Version: 20250625

WATERMELN®

H2 HYDROGEN GENERATOR

Watermeln gives you energy

WM-200 gen 2 Product Sheet

About us

We are a sustainable startup focused on providing a sustainable solution for projects without (or with a limited) grid connection. With our extensive knowledge of making the Netherlands more sustainable through battery and hydrogen technology, we are ready for the future of smart and green energy.

Key Principles

- Use of refurbished battery cells
- No on-site CO_2, NOx, and particulate emissions
- Green-certified hydrogen

Our Mission

Our mission is to make all diesel generators worldwide obsolete by providing affordable electricity anywhere, anytime.

Our Services

The hydrogen generator designed and developed by Watermeln and Accenda are the clean alternative to diesel generators. It consists of a fuel cell for 24/7 base load power and a battery for peak load capacity. By connecting our system to additional batteries, we can increase peak output to megawatt levels.

WM-200

The offer

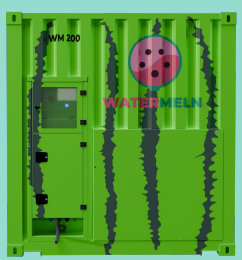
1. Hydrogen Generator(s) of 200 kW / 70 kW AC
2. Green hydrogen with storage tanks
3. Installation, transport, and monitoring
4. Basic cabling and hoses for the hydrogen generator and hydrogen storage tanks

Pricing Structure
Our pricing consists of two components:

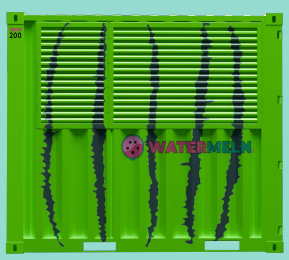
1. Usage rate (based on the selected hydrogen storage)
2. A fixed service rate for installation, rental, and monitoring of the Watermeln 200 and H_2 storage

Best Suited For:
- This unit is highly suitable for projects with high consumption and peak loads (up to 350 kW peak and 1700 kWh per day).
- A fuel cell has higher rental costs, but due to its high efficiency, it has low usage costs.
- Completely emission-free and low noise.

Design

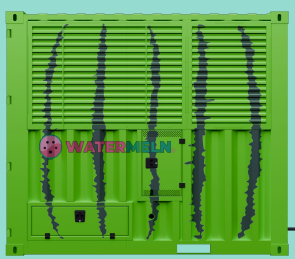


FRONT



RIGHT SIDE


BACK



LEFT SIDE

WM-200

Specificaties V2.0

Power	Peak: 350 kW AC Battery: 200 kW AC Fuel cell: 70 kW Ac
Capacity	Li-ion battery NMC of 120 kWh
Output	2x Powerlock 380A 2x 125A 5p
Input	1x 63A 5P (max 22 kW)
Hydrogen	Gascontrol (external) High pressure connector: ISO 5145 No. 38 W30 2x LH Input: max 350 bar working pressure Output: 30-35 bar (Quick connect) WM-200 Input: 30-35 bar (quick connect), minimum input 20 bar
Enclosure	Formaat: 10 feet; 2,99 x 2,44 x 2,59 meter Rating casing: IP15 Weight: 4500 kg
Safety and certificates	ADR road transport CE inspection (NEN-EN-ISO 12100:2010, NEN-EN 13854:2019, NEN-EN-IEC 60204-1:2018, PED 2014/68/EU SEP art. 4.3) Explosive safety document (ATEX)
Monitoring & control	MyWatermeln cloud monitoring GPS & 4G online monitoring and commands Physical control and monitoring
Operational	Temp: -15 till 40 Degrees °C (active conditioning and antifreeze safety) Efficiency: ≥ 45% LHV (15 kWhe / kg H2) Maximum tilt of 15° above 0° celsius temperature and maximum of 9° under 0° celsius
Modus AC	Making grid or follow grid Fixed power Set point Standby

Meer info: watermeln.com/technologie

Info

Watermeln takes care of everything. We provide green power at any location, whenever needed. The service includes installation, active monitoring and maintenance.

Applications
The hydrogen generators are the solution for projects without (or with limited) grid connection:

- Festivals and events
- Construction sites
- Fast charging for EVs and (construction) equipment
- Logistics hubs with congestion issues
- Shore power (50 & 60 Hz)

Safety and guidelines

The staff at Watermeln is trained to ensure the safe operation of the hydrogen generator. They work in accordance with the standards and guidelines of PGS 15, PGS 37-1, ATEX 114, and the "Safe Living Environment Guideline: hydrogen generators" (WP2; Oct 2023). A comprehensive safety and regulatory plan is available upon request from Watermeln.

1. Arrangements to be made in advance: We recommend notifying the relevant authorities (fire department and municipality) of planned hydrogen activities at least 4 weeks in advance.
2. Analyze whether the activity aligns with the local environmental plan, or if exemptions and/or permits may be required. The step-by-step guide in Appendix 1.1 can be used as a reference.

Setup Requirements:

1. The entire system is set up outdoors.
2. Horizontal placement up to a maximum of 10° on a stable surface with a minimum load-bearing capacity of: WM-200: 470 kg per m^2, Hydrogen tank (MEGC): 650 kg per m^2.
3. Equipped with collision protection for locations with forklift traffic and lanes with speeds > 15 km/h.
4. High fencing (2m) around the WM-200 and hydrogen tanks, featuring warning signals for explosion and fire hazards and a no-entry policy for unauthorized persons.
5. Must be accessible at all times for emergency vehicles (minimum width of 3.5 meters and height of 4.2 meters).
6. Grounding of the WM-200 and the hydrogen tank/bundles using grounding rods.
7. The ATEX zone must be kept free from (potential) ignition sources at all times. For the Watermeln setup, ATEX Zone 2 applies, with a radius of 1 meter in the following locations: hydrogen tank connection, hydrogen connection at the WM-200, and Gas Control. See the image on the next page for clarification.

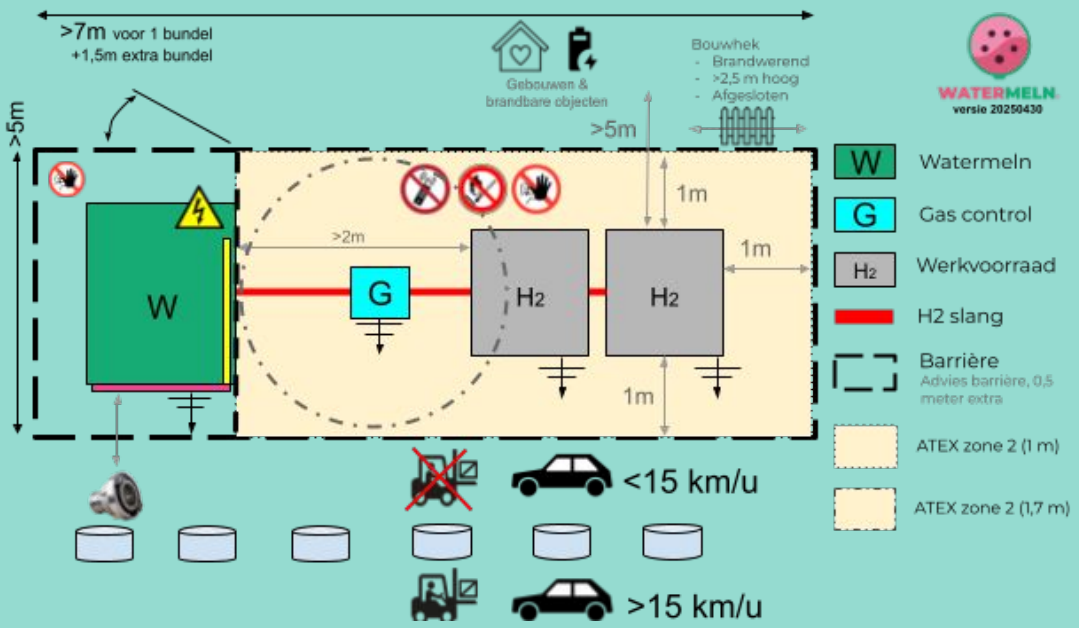
On-site Work Instructions:

1. Check the entire system for any damage before turning it on.
2. Wear personal protective equipment (PPE) within the ATEX zone: anti static clothing, anti static safety shoes, and a hydrogen ppm detector.
3. In an ATEX zone, mobile phones, smartwatches, and portable electronic devices that could cause ignition are prohibited. This also applies to tools without ATEX certification.

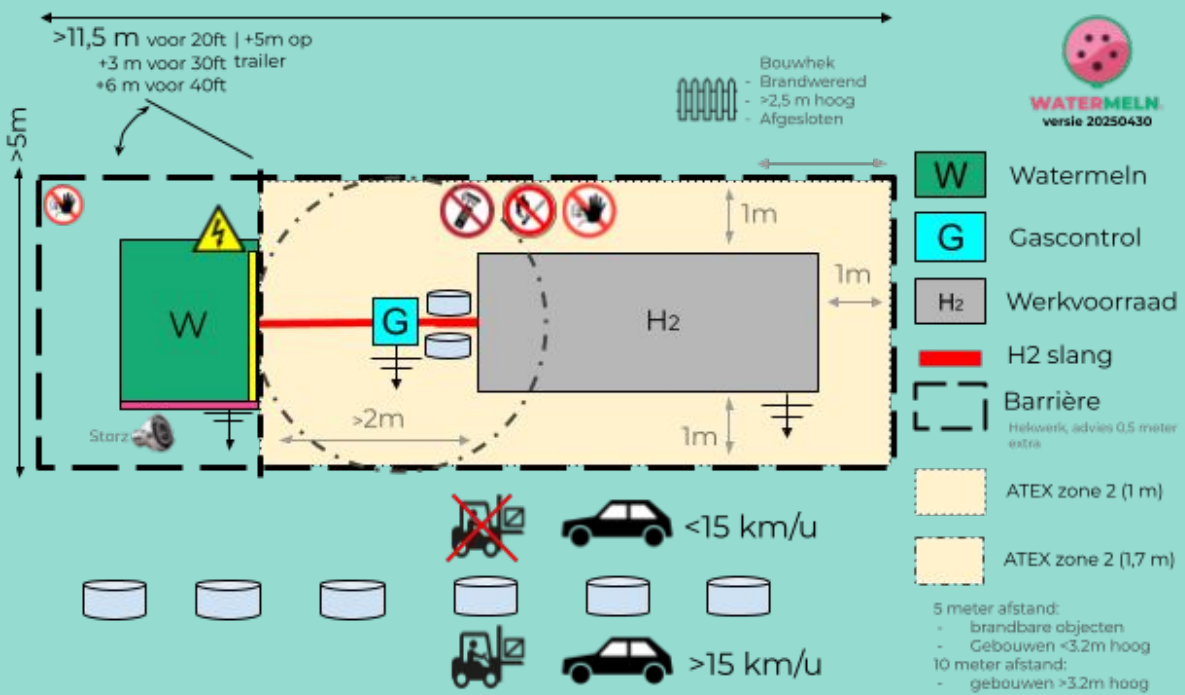
Practical examples

Placement

Scenario 1: Placement with bundles



Scenario 2: Placement with MEGC 20 feet container



WATERMELN

Happy partners & customers

DGTL

Greener Projects

KWS

ID&T

SIGHTLINE PRODUCTIONS

Beens Groep

REVOLUTION FOUNDATION

STREAM

We look forward to your response!

WWW.WATERMELN.COM

Jeff Wezel & Jasper Baltus
info@watermeln.com
+31 (0) 20 705 89 70
Watermeln B.V.