGHT WITH QUICK COUPLER (mm)	4096
PESO OPERATIVO CON CABINA (Kg) MACHINE WEIGHT CABINE(Kg)	5100
RAGGIO DI VOLTA MIN SENZA BENNA (RUOTE STDANDARD) (mm) MIN STEERIGN RADIUS WITHOUT BUCKET(STANDARD TYRES) (mm)	3925
ALTEZZA DA TERRA MINIMA (mm) GROUND CLERANCE (mm)	240

RUOTE-TRASMISSIONE TYRE-TRANSMISSION	
FORZA DI TIRO (kgf) PULLING FORCE (kgf)	4100
VELOCITA MASSIMA (km/h) MAX SPEED (km/h)	24
RUOTE STD STANDARD TYRES	12-75 18
RUOTE OPT 1 OPTIONAL TYRES 1	12-16.5
RUOTE OPT 2 OPTIONAL TYRES 2	280-80 R20 MICHELIN
RUOTE OPT 3 OPTIONAL TYRES 3	
RUOTE OPT 4 OPTIONAL TYRES 4	
RUOTE OPT 5 OPTIONAL TYRES 5	
RUOTE MOTRICI WHEELS DRIVE	4WD

MOTORE (ELETTRICO) ELECTRIC MOTORS	
MOTORE TRAZIONE POTENZA(kW) TRACTION MOTOR POWER (Kw)	19 (S2)
MOTORE TRAZIONE VOLTAGGIO (V) TRACTION MOTOR VOLTAGE (V)	96
MOTORE IDRAULICA POTENZA (kW) HYDRAULIC MOTOR POWER (kW)	22 (S3)
MOTORE IDRAULICA VOLTAGGIO (V) HYDRAULIC MOTOR VOLTAGE (V)	96
TIPO BATTERIA BATTERY TYPE	LITIO
CHIMICA BATTERIA BATTERY CHEMICAL TYPE	LiFePo
CAPACITA BATTERIA STANDARD (kWh) STANDARD BATTERY CAPCAICTY (kWh)	22
CAPACITA BATTERIA STANDARD (Ah) STANDARD BATTERY CAPCAICTY (Ah)	228
CAPACITA BATTERIA OPTIONAL (kWh) OPTIONAL BATTERY CAPACITY (kWh)	44
CAPACITA BATTERIA OPTIONAL (Ah) OPTIONAL BATTERY CAPACITY (Ah)	456
ORE DI LAVORO MIN CON BATTERIA STD (h) MIN WORKING HOURS WITH STANDARD BATTERY (h)	3
ORE DI LAVORO MAX CON BATTERIA STD (h) MAX WORKING HOURS WITH STANDARD BATTERY (h)	4,5
ORE DI LAVORO MIN CON BATTERIA OPT (h) MIN WORKING HOURS WITH OPTIONAL BATTERY (h)	6
ORE DI LAVORO MAX CON BATTERIA OPT (h) MAX WORKING HOURS WITH OPTIONAL BATTERY (h)	8
TEMPO DI RICARICA BATTERIA STD (220V-400V) (h) CHARGING TIME STANDARD BATTERY (220V-400V) (h)	5,3-2,7 ON BOARD 1 EXTERNAL OPTIONAL 2
TEMPO DI RICARICA BATTERIA OPT(220V-400V) (h) CHARGING TIME OPTIONAL BATTERY(220V-400V) (h)	11-3,5 ON BOARD 1,3 EXTERNAL OPTIONAL 2
CAPACITA CARICABATTERIE ON BOARD (kW/V) ON BOARD BATTERY CHARGE POWER (kW/V)	3.2+3,2/220V-400V STANDARD 3.2+3,2+3,2/220V-400V
CAPACITA CARICABATTERIE OPTIONAL ESTERNO (kW/V) EXTERNAL OPTIONAL BATTERY CHARGE POWER (kW/V)	14,4/400 OPTIONAL 1 28/400 OPTIONAL 2

IMPIANTO IDRAULICO HYDRAULIC	
PORTATA OLIO (L/min) OIL FLOW (L/min)	62
PRESSIONE (bar) MAX PRESSURE (bar)	230
CAPACITA SERBATOIO OLIO (l) HYDRAULIC TANK CAPACITY (l)	55
TIPOLOGIA POMPA HYDRAULIC PUMP TYPE	INGRANAGGI LOW NOISE

CARATTERISTICHE CHARACTERISTIC	
ALTEZZA AL PIANO FORCHE TELESCOPICO CHIUSO (mm)	3900
ALTEZZA AL PIANO FORCHE TELESCOPICO ESTESO (mm)	5680
PORTATA MAX CON FORCHE TELESCOPICO CHIUSO (Kg) MAX LIFTING CAPACITY BOOM RETRACTED (Kg)	2600
PORTATA MAX CON FORCHE TELESCOPICO SFILATO (BRACCIO ORIZZ) (Kg) MAX LIFTING CAPACITY BOOM FULLY EXTENDED (Kg)	900
SBRACCIO ALLA MASSIMA PORTATA (mm) MAX DISTANCE FROM FRONT WHEELS BOOM FULLY EXTENDED (mm)	1150
TEMPO SOLLEVAMENTO (sec) BOOM LIFTING (sec)	9,48
TEMPO ABBASSAMENTO(sec) BOOM LOWERING (sec)	5,6
TEMPO ROVESCIO BENNA (sec) BUCKET OPENING (sec)	3
TEMPO CHIUSURA BENNA (sec) BUCKET CLOSING (sec)	4,8
TEMPO SFILO FUORI (sec) BOOM EXTENSION (sec)	8,4
TEMPO SFILO DENTRO (sec) BOOM RETRACTION (sec)	4,7

NOTE: All the data showed in this slide are preliminary, and could be changed after test.

New Apollo/Mini Agri e 26.6 **standard equipment:**

- Hydraulic control distributor-single joystick with proportional and simultaneous controls (flow sharing) with high efficiency features.
- “Control Plus” lifting block valve for «gravity boom lowering» .
- Low noise Hydraulic pump.
- Standard 22kW/228 Ah battery pack (96V). System prearranged to add the second battery pack.
- Double On-Board battery charger 3,2+3,2 kW ,suitable for all the charging methods previously described.
- Set of wheels 12.0/75-18 with fenders.
- Dieci fixed attachment holding plate.
- Full led road lights.
- Fully enclosed cabin.
- Mechanical standard seat.
- 96V cabine heating system.
- 7”inch Color Display.

New Apollo/Mini Agri e 26.6 **main optional list:**

- Extra 22kW/228 Ah battery pack (96V)→ total energy on the machine 44kW/456 Ah. The kit include another On-Board battery charger→ Total power on the machine 3,2+3,2+3,2 kW.
- Semi automatic Air Conditioning System.
- External BIO ETHANOL cabin heating system (air/air). To allow using the machine in cold environment without impact on battery duration, keeping a Green approach.
- Same tyres option of the current diesel Apollo/Mini Agri 26.6.
- Non Marking tyres, especially designed to use the machine inside of buildings.
- External fast battery chargers 96V available in 150A or 300A version.
- Same attachments and attachment holding plates of the current diesel Apollo/Mini Agri 26.6.
- Man basket (not yet ready, availability date will be communicated soon).
- Same lights and cabin optional of the current diesel Apollo/Mini Agri 26.6.
- Electrical cooling system for hydraulic oil.

Any customers feedback and dealer/salesman personal opinion would be really appreciated.

Together we can lead the future

Thank you for your attention

For any additional question, ask to your Dieci
Representative

MORE ON WEBSITE PAGE: [CLICK HERE](#)