

EV startup Graft has begun commercial production of its carbon-rim electric motorcycle, featuring fully interchangeable battery pack

- Electric Vehicle (EV) startup, Graft, has begun taking orders of EO.12, its first high-performance electric motorbike designed for off-road trail riding, competitive enduro and motocross.
- With a maximum output of 25 kW (34 hp) and weighing just 50 kg / 110 lb (battery inclusive), the bike has the highest known power-to-weight ratio in the off-road e-bike market and is the first in the world to feature carbon fibre wheels.
- The EO.12 is priced in packages ranging from \$8500-\$12500 USD (depending on set-up and battery size) and is the first in Graft's fleet of off-road recreational vehicles that will share fully interchangeable battery packs.

SAN FRANCISCO, TAIPEI - FEB 22, 2022 - Following two years of development and comprehensive testing, EV startup Graft has begun commercial production of its first high-performance, off-road electric motorcycle. Designed, developed and manufactured in-house by a team of passionate engineers and riders, EO.12 dirt bikes will be hand built in monthly, made-to-order batches and shipped worldwide from the company's production workshop in Taipei, Taiwan.

The EO.12 is the first off-road motorbike across both gasoline and electric markets to feature carbon fibre wheels, delivering 25% weight saving against the average motorbike wheel and comprising a total vehicle weight of 50 kg / 110 lb (battery inclusive). The ultra-light construction ensures excellent manoeuvrability and easy recovery on challenging, technical trails, and with a maximum output of 25 kW (34 hp) the bike has the highest known power-to-weight ratio for an off-road electric motorbike. By marrying impressive power with manageable weight and removing the need for gear changes, the bike is easy to handle, making it as inviting for athletes as it is for dirt bike novices.

Featuring a large wheel size (53.34 cm/21 inch), EO.12 utilises a user-friendly seat height homologated for the average American or European rider. Engineered to meet optimised traction and durability specifications, Graft has selected high-quality materials and components that exponentially elevate riding experiences including a luxury touchscreen

display, motorcycle-grade suspension (produced by BOS with 3-way adjustability), and a hydraulic bump stop for additional shock absorption.

Parts of the drivetrain are 3D-printed in titanium to handle its torque of 440 Nm (324 lb-ft) at the back wheel, and the frame has been CNC machined in-house from 6061-T6 aluminum billet with a brushed, anodised finish. Graft is the only manufacturer in the world making motorcycles with billet CNC-machined frames, a production method that offers additional strength and precision, avoiding any of the distortion seen in welded frames. Rated IP67 water resistant and featuring a permanently lubricated chain, the machine requires extremely little maintenance between rides.

The bike is the first in a family of off-road, recreational vehicles (including motorcycles, ATVs and UTVs) currently being developed by Graft since its launch in 2020. Addressing a common concern among e-bike riders that battery packs can quickly become obsolete as a result of changing designs in later iterations, Graft has designed each of its vehicles to be compatible with the same lithium-ion battery pack that is entirely swappable between models and future vehicle generations. This 10-year pledge on battery pack format is designed not only to increase the long-term usability of Graft's vehicles but to reduce waste creation and the brand's overall environmental impact.

The company's owner and lead engineer, Azizi Tucker, said of the launch: "Although Graft was founded just two years ago in 2020, it really emerged out of a lifetime of passion in racing on two and four wheels combined with a 15-year career working in the electric vehicle industry. Our EO.12 bike represents a desire to converge those experiences to fully realise the potential of recreational EVs and the instant torque, easy control, and zero maintenance that the technology has to offer. Most importantly, it represents Graft's mission to make vehicles that are ground-breaking and fun to ride".

EO.12 comes with a 15A charger (220V) that takes 1.5 hours to complete a full charge. Available with full service upgrades, Graft provides a choice between a standard Base Model and Factory Team model, with the latter offering upgraded power specifications and components, including Vibracore lightweight handlebars and a full titanium bolt kit. With complete aftermarket support and service part availability, Graft has invested heavily in ensuring a seamless after-purchase experience. EO.12 is priced in packages ranging from \$8500-\$12500 USD (depending on set-up and battery size) and is available now at **Graft-EV.com**.

Specifications

- Weight: 110 lbs / 50 kg
 - Torque: 440Nm
 - Top speed: 50 mph / 70 kph
 - Peak Power: 34 hp / 25 kW
 - Charge time: 1.5 hours
 - Range: 3 hours (varies due to terrain and riding style)
 - Swingarm: Billet CNC machined 6061-T6 Aluminium
 - Wheelbase: 53.8 in / 1366 mm
 - Shock absorber: 3-way Adjustable Air Shock with Hydraulic Bump Stop
 - Front Suspension: 3-way adjustable 42mm Inverted Fork with Hydraulic Bump Stop
 - Battery Type: Lithium-ion
 - Battery Pack Voltage: 80 V
 - Battery Pack Capacity 2.7 KWh
 - Battery Pack Life Cycle: 2000 Charge Cycles
 - MSRP: \$8500-\$12500 USD
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ABOUT GRAFT

Built by riders for riders, Graft is an EV startup, dedicated to manufacturing high-quality, best-in-class electric motorcycles and recreational vehicles. Founded by American-born engineer and power sports enthusiast, Azizi Tucker, Graft combines decades of experience, creative exploration, and tinkering in the motorsports, electric vehicle and manufacturing fields. Headquartered in Taipei, Taiwan to take advantage of the burgeoning supply chain of the Pacific Rim as well as the whole World, Graft's small team of engineers handcraft vehicles fully in-house, pouring their attention to detail and passion for driving into each and every build.

ASSETS

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