

HEFT

## FOR ON FARM EUTHANASIA

For ill, injured or non-viable animals in the daily production.  
Ready to be immediately used as a first response.

# H1



METHOD BASED ON

NEFS

NITROGEN EXPANSION  
FOAM STUNNING

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ROOM FOR IMPROVEMENT, TIME FOR CHANGE

OUR TECHNOLOGY IS

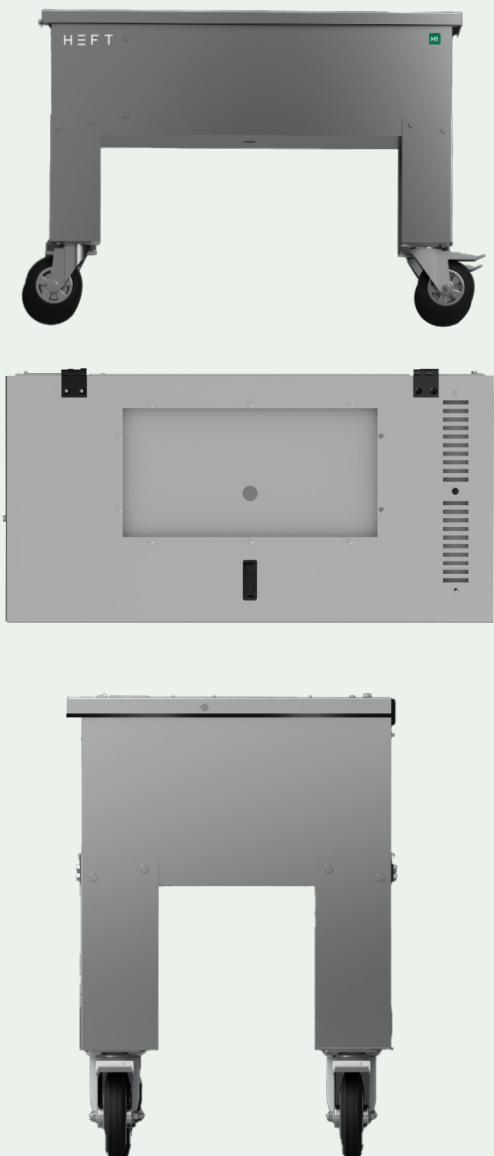
**HUMANE | SAFE | EASY TO USE | RELIABLE**

## OUR SOLUTION

At HEFT, we develop and offer sustainable solutions to end the life of pigs and poultry in a more humane way.

Our technology is based on nitrogen induced high expansion foam to create an anoxic atmosphere with less than 2% oxygen.

- Nitrogen expansion foam stunning (NEFS)
- Reduced stress and pain to the animal
- Replacing manual methods with automated technology
- Reduced the risk of injury and physical strain
- Easing emotional burden for animal caretakers
- Deep stunning (no bleeding)



## TECHNICAL DATA

### GENERAL

Model name	H1
Size L x W x H	1165x595x650 mm
Animal area L x W x H	880x546x290/334 mm
Weight	85 kg
Usage certification	HEFT Certification
Control unit	DS1
Filling time (foam)	7 seconds

### MAINTENANCE

Service	Once every 18 month
Cleaning	Run the system with clean water before storage
Storage	Store dry, not to be exposed to major changes in temperature

### DESIGN DATA

Max temp	45°C
Min temp	+0°C

### CONSUMABLES (PER RUN)

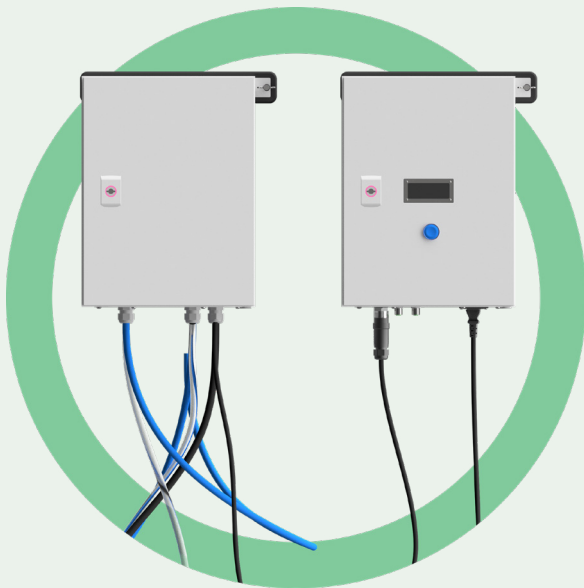
Gas	~215 L
Foam	0,019 L
Water	0,37 L

**HEFT**

## THE DS1

The DS1 is an integrated control unit designed for the precise regulation and distribution of foam mixture and gas into the container system. It features color-coded connection points and tubing to facilitate accurate and efficient assembly, reducing the risk of operator error.

By default, the DS1 is wall-mounted to ensure a fixed and space-efficient installation. Alternatively, it can be delivered with a mobile storage rack for flexible use and safe storage. The rack allows the DS1 to be easily relocated or stored away when not in operation.



### GENERAL

Size L x W x H	600x425x215
Weight	26 kg
Cabinets	Pump, control system
Liquid tank	20L
Power	110/240 V, 50/60 Hz
Compatible unit	C1, H1

### MAINTENANCE

Service	Once every 18 month
Cleaning	Wipe with a damp cloth
Storage	Store dry, not to be exposed to major changes in temperature

### DESIGN DATA

Max temp	45°C
Min temp	+0°C
Pressure	16 Bar(g)

## HEFT FOAM AGENT

The HEFT Foam Agent is specially designed to meet the technical and animal welfare criteria of the HEFT systems. It is made from renewable resources such as rapeseed and coconut oil. Designed to have minimal impact on animals, humans and nature.

- Homogeneous and large bubbles
- Dry and clear bubbles
- No opaque
- Minimal residues
- Classified as non-hazardous waste
- Non skin irritation and safe to use



## OUR NITROGEN BASED METHOD



### PROCESS

- 1 In 10 seconds the container is filled with foam. The bubbles contain 100% nitrogen.
- 2 A burst of nitrogen is added, the bubbles break in 1 second and a homogeneous anoxic atmosphere is created (<2% oxygen).
- 3 The animals lose consciousness within 10-20 seconds and will be irreversibly stunned with minimal stress and pain.

### BENEFITS

- High expansion foam controls the gas, pushes out the air and makes the process quick.
- No occlusion of airways due to dry and large bubbles that burst quickly to release the gas.
- Animals have no receptors that make them react to the instantaneous change of atmosphere with nitrogen levels from 78% to 98%.

**75%** **GAS SAVINGS**  
Reduced gas consumption compared to regular gas flushing

**H<sub>2</sub>O** **LOW WATER CONSUMPTION**  
~1,3 liter per m<sup>3</sup>  
Expansion ratio 1:700-850

With over 15 years of dedicated research, our technology is grounded in science and validated by leading academic institutions and researchers across Europe and the United States.