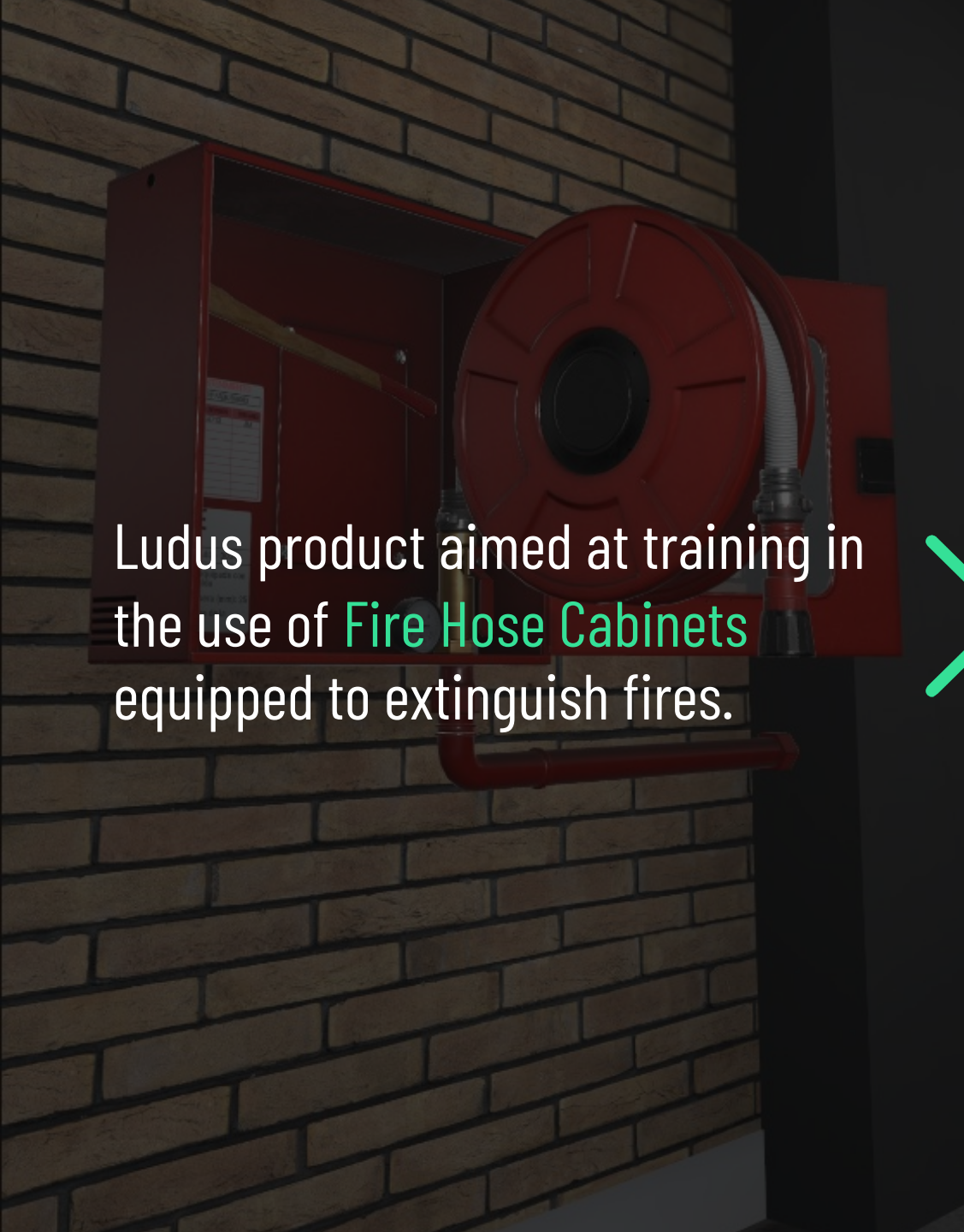


# Technical Sheet



*Use and Handling of FHCs*



Ludus product aimed at training in the use of **Fire Hose Cabinets** equipped to extinguish fires.



## *Use and Handling of FHCs*

---

- > Its objective is to facilitate the learning of the protocol for the use of an FHC from an experiential experience, "**learn by living**".
- > The student must follow the steps of **the fire safety protocol** to alert to the presence of a fire and use an FHC to control the fire.
- > This product is also aimed at **familiarizing** the student with a **stressful situation and avoiding psychological blockage**.



01

Simulation  
Content

# Exercise description

## Simulation content

---

The student will be facing an advance fire. **They must warn of the presence of fire and sound the alarm.**



Next, the student **must use the FHC correctly** to extinguish the fire.



The trainer will be able to **configure different types of exercises** and make changes in real time to them.



# Configuration Possibilities

## Simulation content

---

Before starting the exercise, the trainer could configure:

- > **The scenario in which the exercise takes place \***
- > The type of **FCH \*\***
- > The **Fire class \*\*\***
- > **Guided mode/Non-guided mode**
- > Fire Progress **Automatic/Manual**

---

> \*Only one scenario in the first version (Library)

> \*\* A single type of FHC in the first version (25mm FHC)

> \*\*\*Only one fire class in the first version (Class A))



## Changes in real time

### Simulation content

The trainer will have some features to **control the simulation in real time:**

# 1

#### **Steps of the extinction protocol.**

The trainer will be able to view the Checklist indicating which steps of the protocol the student has completed in the simulation.

# 2

#### **Fire progress.**

The trainer will have a functionality that allows him to control **the state of the fire** (Initial, advanced and uncontrolled).

# 3

#### **Character activation.**

The trainer will be able to activate the behavior of some characters on stage to **generate stress** in the student.



## Library in a training center

### Simulation content

The action of this training tool will take place, in the first version, in the **library of a training center**.

The scenario will represent a context of stress and will include different characters **to generate the stress** present in a real fire situation.





## Fire classes

### Simulation content

---

In the first version, the product will include a **class A fire** and the possibility of an electrical component. New types of fire could be included in future updates







## FHC Types

### Simulation content

The product will include, in the first version, a **25mm FHC**.

The FHC will consist of the following interactive parts, so that the students can use them in a realistic way during the exercise:

- > Lid cabinet.
- > Open/close valve.
- > Pressure gauge.
- > Lance with regulator for different types of water projection.

The FHC must include the different parts so students can interact with them

Wardrobe

Valve

Pressure gauge

Lance with regulator for different types of water projection





## Other scenario elements

### Simulation content

Other interactive objects will be included in the scenario, such as:

- An **ABC Powder fire extinguisher**, which will be ineffective with the fire already advanced.
- General switch of the electrical installation.
- Telephone to call emergencies.
- Fire alarm.
- Animated characters that will hinder the student's work with her behavior.





## Protocol for the use of **25mm** FHC

### Simulation content

.....

The student must **complete the following actions** to comply with the security protocol in the use of FHCs:

- Alert (Emergencies and alarm).
- Open the cabinet containing the FHC.
- Open the valve.
- Unfold the hose.
- Try the spear.
- Position yourself correctly in front of the fire.
- Project water on the fire, drawing on the flames from the ends.





## Exercise duration

- > The trainer has the option to repeat an exercise, in case, for example, the student makes many mistakes or wants to make a point.
- > The expected average time to complete an exercise is **5 minutes**.
- > The trainer **can force the end of the exercise** and go directly to the **results** to see the errors made so far, in case an exercise takes too long.



## End of the exercise

### Simulation content

---

The exercise can end in different ways:

The fire gets out of control. When the fire gets out of control the exercise will end after 10 seconds.

- > **The trainer ends the exercise.** The trainer has an option that allows him to end an exercise at any time.
- > **The student extinguishes the fire.** When the student extinguishes the fire, the exercise ends automatically.
- > **The student has an accident.** When the student makes a serious mistake and suffers an accident, the exercise ends and they appear in a hospital infirmary.
- > **The student leaves the scene of the fire.** The student will be able to escape from the fire using an emergency door if she senses that the fire is out of control.
- > **The fire gets out of control.** When the fire gets out of control the exercise will end after 10 seconds.



## Accidents

### Approach the fire

It gets too close to the fire and comes into contact with the flames. The exercise ends automatically.

---

### Water in electrical appliance

The student projects water on an electrical appliance without turning off the electricity

---



## Statistics system

### Simulation content

Basic statistics shown to the user at the end of the simulation:

- > Exercise duration time
- > Protocol step completed
- > List of mistakes made

**EJERCICIO COMPLETADO CORRECTAMENTE** 09:34

PROGRESO DEL EJERCICIO	OBSERVACIONES
<ul style="list-style-type: none"><li>✓ Alertar del incendio</li><li>✓ Cortar la corriente</li><li>✗ Revisar el manómetro</li><li>✓ Preparar la BIE para su uso</li><li>✓ Extinguir el fuego</li></ul>	<p>Has completado el ejercicio siguiendo todos los pasos del protocolo de seguridad. Tus compañeros y compañeras se beneficiarán de tus buenas prácticas. Has completado el ejercicio siguiendo todos los pasos del protocolo de seguridad. Tus compañeros y compañeras se beneficiarán de tus buenas prácticas.</p>



02

Future  
updates





## 45mm FHC

### Future updates

---

A 45mm FHC will be included in the second version of the product.

- > The trainer will be able to configure the type of FHC with which the student must complete the exercise
- > An animated character will be included to help the student use the FHC





## Protocol for the use of **45mm** FHC

### Future updates

---

The student must **complete the following** actions to comply with the security protocol in the use of FHCs:

- Fire alert (Emergencies and alarm).
- Open the cabinet containing the FHC.
- Unfold the hose.
- Open the valve.
- With the help of another person.
- Try the spear.
- Position yourself correctly in front of the fire.
- Project water on the fire, drawing on the flames from the ends.





## New types of fire

Future updates

---

- > Class B Fire
- > Class C Fire



## New scenarios

Future updates

---

- > Future versions of the product will include new scenarios that make sense of class B and class C fires.
- > To decide the scenarios to include in future versions, we will take your opinion into account.



## Possible Checklist Exercise

### Future updates

---

In this exercise, the student must verify that the FHC is correct to be used. This is the **quarterly review** that users must make of the FHCs.

**There will be no fire, just checks.**



### Comprobatons

- > Signage accessibility
  - > Hose Deployment
  - > Lance Regulator Operation
  - > Network pressure
  - > Gauge reading
  - > Cleaning of the different parts
-





03

All trainings,  
one platform

# First European Platform

for realistic training in **labor and health security** with  
Virtual Reality

## Platform advantages



### Content access

Living products in  
continuous improvement



### Teacher training

Pedagogical support for  
teachers in the use of VR



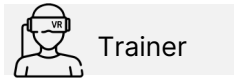
Hardware  
at **cost price**

*Learn by Living*

**Improve your classes on  
safety and health**, adding an  
immersive component to the  
trainings



**19 complete products** with more than 500 exercises.  
25 products by the end of 2022.



- > Road safety
- > Plant risk prevention
- > Fall protection
- > Safety officer at heights
- > CPR
- > Overhead Crane
- > PPE. Personal Protective Equipment
- > Warehouse safety
- > Plant risk assessment
- > Electrical hazards
- > LOTO
- > Fire safety
- > Confined Spaces
- > Safety in construction
- > Mobile elevating work platforms
- > Postural ergonomics
- > Forklift risks
- > Hand Injury Prevention
- > Use and Handling of FHCs

We are continually adding **new updates** and content to the platform





# Calendar

of incorporation to Ludus

01

## Demo

Product demonstration.  
Financial proposal  
presentation.

02

## Suscription

Platform hiring.  
Reception of the material.

03

## Onboarding

Welcome pack.  
Commercial arguments.  
Graphic resources.  
Marketing sheets.  
Video tutorials.  
Training for trainers.

04

## VR training

Unlimited use of the training  
resources available on the  
platform.  
Platform maintenance and  
update.

# Why VR?

The impact that virtual reality has on learning is **remarkable**



Active learning

Based on Edgar Dale's Pyramid of Learning


VR learners are...

 **4 times**

**Faster at learning** than in a conventional classroom

 **3.7 times**

**More connected** to the content than learners in a classroom

 **2.3 times**

**More connected** to the content than learners in e-learning

 **4 times**

**More concentrated and focused**



# *Learn by Living*

[ludusglobal.com](https://ludusglobal.com)