

Newsletter

December 2021

Dear Reader

We are pleased to present you the tenth Solenco Power Newsletter from December 2021.

With the project's Newsletter you receive the latest information about the European Project SOLENCO and its main objective "The Solenco Powerbox", Manufacturing and Commercial roll-out.

Further, we will keep you up to date about the Project Activities and initiatives related to Solenco.

In the tenth issue of Solenco Power's Newsletter, we share details about our certification approach.

For more information and news about Solenco, please visit our website:

<https://www.solencopower.com/>

We hope you will enjoy reading this tenth issue.

Your feedback and comments are always welcome!

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Title

Solar Energy, 24 hours, even in winter. On or off-grid. Based on Hydrogen Technology

Duration

April 2020 – December 2022

Main objectives

Manufacturing and Commercialisation of Solenco Powerbox

Message from the President



During this October – November 2021 period, we like to share with you the different safety steps needed for a successful market entrance of the Powerbox.

As with any competing energy storage technology, safety barriers need to be overcome.

Therefore, we collaborate with the Dutch inspection company, KIWA, following the instructions defined by international standard organisation technical committee 197 (ISO TC197).



Solenco Powerbox - Certification

**"You're not going to be
selling energy in the future,
you'll be selling life"**

**Dr. Hugo Vandenborre
Founder & CEO**

As mentioned, the Dutch Company Kiwa has supported Solenco in the different safety steps needed for a successful market entrance.

Testing: quality and reliability ensured

When you bring something new into the market, you want to eliminate quality and safety risks. After all, your potential customers need to be able to have confidence in your product. So, the product must be compliant with local and international rules and regulations. Among others, Kiwa's independent, fully equipped and highly qualified testing labs and offering these services.

Below we show two certificates recently granted related to the Solenco Powerbox.

Declaration

Number: V 20.002
Issue date: 15 January 2020
Scope: 2006/42/EC

Kiwa Technology hereby declares that the Power Generator with Reversible Fuel Cell, Boiler and Storage tanks:

Type name: Solenco Powerbox™ (SPB™)
Manufacturer: Solenco Power N.V., Turnhout Belgium

Has been subject of a field location approval, and was evaluated to the essential requirements of the Machinery Directive

And fulfills the requirements as mentioned in the assessment report VGI/1382/H.

The test report can act as a base to show presumption of conformity with the relevant essential requirements of the Machinery Directive (2006/42/EC) and amendment 2009/127/EC.

This declaration is only valid in combination with the appendix to this certificate, where specific information and/or conditions are given.

Ing. J.A.M. Peters
Unit Manager Gas Measurement & Safety
Kiwa Technology

Client:
Solenco Power N.V.
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Certificate of conformity

Based on unit verification
According Pressure Equipment Directive 2014/68/EU, Module G

Kiwa herewith certifies that the pressure equipment assembly unit stated herein meets the requirements of the Pressure Equipment Directive 2014/68/EU.

Manufacturer
Name: Solenco Power N.V.
Address: Stadhoudersstraat 112, bus 2
Place: 2300 Turnhout
Country: Belgium

Assembly
Description: Solenco Hydrogen Storage
Conform Assembly see DOC Solenco

Type
Type: 237-0401
Serial number: 150511882004
Category: IV module G
Declaration of conformity: 237-0401, 150511882004 dtd 14-06-2021
Documents: Manual Hydrogen Storage Module dtd 31-05-2021
PRD FMEA 300 bar dtd 15-04-2021
Safety valves calculations dtd 14-04-2021
Identification van drukapparatuur en veiligheidsapparaten dtd 15-4-2021

Design Data
Pressure: Max./Min. allowable Pressure PS: +300 bar(g)
Temperature: Max./Min. allowable Temperature TS: 110°C (Fire scenario)
Volume: 300 liter (high pressure burst)
Fluid: Group I, Category IV

Safety device(s)
Verification: HV-PSV-002 / 300 PRD High pressure safety
HHV-PSV-001 / 300 TPRC Thermal safety, only fire scenario
HHV-PSV-001 / 140 PRD Low Pressure safety

Report
Report number: R21154R5-02
Date of issue: 18-06-2021

Remarks
The pressure equipment shall carry the mark as indicated below:
CE2715

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Chairman of pressure Rego
Nagelen: 87338713

Upcoming Initiatives

In the next newsletter we will introduce an upcoming project combining the Solenco Powerbox with district heating networks.



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