

## Demo-House

### Item numbers covered by this datasheet

530920	Demo-House
530980	Demo-House Podium
530999	Flight case (for Demo-House with Podium)

### General

#### The Demo House -

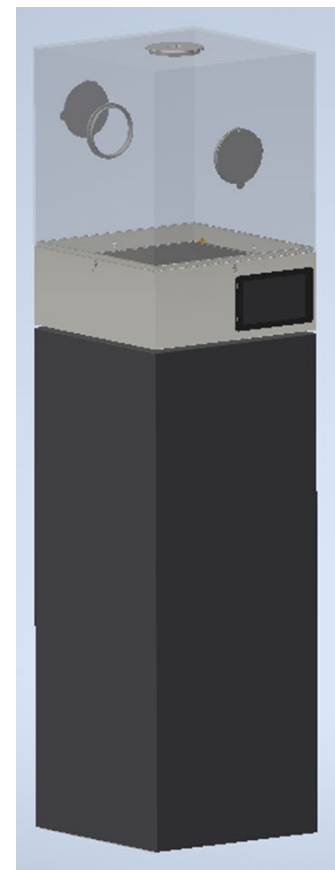
#### The Ultimate Demonstration of Inergen® Fire Suppression

A demo house provides a unique opportunity to showcase how the Inergen® system works in practice. This portable setup allows you to demonstrate, on a small scale, how Inergen® effectively extinguishes fires by lowering the oxygen level to a point where flames cannot survive. This visual demonstration is invaluable for understanding the principles behind Inergen® fire suppression.

#### Why Choose a Demo House?

- **Interactive Presentation:** The demo house can be used at trade shows, in companies, with advisors, during customer visits, and in schools. It's the perfect tool for demonstrating Inergen®'s efficiency and the unique principles behind fire suppression without water or foam.
- **Mobile and Effective:** The design allows for a least 12 demonstrations using only the upper part (530920) of the system, making it highly versatile in various presentation settings.
- **Trade Show Ready Stand:** We have developed a demo stand (Podium) specifically designed for trade shows, capable of performing a least 30 demonstrations with refill options, making it a perfect eye-catcher and natural conversation starter at your stand.
- **Visual Experience:** The demo house features an oil lamp under glass, which is lit, followed by the activation of the Inergen® system. An oxygen meter shows the oxygen level dropping as the flame is extinguished—a clear and effective demonstration of Inergen®'s impact. After each activation, the demo house is extracted, allowing the oxygen level to return to normal, readying the system for the next demonstration.
- **Creates Attention and Dialogue:** With its visual and engaging setup, the demo house is perfect for capturing attention and sparking interest. It piques curiosity and invites dialogue about modern fire safety solutions.

The demo house is an effective tool for providing an in-depth understanding of how Inergen® works and how it can protect both people and property in a safe and environmentally friendly way. This is not just a presentation—it's an experience that leaves a lasting impression.



## Specifications

Temperature(operation)	+10 - 50 °C
Ingress protection Class	IP42
Materials	Metal/Acryl/Plastic

Dimensions(cm) (LxWxH)	
530920 Demo-House	40x40x56 cm
530980 Demo-House Podium	40x40x105 cm
530999 Flight case for demo house	45x50x168 cm

Weight (kg)	
530920 Demo-House	15 kg
530980 Demo-House Podium	40 kg
530999 Flight case for demo house	28 kg

Electrical specifications	
Voltage	12VDC
Current	2.5A

Mechanical Specifications	
Pressure (MPa)	200 Bar(20MPa)
Threads connection	M16

Number of tests	
Demo-House Basic (2 l cylinder)	A least 12 times
Demo-House (5 l cylinder)	A least 30 times

## Marking

The product are marks with at engraved alu-plate with item-No and part-name.



## Installation

Unpack the Demo-House from the Flight case.

The Demo House (530920) is placed on the Podium (if there is a Podium) or on a stable table. If the Demo House is placed on the Podium, make sure that the Air-connection from the Podium to the Demo House is aligned.

- The Oil lamp is placed on the 'lamp holder' at the frame.
- The Top Acryl (530967) is placed on the frame.
- The included Power supply (12VDC) is connected (USB-C) to the USB connector on the Basic backplate.

Check the manometer, If the pressure is too low the cylinder must be refilled or replaced.

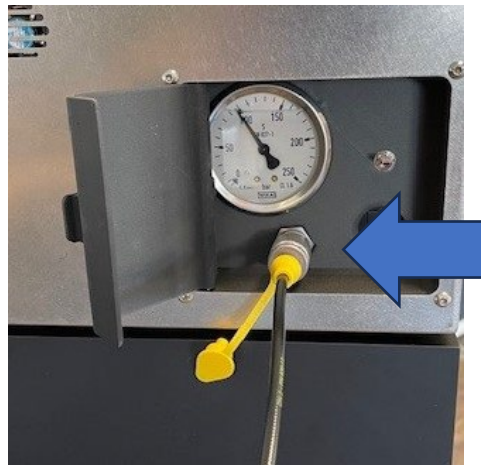
### Demo House (No podium) refilling.

If the pressure is too low, the cylinder in the Basic must be refilled.

Open the gate on the backside and connect an external Inergen source(hose) to the thread connector.

Refilled the cylinder to a pressure of 200 Bar (20MPa). This can be read at the manometer. Reconnect the hose.

**Blue arrow: Thread connector for Demo House**



## Podium (5 l cylinder)

**Refilling**, the cylinder inside the podium can be refilling by open the gate in the podium and connect an external Inergen source (hose) to the the thread connector. Filled the cylinder to a pressure of 200 Bar (20MPa).

**Replacement**, the cylinder inside the podium can be replace by open the gate in the podium. Close the valve and remove the hose at the valve. Unlock the brace that hold the cylinder and remove the cylinder.

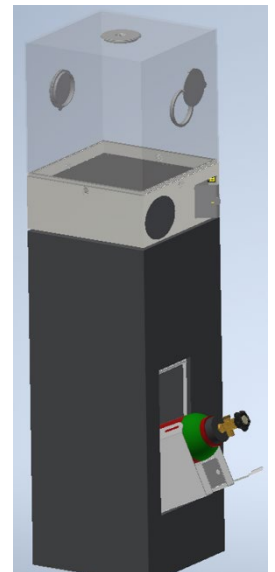
Note, the cylinder weight is 15 kg, so be carefully.

Place the new cylinder and secure the cylinder.

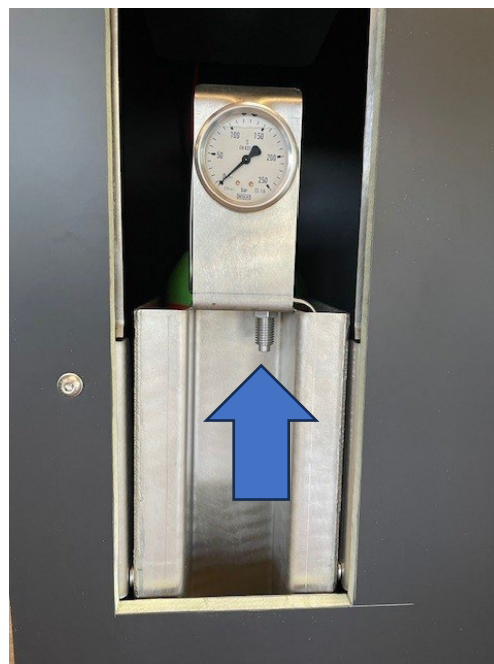
Connect the hose to the valve again and carefully open the valve.

Check the pressure at the manometer.

Lock the gate.



**Blue arrow: Thread connector for the Podium**



## Operating

After start-up, 3-4 min. the Demo-House is ready for use and the oxygen level at the display should be app. 20.9 %.

To operate the system, there is a changeover switch at the backside.

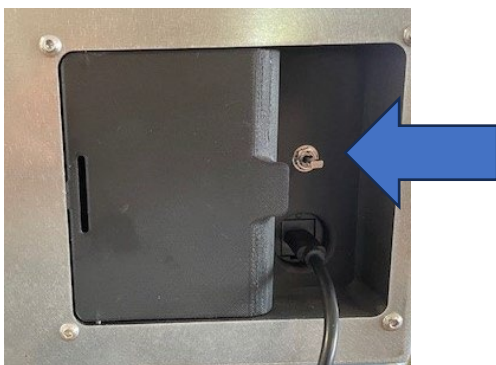
The Changeover Switch have 3 position:

1. Up. Valve is open for the Inergen to extinguishing the fire
2. Middle. No action
3. Down. Fans are running to ventilate the 'room'.

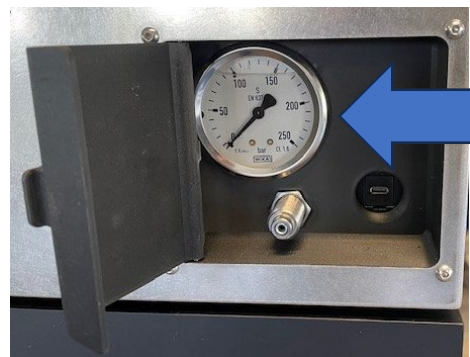
The Oxygen level on the display should be app. 20.9 %.

Always check the pressure at the manometer before a demonstration.

### *Position of the changeover switch*



### *Manometer*



### *Display indication of the Oxygen level*



Move the round hatch at the side on the Top Acryl and ignite the oil lamp.  
(Note the oxygen level can fall a little, due to the oxygen consumption by the flame)

By pushing the Changeover Switch UP, the fans stop and the valve for the Inergen is open.  
It now extinguishing the fire and the oxygen level fall quickly down.

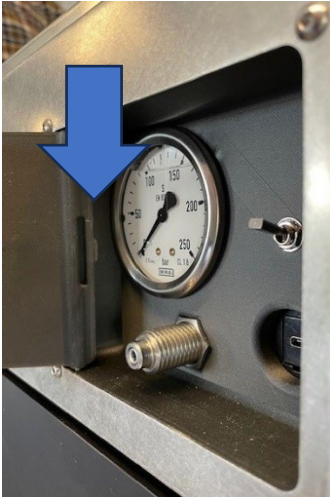
Swith the Changeover Switch to the Middle, when there is no flame (the oxygen is app. 15%).  
The valve is close and now it is possible to see how long the oxygen level is steady.

After a demonstration, the space inside should be extract by turn on the fans by the switch.  
The Oxygen level will return to normal, app. 20.9 %.

## Maintenance

It is possible to calibrate the Oxygen sensor by pushing a microswitch on the backplate. Insert a clip/needle in the hole, for a least 5 sec., the oxygen sensor is now calibrated to the normal oxygen level in the air. The display will indicate 'Calibrate' at calibration.

**Placement of the hole for calibration.**



## PID Symbol

*Next version will have an PID diagram*

## Replaceable parts

- 200601-21 Cylinder 05-200 W24 DNV (for the Podium)
- 530967 Demo-House Top Acryl Basic
- 530370 PSU 230Vac-12V USB-C
- 530975 Oil Lamp
- 530999 Demo-House Flight case for Podium and Basic



## Standards & approvals

List of standards and approvals.