



REGAMOTION®
A PART OF REGAL COMPONENTS

Regamotion Power assist hybrid



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Power assist hybrid

Regamotion Power assist hybrid is a power unit that enhances the performance of a machine by seamlessly adding electric power to the diesel engine. Size the diesel engine for the average workload and add electric power for peak loads.

SEAMLESS

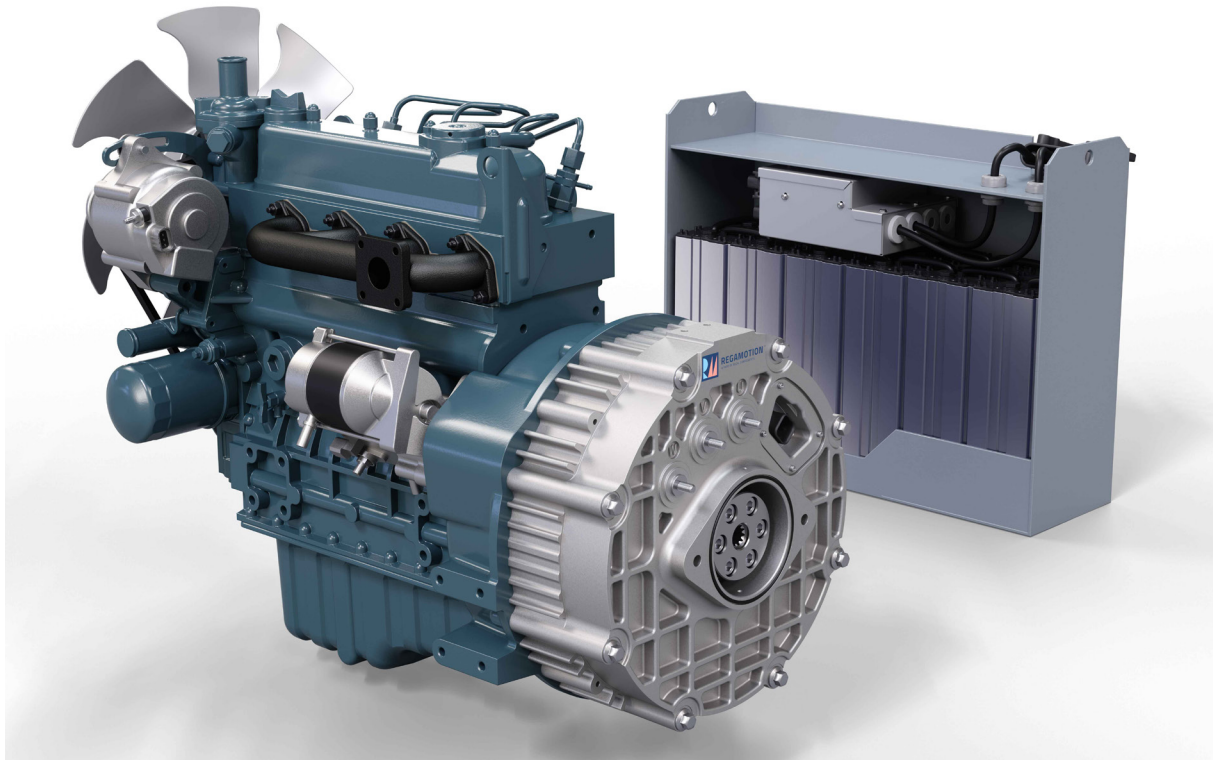
Reliable and maintenance free design that offers a seamless operator experience. The system will automatically add electric power when needed during peak loads and recharge the batteries in between. Battery capacity is optimized for different user cases.

MILD OR FULL HYBRID

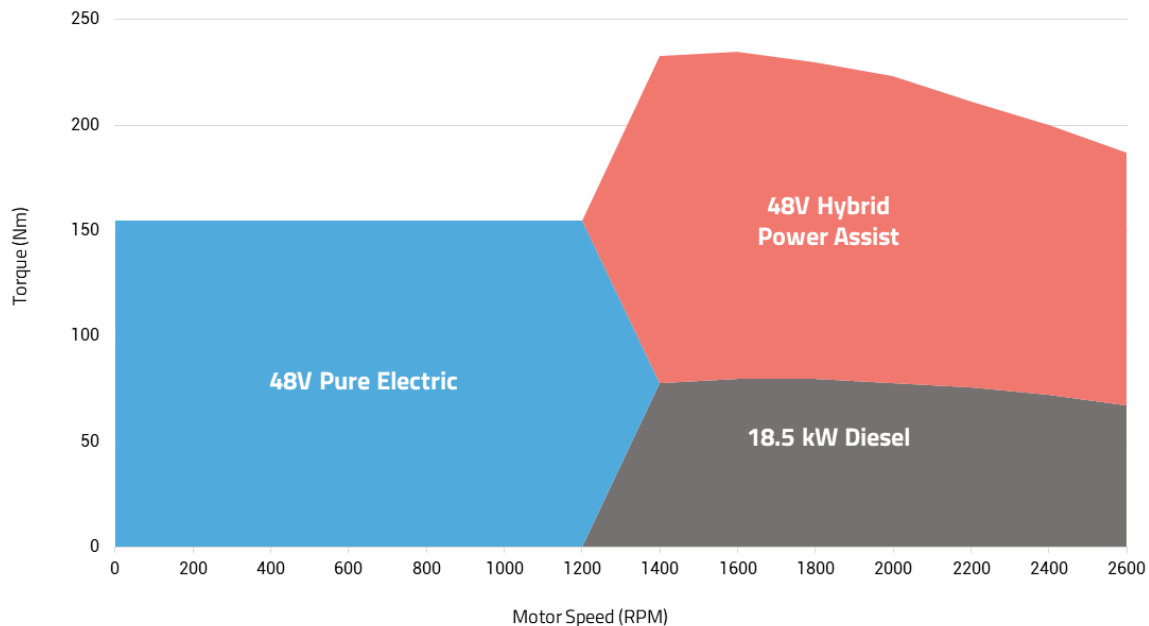
Customize the system after user specific needs. Choose an automatic mild hybrid integration, or the full hybrid option and switch to full electric drive when the machine is moving in and out of buildings or other emission restricted areas.

STAGE V FRIENDLY

Use a < 19 kW diesel engine for average workloads and add electric power when needed. With additional nominal power of <24 kW and peak power <57 kW. Perfect for intermittent duty cycles common in non-road mobile machinery 'NRMM'.



48V Hybrid System Performance



How does it work?

Regamotion Power assist hybrid is a complete system for hybrid intergration. Power assist hybrid consist of a battery pack, electric motor and a sophisticated control system. The motor is interfaced to the combustion engine and the control system is customized for application specific needs.

SYSTEM DESIGN

The system is designed for 24V-80V nominal voltage and the battery capacity and size of the electric motor is optimized for application specific duty cycles. The system can be interfaced to a monitor for operator control or be fully automatic.

ELECTRIC MOTOR

The motor is designed to fit a SAE #5 (other on request) flywheel housing. Available with different ratings with nominal power up to 24 kW. Based on PMAC technology which gives it a minimal footprint combined with the highest possible efficiency.

FURTHER OPTIONS

The system offers additional options for customization such as:

- SAE J744 hydraulic pump interface at the rear cover.
- Option to eliminate the separate starter motor to the engine.

"Combining the stamina of the diesel engine with the torque and responsiveness of electric power. The best of two worlds."

- Emil Vestman, Lead engineer.

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