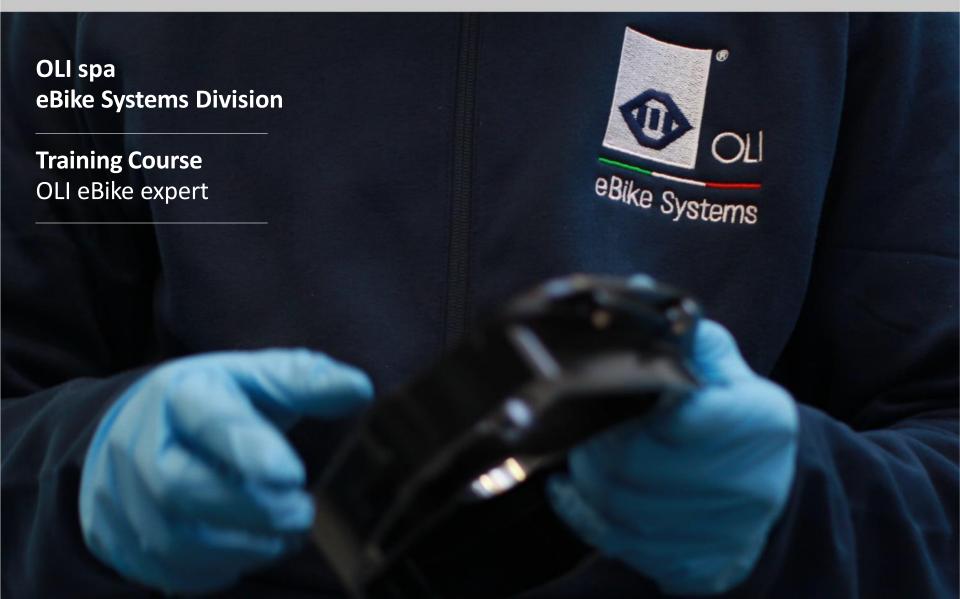
OLI eBike Systems Training Course 2019





OLI eBike Systems



eBIKE

OLI eBike Systems is a division of OLI SPA specialized on **Designing and manufacturing complete eBike systems**.

LEADER

OLI spa is # 1 Worldwide Leader in heavy industrial shaker motors, including # 18 owned distribution centers around the world and # 3 manufacturing facilities.

ESPERIENZA

OLI eBike Systems blends **60 years of OLI experience** on shakers motors & gears with 10 Years of R&D and designing experience of a team of enginneers on eBike

PRIMATO

OLI started engineering, producing and selling eBike drives in 2015, **first in Italy**.

OLI, worldwide leader



OLI Group is leader in shaker motor technolgy with sales/service centers all over the World.



Product Range OLI spa



Industrial vibrators











• Industrial Shaker Motors

Flow aids







- Pneumatic impactors
- Flow aids for silos/hopper

Concrete consolidation

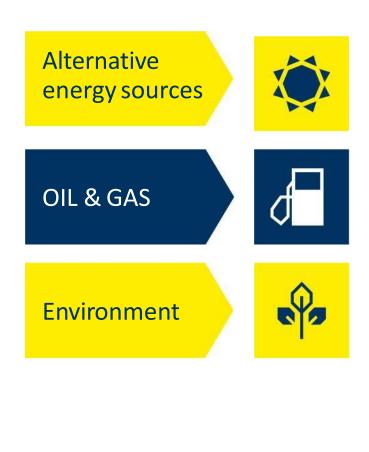


• Internal concrete pokers

Industries







OLI key values



HIGHLY SPECIALIZED SALES TEAMS



Deep knowledge of applications

STOCK AVAILABILITY



Stock in each country

GLOBAL NETWORK



OLI branches to provide market coverage.

OLI Divisions in the World



Worldwide specialized sales network

- 1. OLI Italy
- 2. OLI Australia
- 3. OLI Benelux
- 4. OLI Brasil
- 5. OLI China
- 6. OLI France
- 7. OLI Germany
- 8. OLI India
- 9. OLI Malta
- 10. OLI Middle East
- 11. OLI Nordic
- 12. OLI Russia
- 13. OLI South Africa
- 14. OLI Spain
- 15. OLI Thailand
- 16. OLI Turkey
- 17. OLI Uk
- 18. OLI Usa



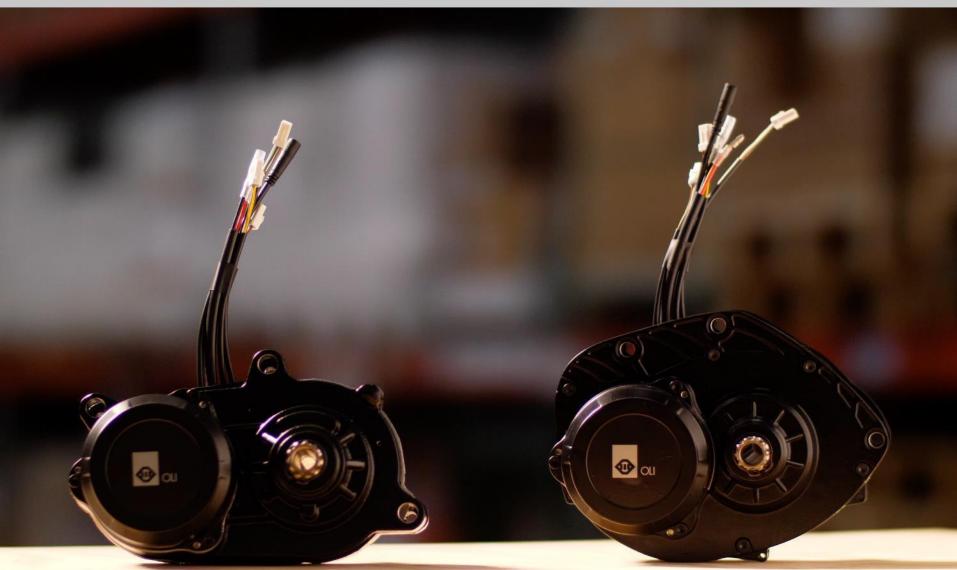
Showroom



OLI Spa turnover 10.000+ 70 MILIONI € Global Active Customers. 2018 **Motovibrators** produced 280.000+ **Countries** covered by OLI direct sales Network 60+ in 2018 **Pneumatic** Impactors **16 New divisions** opened 100.000+ Produced in 2018 between 206 and 2018

OLI eBike Systems





Range of Drives on OLI eBike Systems











Plus of OLI eBike Systems



SMOOTH

Extremely smooth action.

EFFICENT

Low energy consumption thanks to the high quality e-motor.

QUIET

Top of the range quiet performance

WARRANTY

3 years warranty

NATURAL

Thanks to the high quality torque sensor.

CERTIFIED

Certified to EN 15194/2017.

POWERFUL

Excellent torque already generated at low rpm.

SUPPORTED

Dedicated customer care (Pre and After-Sale)

Built to Last

Robust components

Power (Watt) Tests carried out by VELOTECH.DE laboratory of the most popular eBike brands Drives



Abbildung 13

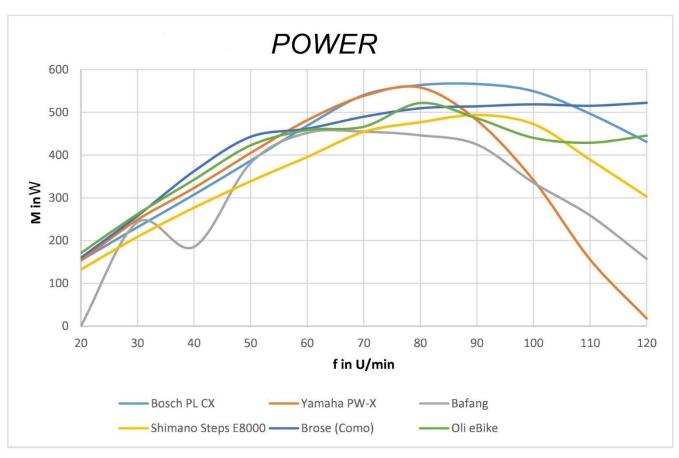


Abbildung 14

Torque (Nm) test by VELOTECH.DE laboratory of the most popular eBike Brands in the market (Nm & Rpm)



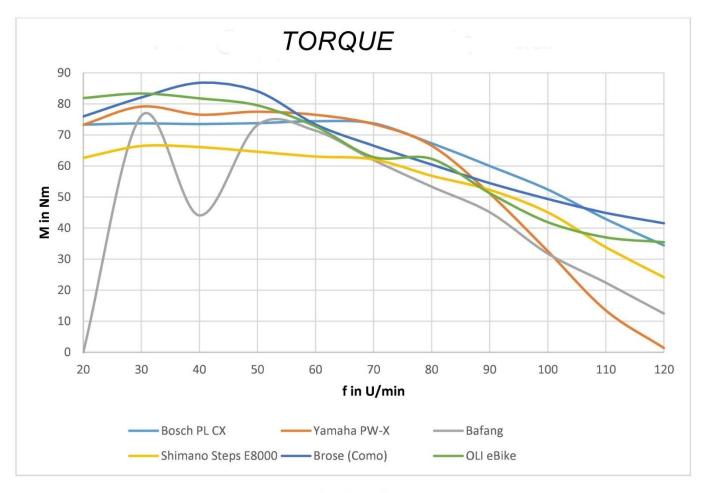
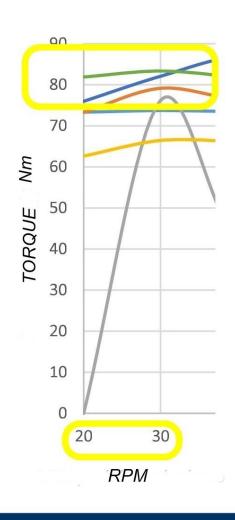


Abbildung 13

Torque available, when the eBike is steady, stopped, and we need to start riding.



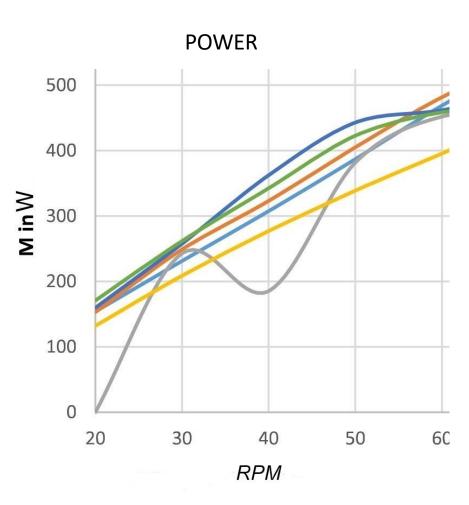


The diagram shows that OLI eBike Systems generates the highest torque of all systems tested during the very first pedal stroke, from 0 to 30 Rpm (revolution per minute) This means that OLI eBike Systems offers the easiest start than anybody else.

- On the e-city bikes, this translate into easy start even when the chain is left on the smallest gear of the cassette.
- On the e-mtb this means being able to start climbing, from standstill, on and above 35% - 40% degree inclination walls!
- On the cargo bikes, our system provides extra help when extra loaded and or staring the ride on a climb.

Potenza meccanica disponibile nella fase di maggior utilizzo delle e-bike Power - W





This graph shows that OLI eSystems supplies the highest power (W) within the e-Drive tested tested during he most typical range of Rpm used on e-Bikes, between 20 to 60 Rpm.

This in practical terms means enjoying an easier start and following smooth speed progression with less effort compared to other brands.

Furthermore, there will be less demand to operate on the shifter making the ride more enjoyable, more fluid, more accessible to a wider range of biking appetites. The OLI e-Systems high Power performance is particularly appreciated in the following e-bike:

- e-City
- e-Trekking
- e-mtb
- e-cargo

Torque (Nm) and Power (Watt) available at higher rpm — This is typically experienced with e-mtb when extra torque and watts are required to overcome an obstacle, a steep wall.









The chart shows how OLI eBike Systems supplies high torque and power even at high rpm (above 100 rpm).

This performance is engineered specifically to overcome obstacles, typical in the Mtb world, like big rock, roots, or sharp steep climbs. With our e-systems the rider is not forced to operate on the shifter but she/he simply needs to increase the cadence: the e-systems will immediately supply all the assist required without dropping any power and maintaining the momentum and fluidity = less effort & more fun!

This unique performance is achieved via the quick and precise feedback to the computer from the top quality torque sensor installed.

Advantages of OLI e-Bike Systems when starting from standstill on e-cargobike compared to Bosch.

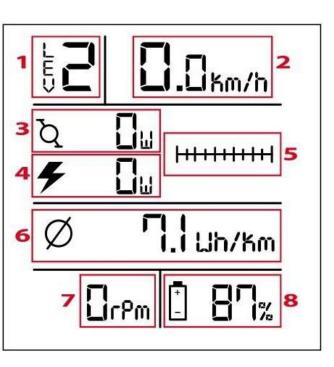


- Easy start: OLI reacts immedialtely, as soon as the pressure is applied on pedals. Bosch requires the rotation of the crank (1/8 of a rotation)
- OLI performs 10Nm more than Bosch (see Velotech chart)
- OLI is quieter
- Oli can install 30T chainring. Bosch has a different gear system and uses a 14T custom chainring which equals to a traditional 35T (BCD 104). There is a definite difference starting from standstill using 35T chainring versus 30T chainring.
- Built strong: the gear box has mechanical components made to last. Bosch max suggested load is 250Kg. OLI Max suggested load is 300Kg.
- OLI E-Systems «Lazy-Mode» option reduces the effort required for the e-cargo bike



Control panel setting: Race mode. This enables access to performance data useful during the ride.





- 1 Assist level (from 1 to 5)
- 2 -Speed (km/h -ml/h)
- 3 Watt (instant) used by the rider
 This information is generated from the sensor located in the drive and has the same high precision found in similar torque meters installed by demanding avid bikers and pro riders
- 4 This shows the Output power (Watt) of the drive
- 5 Power display (Watt) same as point # 3 and # 4
- 6 Average consumption Wh/km
 This enables some planning of the trip. Dividing the capacity of the battery by the actual average consumption (Wh by Km) we can estimate how to adjust our effort to complete the entire ride and not run out of battery energy. Dividing the energy of the battery by the average consumption we will obtain a good measure of the possible max distance per each battery charge
- 7 Rpm (rotation per minute)
- 8 Resiudual battery energy left (%)

AssDirect Assistance





Specialized Customer service.



Direct Phone line: +39 0547 318 322



Dedicated e-mail: customerservice@oli-ebike.com



Possibility to interact directly with dealers (with the manufacturer (OEM) approval)



Accurate reporting in case of returns



Service, repairs, within 5days max

Product Range 2019 OLI eBike Systems







MOVE



Charatteristics

- •Coppia max: 50 Nm
- Potenza max: 250 W (max 550 W)
- Cadenza max: 105 rpm
- BB Interfaccia: Bosch compatible
- •BSD mode
- >LAZY mode
- > Integrated gear: Compatible







Characteristics

- Max Torque: 80 Nm
- Max Power: 250 W (max 650 W)
- Cadence max: 120 rpm
- **BB Interface:** Bosch compatible
- > **ZERO EFFORT** mode
- > INTEGRATED POWER METER
- > **BSD** mode
- > LAZY mode
- > Integrated gear: Compatible







Characteristics

- Max Torque: 85 Nm
- Max Power: 250 W (max 720 W)
- Cadence max: 130 rpm
- Interface: OLI proprietory design
- Optional installation @ 40° angle
- > **ZERO EFFORT** mode
- > INTEGRATED POWER METER
- > **BSD** mode
- > LAZY mode
- > Integrated gear: Compatible



ZERO EFFORT mode

Starting from standstill: never been so easy. No rotation of the crankset is requested, the drive will activate with a simple prerssure on the pedals

INTEGRATED POWER METER

Easy access to the data on the display, showing biker and edrive output power (Watts)

BSD mode

Battery Self Diagnostic battery performane data is easily accessible.

LAZY mode

Full Drive Power easily accessible at a touch of the button

Batteries available



SF06S



Characteristics

- Frame type
- 50 cells
- Tension: 36 V
- Capacity: 11,6 Ah or 14,5 Ah
- Weight: 2,9 Kg



Batteries avaiable 2019



BN18



Characteristics

- Integrated type
- 40 cells
- Tension: 36 V
- Capacity: 14 Ah
- Weight: 2,8 Kg



ADDED VALUE TO THE CUSTOMERS



Availability

Stock availability.

LOGISTICS

Oli Offres logistics support to customer's manufacturing site

KANBAN SYSTEM OLI Offers KANBAK System to support manufacturing sites

WARRANTY

3 years warranty on the E-drive System

EXPERIENCE

10+ years experienced team of customer support to handle customer care.

ADDED VALUE TO THE CUSTOMERS





Partnership with **Phylion Battery Co., Ltd**.

Complete warranty

OLI offers full warrany to the **complete E-System** (drive unit + display + Phylion battery).

EXCLUSIVITY UE

OLI is the exclusive **Phylion Battery Customer Service** for Europe.

Vantaggi per i clienti



CUSTOMIZATION

Possibility to **customize any components**.

PRODUCTIVITY

Industrialized production system: possibility to increase manufacturing output quickly

CERTIFICATIONS

Certified according to **EN 15194:2017 EEC**.

PRICES

Very competitive in the market place

