

H2PowerPac

Clean and flexible power generator for mobile applications

H2PowerPac 80



eCap Marine's H2PowerPac provides a modern, environmental-friendly, and safe solution for supplying emission-free power based on hydrogen for mobile applications, such as **emergency power generation, festivals or building site power supply.**

The innovative power system features modern fuel cell technology with an output of up to 500 kW, batteries as a buffer and a hydrogen tank in a compact unit. Power supplied by the H2PowerPac is **emission-free** compared to the national grid or other power generators.

H2PowerPac 150



Each H2PowerPac is freely adjustable to the individual power needs of the desired application. The systems are variable in size and number and the hydrogen tank is adjustable to any desired dimension within a container ISO format. Several H2PowerPacs can easily be combined for power requirements exceeding 500 kW.

H2PowerPac 500



Green hydrogen

Green hydrogen is generated by renewable energy sources like solar or wind using electrolysis. This energy source is highly appreciated by the federal government and states to fulfil the EU's energy and climate objectives. Green hydrogen is the perfect choice for renewable and sustainable power with zero emissions.

Handling Procedure

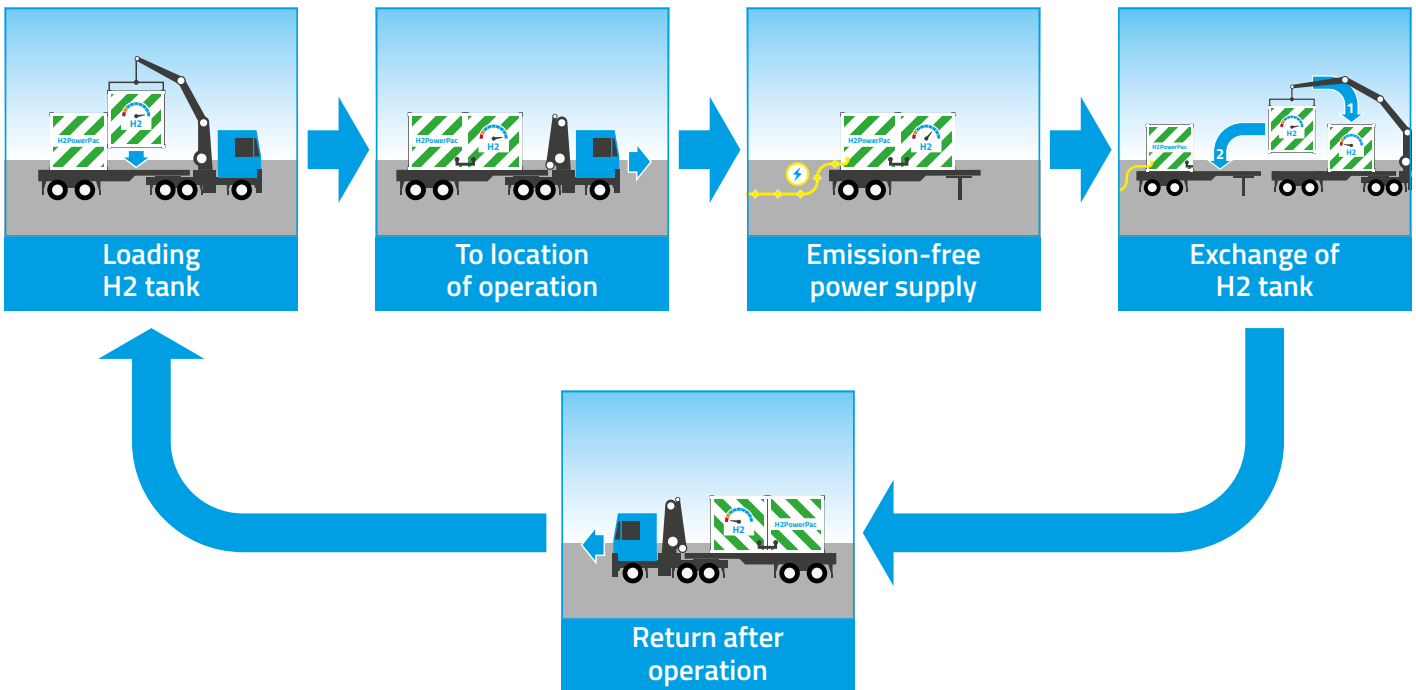
Once the operational area is clear, a filled up H2 tank is placed on the trailer and connected to the H2PowerPac. The trailer is then moved to the operation location.

The flexibility of the system allows supplying power to multiple consumers simultaneously. Due to the integration into standard power generation processes, no additional infrastructure investments are necessary.

An empty H2 tank can of course be replaced during operation. The buffer battery provides a continuous power supply during replacement. After the operation, the trailer is driven back to its stand-by location.

Advantages of the H2PowerPac

- Independent and mobile power supply
- Emission-free energy supply
- Quick implementation in any location
- 100% reliable solution (redundancies)
- ADR/TPED approval
- In line with energy laws – no state taxes, grid fees etc.
- Suitable for all types of container terminal operations
- Suitable for all types of truck operations



H2PowerPac 240



Example: Emergency Power Generator

H2PowerPac 20 ft. – 240 kW

10 ft. H2 tank

- Capacity: 177 kg
- Operating time with max. efficiency: up to 24 h

10 ft. H2PowerPac

- Fuel cell systems (in total 240 kW)
- 195 kWh batteries (LiFePO4)
- Battery management system

▶ 2.8 tons CO2 emission saved per day