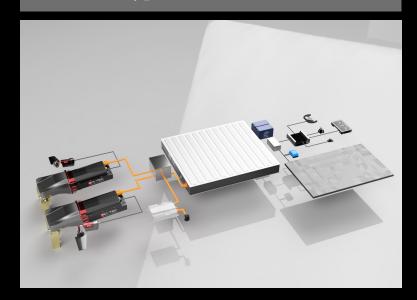


THE CD-TEC TECHNOLOGY STACK 360°



THE CO-TEC TECHNOLOGY STACK 360°

100% INTEGRATION



Thanks to the 360 degrees technology stack of eD-TEC the drivetrain system is perfectly integrated into almost every boat seamlessly. The eD-TEC Technology Stack 360° covers the entire vessel's architecture ranging from propulsion to digital switching.

END-TO-END-ELECTRONICS



Thanks to the eD-TEC platform every system component is directly linked to the AI BOX, enabling update OTA into the last component. The vessel will be smarter and better every year! From the water to the cloud, interlinked, connected and smart!

DESIGNATED HMI



To fulfill the high standards eD-TEC holds itself to, it is necessary to develop a dedicated user interface to perfectly accommodate the functionalities offered by the system. The system ensures maximum efficiency, comfort, and performance while convenient usability.



THE CD-TEC TECHNOLOGY STACK

1. Best System

All operating windows are to be operated in the ideal operating range in the system network (fuselage, propeller and engine/gearbox).

2. Best Hull

A lightweight hull using carbon or nature fibre to gain structural integrity without compromising weight. Enhanced via foil or stepped hull technology.

3. Drive Train Platfrom

A simple plug & play solution is important for the boating industry for installation, operation and maintenance whilst catering to operators demands.

4. E3/AI/AD

Perfect control, data and cloud-based ensures an optimal and secure system network and generates continuous updates and upgrades over the air.

5. SW Driven Platform

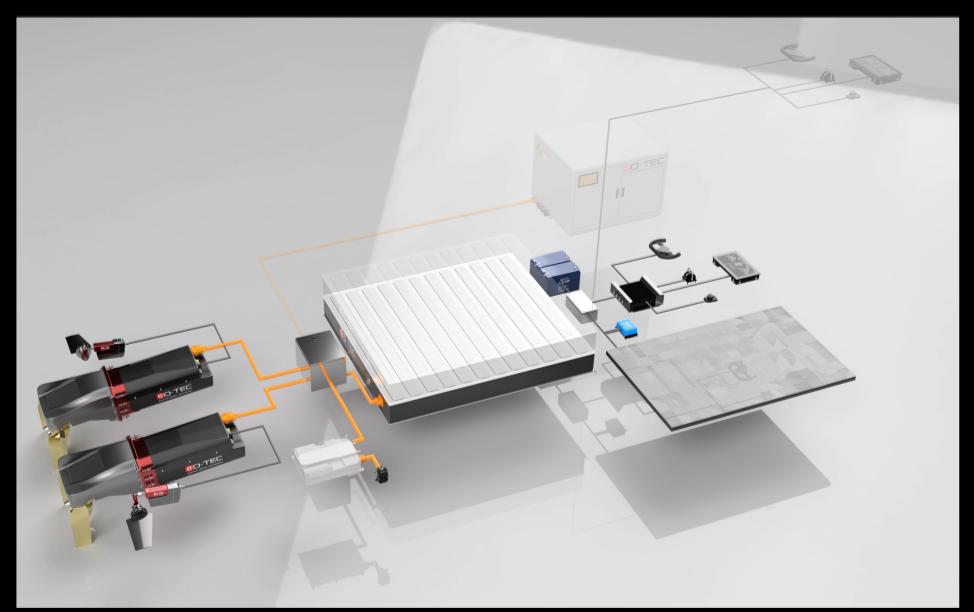
The cloud-based connectivity ensures updates over the air, assistant system Weden reloads, healthcare, docking, etc. are optimized year after year.

6. New Business Model

New business models revolving and driven by software updates and upgrades enables the subscriber constant development and improvement.



SCALEABLE



Scale it up!

From 6m monohull to 25m catamaran! 2 drive units up to 4 drive units, our technology stack scales with your needs! No matter if 100% electric or with a range extender, we can offer a system to YOUR needs.



soon

| | 6-10 meters | | | | | | | |
|------------|--------------|-------------|-----------|------------------|----------------|--------------------|--|--|
| | Units | Performance | Propeller | Battery capacity | Range Extender | System performance | | |
| Q1 | 2-4x | 50-200 kW | 16-18" | 60-200 kWh | N/A | 100-800 kW | | |
| Q2 | 2x | 100-400 kW | 21-24" | 160-360 kWh | 20-200 kW | 200-800 kW | | |
| Q3 | N/A | N/A | N/A | N/A | N/A | N/A | | |
| ning on | 10-16 meters | | | | | | | |
| | Units | Performance | Propeller | Battery capacity | Range Extender | System performance | | |
| Q1 | 2x | 50-200 kW | 16-18" | 60-200 kWh | N/A | 100-400 kW | | |
| Q2 | 2-4x | 100-400 kW | 21-24" | 160-360 kWh | 20-200 kW | 200-1600 kW | | |
| Q3 | 2x | 200-600 kW | 25-32" | 200-600 kWh | 50-200 kW | 400-1200 kW | | |
| ning on | 16-25 meters | | | | | | | |
| | Units | Performance | Propeller | Battery capacity | Range Extender | System performance | | |
| Q1 | N/A | N/A | N/A | N/A | N/A | N/A | | |
| Q2 | 4x | 100-400 kW | 21-24" | 160-360 kWh | 20-200 kW | 400-800 kW | | |
| Q3 | 2-4x | 200-600 kW | 25-32" | 200-600 kWh | 50-200 kW | 400-2400 kW | | |
| ing | | | | | | | | |



soon

| | 6-10 meters | | | | | |
|-------------|--------------|-------------|-----------|------------------|----------------|--------------------|
| | Units | Performance | Propeller | Battery capacity | Range Extender | System performance |
| eD-Q1 | 2x | 50-200 kW | 16-18" | 60-200 kWh | N/A | 100-400 kW |
| eD-Q2 | 2x | 100-400 kW | 21-24" | 160-360 kWh | 20-200 kW | 200-800 kW |
| eD-Q3 | N/A | N/A | N/A | N/A | N/A | N/A |
| Coming soon | 10-16 meters | | | | | |
| | Units | Performance | Propeller | Battery capacity | Range Extender | System performance |
| eD-Q1 | 2x | 50-200 kW | 16-18" | 60-200 kWh | N/A | 100-400 kW |
| eD-Q2 | 2x | 100-400 kW | 21-24" | 160-360 kWh | 20-200 kW | 200-800 kW |
| eD-Q3 | 2x | 200-600 kW | 25-32" | 200-600 kWh | 50-200 kW | 400-1600 kW |
| Coming soon | 16-25 meters | | | | | |
| | Units | Performance | Propeller | Battery capacity | Range Extender | System performance |
| eD-Q1 | N/A | N/A | N/A | N/A | N/A | N/A |
| eD-Q2 | 2x | 100-400 kW | 21-24" | 160-360 kWh | 20-200 kW | 200-800 kW |
| eD-Q3 | 2x | 200-600 kW | 25-32" | 200-600 kWh | 50-200 kW | 400-1200 kW |
| Coming | | | | | | |



D-TEC ED-PLATFORM AT A GLANCE

50 - 2400 KW SYSTEM POWER



50 - 2400 kW System power

The eD-QDrive Series offers power units from 70kW to 600kW, which are 100% integrated. Motor, controller, cooling system (incl. water inlet, outlet, heat exchanger & water pumps), and gearbox. The eD-QDrive is easily mounted via the easy mounting system and installed via 1x High-voltage plug, 1x 24V In, 1x 24V Out & 2x CAN ports. The 24V out port can be used to connect to a flap or foil actuator. This actuator can be controlled via an Interface or automatically by the AI PC, accounting for pitch, roll, and weight&balance. The automatic control profile can be adjusted to ensure range, comfort, or performance.

ONE TO CONTROL IT ALL



One to control it ALL

The AI Box is the heart and brain of the entire technology stack. The AI Box manages the operation of the vessel, including the propulsion system (Inverter, Motor, Rudder, Foils/Trim Tabs), cooling systems (eD-QDrive & Battery), and charging (up to 150kW). The AI Box also manages the domestic operation of a vessel, including domestic switching (all 24V systems can be controlled), and resource management (High-Voltage Battery, Domestic Battery, Solar Power, Shore Power & Fresh Water). This holistic and complete vessel management enables the most efficient use of resources on board while being as convenient. One AI Box means one interface; this means convenience and simplicity for the owner or crew, as well as accessible and reduced maintenance through predictive maintenance.

TAILOR MADE USER INTERFACE



Tailor made user interface

The AI Box can manage all the vessels components ranging from trim tabs, rudders, and throttle (fly-by-wire), Autopilot, High Voltage & Domestic Battery, Charging and HPC. Resource management as well and Domestic Switching. These functions must be usable and convenient while conforming to DNV requirements. To fulfill the high standards eD-TEC holds itself to, it is necessary to develop a dedicated user interface to perfectly accommodate the functionalities offered by the system. The system ensures maximum efficiency, comfort, and performance while convenient usability.

ED-HV BATTERY: 80-320 KWH



eD-HV Battery: 80-320kWh

A vital component of the eD-Technology Stack 360° is the high-voltage Battery. It is critical to the system and must be able to deliver high amounts of power, thus requiring a battery setup with a high C-Rate. Optimized thermal management accompanies the battery pack; this prevents the derating of the Battery, allowing for longer and higher peak power settings. Weight performance is critical aswell; the eD-HV Battery will be able to offer a very competitive power-to-weight ratio, unlike any other product.

The eD-HV Battery will be available soon, it integrates seamlessly into the eD-Technology Stack 360° and is scalable from 80kWh-320kWh.



ED-PLATFORM SUB-SYSTEMS

FLAPS/FOILS

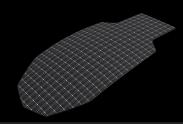
SOLAR

RANGE EXTENDER

DIGITAL SWITCHING & MONITORING



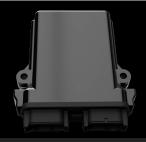
Handling & efficiency
Flaps or foils support handling of vessel through inducing role and pitch. Increasing driving experience and efficiency.



Harness the sun power
The seamless integration of solar
cells in the eD-Platform offers
redundancy and greater
independence.



Increase range & performance Most efficient way to use fuel on a vessel. Increase endurance and performance with a GenSet.



Control at your fingertips Switch lights and have a look on all tanks and systems conveniently integrated in one user interface.

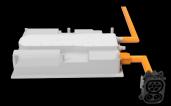
MFD & AUTOPILOT







System integration
Staying true to end-to-end integration - MFD and autopilot integration in the eD-TEC
Technology stack.



Fast & convenient charging
DC fast charging allows charging powers up to
300kW. V2V charging will allow the operator to
charge Vessel with vehicles or vice versa.

Disclaimer: everything presented are subject to change and thus preliminary



Always up to date
OTA updates allows for constant development
of the operating software while connectivity
provides the user with the latest data and info.



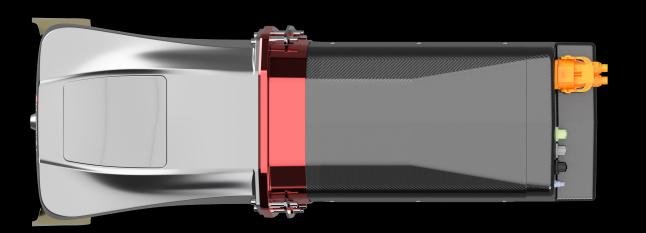
| | | | | Comin | | Comin | | |
|----------------------|--|---------|---------------------------------|------------------------|---------------------------------|------------------------|--|--|
| eD-QDrive | eD-Q1 (6-10m; Prop 16-18´´) | | eD-Q2 (10-16m; Prop 21-24´´) | | eD-Q3 (16-30m; Prop 25-32´´) | | | |
| | 100 kWc | 200 kWc | 200 kWc | 380 kWc | 400 kWc | 600 kWc | | |
| Al Box | Backbone Computer, Cloud capable, | | Update over th | e Air capable, S | W Basis | | | |
| Energy Pack | Performance Battery, DC-Link, Thermal management-SET | | | 33 kWh N x parallel | 98 kWh N x parallel | 80 kWh N x parallel | | |
| Charging Pack | DC/DC Converter 2,7kW, Onboard Charger: | | 22 kW AC | 22 kW AC/ 150 kW DC | 22 kW AC/ 300 kW DC | V2V SET | | |
| E3-Architecture & SW | Safety PLC, steering & throttle by wire, Electronic MOB kill switch, Al Box | | PFD 16" Touch | PFD & MFD 16" Touch | 2. PFD 16" Touch | AP, Wind, VHF, Echo | | |
| Gen Set | 195 kWc, 445 kg, EU-Directive 2013/53/EU (RCD) EPA Marine Tier 3, BSO2 | | | | | | | |
| Solar | Solar Panel Set, Control, DC/DC, SW | | 700 Wp | 2,5 kWp | 2-30 kWp | Add DC/DC Set | | |
| Domestic | Individual/Boat | | Light | Sound | 220 Volt | Cooling / Heating | | |



ED-TEC ED-QDRIVE 1 100KW







| | Peak power | 200kW |
|------------|--------------------|--------------|
| | Continuous power | 100kW |
| | Voltage max. | 750Vdc |
| Electrical | Voltage min. | 500Vdc |
| | Low voltage supply | 24Vdc |
| | Communication | CAN/J1939 |
| | Propeller size | 16-18'' |
| D | Transom angle | 6 ° |
| Properties | Weight | <100kg |
| | Cooling | Dual circuit |



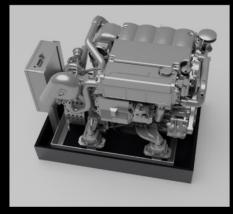
ED-TEC BATTERY PACK OFFERING

| | 33 PRIS | 98 CYL | 80 eD-HV | |
|-----------------------------|------------------|------------------|-------------------|---|
| Energy (nom) | 33 kWh | 98 kWh | 80 kWh | We are currently offering different |
| Discharge power continuous | 50 kW | 100 kW | 600kW | types of battery packs. Each have their |
| Charge power continuous | 45 kW | 80 kW | 80-120kW | own advantages. Each pack can be used in parallel |
| Cycle life | 1700 cycles | 2000 cycles | 2000 cycles | within one system |
| Dimension (L x W x H) in mm | 1700 x 700 x 150 | 1720 x 700 x 300 | 1500 x 1600 x 200 | |
| Weight in kg | 275 kg | 600 kg | <450 kg | |

Disclaimer: everything presented are subject to change and thus preliminary









| Motor type | T4.270 | | | |
|----------------|--|--|--|--|
| Power | 195 kWc bei 3.600 U/min, 54 l/h | | | |
| Weight | 445 kg, Package: | | | |
| Rating | M6 | | | |
| Cylinder | 4 (in Row) | | | |
| Displacement | 2.982 Liter | | | |
| Cooling System | Dual circuit, with seawater glycol heat exchanger | | | |
| Emissions | EU-directive 2013/53/EU (RCD) EPA Marine Tier 3, BSO2 | | | |

future@ed.tec.de

Price



ED-TEC WEIGHT CORE COMPONENTS

EXAMPLE FOR COMPLETE DRIVETRAIN WEIGHT WITH 99KWH AND 196KWH

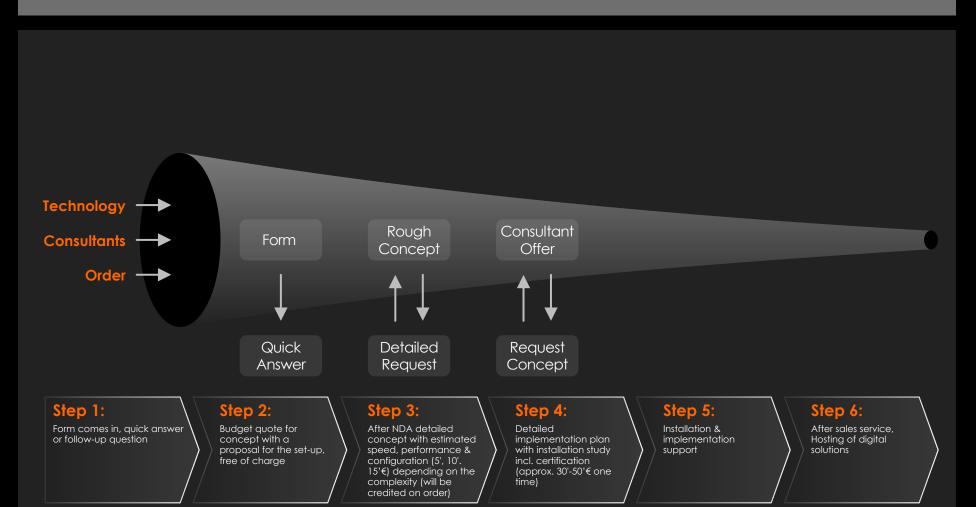
| Component | Weight [kg] 99kWh | Weight [kg] 196kWh |
|--------------------------------------|-------------------|--------------------|
| Charging Pack & Energy Pack | 50 | 50 |
| E3-Architecture | 60 | 60 |
| 2 x eD-QDrive 1- 100 | 200 | 200 |
| 3 x Battery 33 PRIS (99kWh total) | 825 | |
| 2 x Battery 98 CYL (196kWh total) | | 1200 |
| Total | 1135 | 1510 |

Disclaimer: everything presented are subject to change and thus preliminary



REQUEST-FUNNEL

HAVE NOT SENT AN ENQUIRY YET?
TELL US SOME SPECIFICATIONS OF YOUR PLANNED BOAT AND
WE CAN PLAN THE BEST SYSTEM FOR YOU.



eD-TEC is currently a small Startup-Team and focusing of maximum efficiency of resources, thus we put a process in place for everyone to explain how we manage our inquiries and the expenses that will follow for certain steps. This is best seen as a funnel and helps to narrow down the possible solution for each individual customer.

