SMOKE FACTORY

FOG AND HAZE GENERATORS

See the Performance

Sehen Sie die Leistung

Instruction manual

Bedienungsanleitung

Type: Fire Trainer

SMOKE FACTORY

FOG AND HAZE GENERATORS

Welcome.
Thank you for choosing a
Smoke-Factory
fog machine.

The Smoke Factory product range offers a vast range of innovative and economic solutions.
The Smoke Factory Team will support the implementation

	page
1 Introduction	2
2 Safety instructions	3
2.1 Risk of burns	3
2.2 General security	3
3 Description of the device	4
4 Commissioning	6
4.1 Selecting the location	6
4.2 Installing/changing the fluid canister	6
4.3 Fluid	6
4.4 Power connection of Fire Trainer	6
5 Working with the Fire Trainer	7
5.1 Operating elements of the Fire Trainer	7
5.2 Control system	8
5.2.1 External control	8
5.2.2 Stand alone operation	8
5.2.3 Pin assignment	8
6 Maintenance & Service	9
7 Trouble shooting	10
8 Technical specifications	11
9 Warranty conditions	13
10 Service	14

See the Performance

Sehen Sie die Leistung

SMOKE FACTORY
FOG AND HAZE GENERATORS

1. Introduction

Mature and innovative

Fog machines
for more than 20 years

Smoke Factory GmbH is a medium-sized enterprise with increasingly international orientation.

All **Smoke Factory** fog machines are quality products utilizing state-of-the-art of technology. Many years of experience, continuous development and product improvement especially regarding quality aspects, have made us to one of the leading manufacturers of stage fog machines. The close combination of design, manufacturing and assembly work in our factory in Hanover is the guarantee for the quality seal "Made in Germany".

Congratulations on your purchase of a **Smoke Factory** fog machine. Thank you for your confidence. We ar convinced that you will be working safely and comfortably with this device in the future.

We offer both complete and customized solutions. Our **Smoke Factory** employees are qualified professionals with years of experience who completely understand your problem and react with the concentrated expertise of the entire **Smoke Factory** Team in precisely tailored solutions.

Ask us your task! We will be pleased to advise you and will certainly find out the optimum solution for your application with our comprehensive range of fog machines.

Please take your time to read this operating manual carefully in order to optimally operate the device. Please note in particular the safety aspects and act always responsibly.

Enjoy the opportunities of your **Smoke Factory** fog machine.

Type: Fire Trainer

2. Safety instructions

NOTE!

Please observe the notes to specific features of the device to prevent damage!

Attention!
It is all about your safety!
Please do not compromise your health!

2.1 Risk of burns!

- **Attention hot steam!**
  For individuals and heat-sensitive objects a minimum safety distance of at least **1.50 m** from the aperture of the fog machine is required.
- During operation it is strictly forbidden to handle at the fog machines aperture!
- With combustible materials a minimum distance of **60 cm** is required.
- During operation of a fog machine sporadically it is possible that hot fluid droplets can escape. Please take care to not let this become a danger to humans.

2.2 General security

- Never leave a switched on device unattended!
- Never generate fog into open flames or pyrotechnic effects!
- Never operate with visibility less than 2 m! You are responsible for the risk of accidents by people in that location.
- Never open the device while connected to the electricity!
- Never ingest fogfluids or apply externally! Keep away from children! Rinse immediately with plenty of water in the event of eye contact. See a doctor immediately in an accidental ingestion.
- Spilled fluid or splashed fluid droplets can cause slip hazard. Collect the fluid and dispose according to regulations! **Smoke Factory** fog fluid is completely water soluble and biodegradable.
- **Smoke Factory** uses a practically non-hazardous method to produce fog with vaporizing fog machines. We are unaware of any case in which a normal healthy person was hurt by this artificial fog. The prerequisite are the use of professional fog devices with correct vaporization temperatures and the approved fog fluids.

WARNING!

People suffering from a history of respiratory illness and pulmonary impairmant or with an inclination for allergies should avoid any contact with artificially-produced fog!

The user is completely responsible for damages resulting from improper use or non-observance of the operation manual. The manufacturer assumes no liability.

Changes to the safety-relevant components of the device are strictly forbidden!

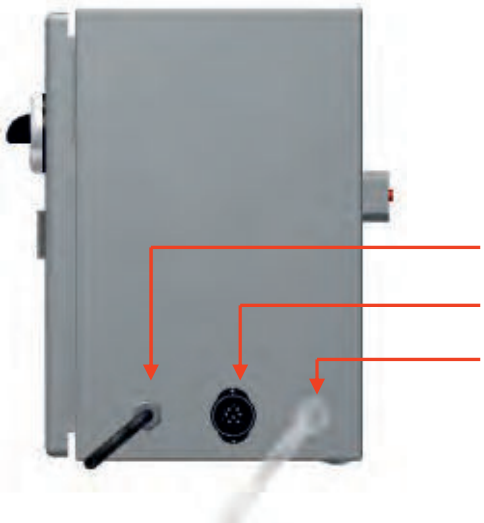
SMOKE FACTORY
FOG AND HAZE GENERATORS

3. Description of the device

Simple and straightforward.
We present solutions!

There is no one size fits all tasks, but there is always the right **Smoke Factory** fog machine but we will always provide the optimum solution for your application. Whether it is our smallest ***Scotty II*** or a ***Fire Trainer***. The right equipment always makes the difference

Side view

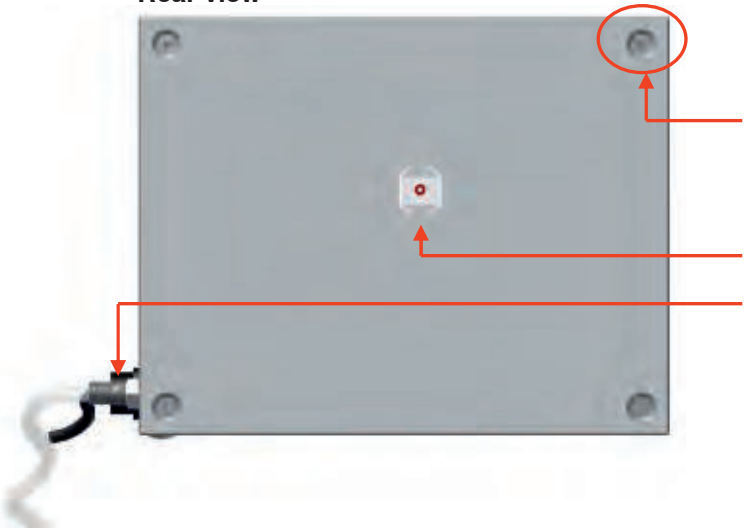


Power connection

Plug connector for the control

Fluid tube

Rear view



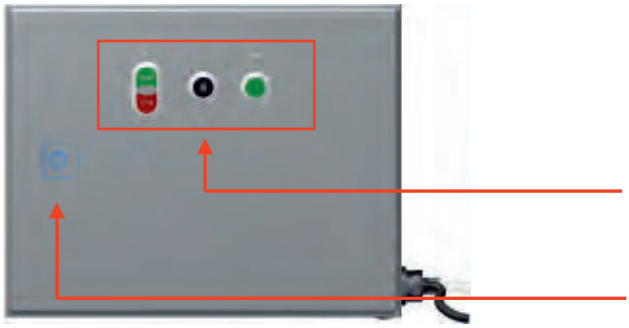
Four outside holes for wall mounting or optional wall bracket see page 12

Aperture for fog output

Connection for fluid tube

SMOKE FACTORY
FOG AND HAZE GENERATORS

Front view



Operating elements

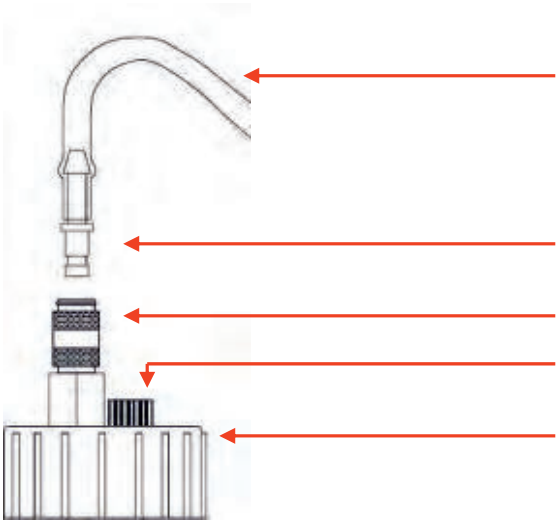
Opening area for the interior

View to the connectors

Pin assignment

1. +12V (output, relative to ground)
2. Input voltage 0-10V (relative to ground)
3. Signal ready for operation 1 (relay contact, potential-free)
4. Signal ready for operation 2 (relay contact, potential-free)
5. Minus / Ground
6. unassigned
7. unassigned

Canister cap of the fluid



Fluid tube

Plug-in sleeve

Locking sleeve to pull the tube

Ventilation seal

Screw-on canister cap

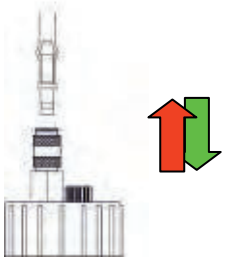
4. Commissioning

4.1 Selecting the location

Terms to selcet a location:

- vibration- and shock-free
- non-flammable place
- ventilation with fresh and fog-free air
- ambient temperature between -20° C and 70° C
- relative humidity of less than 80 %

4.2 Installing/changing the fluid canister



- Solve plug-in sleeve from the rapid coupling by pushing the locking sleeve.
- Implement fuel cap of the empty canister to the full canister.
- Insert plug-in sleeve back into the rapid coupling.
- Place the full canister back in a proper position.

4.3 Fluid

The Fire Trainer has to be operated only with **SMOKE FACTORY** fluids.

Using fluids or additives from foreign vendors will void the warranty of the Fire Trainer.

Do not use fog fluid which is more than two years old.

Fog fluids do not have an unlimited storage life.

For further information about „fog fluids" please contact your local dealer or us directly.

Range of fluids:

▪ FAST-FOG	very quick disappearing fog fluid
• SUPER_FOG	long lasting standard fog fluid
• HEAVY-FOG	extremely long lasting fog fluid
• HEAVY-FOG PLUS	special fluid for firefighter training

4.4 Power connection of Fire Trainer

Plug the power connection of the Fire Trainer into a grounded socket DIN 49440/441.

Ensure that the operating voltage is correct (230V/50Hz).

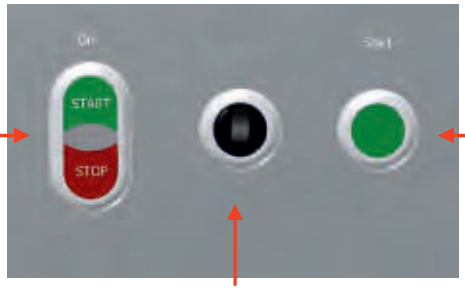
5. Working with the Fire Trainer

The optimum configuration for your Smoke Factory fog machine depends on your application!

The Fire Trainer with its 2200 W and a power pump is quite a real power fog machine.

5.1 Operating elements of the Fire Trainer

The Fire Trainer feature three control elements at the front:



On / Off push button

Start / Stop push button & indicator lamp

selector switch

After the device is connected to the mains power, it is still in the switched-off state. By pressing the green "Start" button the Fire Trainer is switched on. By pressing the red "Stop" Button the device is turned off. An indicator light located in the center of the on / off push button indicates the Fire Trainer is switched on.

After switching on the Fire Trainer heats up about 6 minutes. When reaching the preset temperature the indicator light will begin flashing. When the device is ready for operation, the flashing of the indicator light turns into permanent lights.

The **selector switch** provides three different modes.

Mode 1. Device fogs to full power (approx. 50 Sec.) until the heating element has to heat up again.
Mode 2 Device fogs to full power and regulates the output down automatically until it has to heat up again.
Mode 3. Device produces 60% permanent output with no need to heat up.

By pressing the start / stop button the fog operation gets started or stopped.

5.2 Control system

5.2.1 External control

The Fire Trainer can be externally controlled via the CA 6 GD socket.

- **Number of poles 6 + PE**
- **0-10 V (+) DC**
- **AC/DC 250 V**
- **Cable remote control optional**

Fig. CA 6 GD

5.2.2 Stand alone operation

With Smoke Factory fog machines
all your wishes come true!

You can of course operate the **Smoke Factory** Fire Trainer in stand alone operation.
In stand alone operation just the power of the pump and the optional fan have to be individually controlled directly at the device.

1 2 3

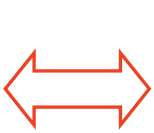
Switch with 3 position 1-2-3:

1. 99% > 0%
2. 99% > 60%
3. 60% permanent fog

5.2.3 Pin assignment

1. +12 V (output, referred to ground)
2. Input voltage 0-10 V (referred to ground)
3. Signal ready for operation 1 (relay contact, potential-free)
4. Signal ready for operation 2 (relay contact, potential-free)
5. Minus / Ground
6. unassigned
7. unassigned

6. Maintenance & Service



- The device must not overheat. The operating and environmental temperature must be observed. Headlights must not exactly shine on the device.
- The Fire Trainer must not be operated without fluid, otherwise the pumps run dry.
- Spilled fluid should be immediately mopped up wet, because humidity - also fluid - can destroy the electronics.
- The sintered filter in the canister cap must be checked from time to time and if necessary, cleaned or replaced.
- When frequently using the same fluid canister it should be rinsed immediately and thoroughly before the next filling. This avoids premature flaking of the fluid through impurities.
- When positioning the Fire Trainer make sure that a fog-free air supply is ensured. Cooling air with too high fog concentration can condense inside the machine and cause humidity damage.
- The height difference between the external canister and the device may not be greater than 1.5 m sinde the pump will not be able to suck the fluid anymore.

7. Trouble-Shooting

The Fire Trainer produces no fog

- Check external control
- Check the power source
- Check fluid quantity
- Check connection to the fluid tank and tank cap for leaks
- Investigate fluid tube for contaminants and cracks

The Fire Trainer fogs irregular

- Check external control
- Inspect for humidity (humidity in the device can cause the fogging process)

The Fire Trainer switches off suddenly

- The temperature limiter has switched off due to overheating. Remove external heat sources and ensure sufficient air supply. The device switches on again after 15 to 30 minutes.

Loud droning sound during fogging

- The pump is running dry - avoid in any case! Refill fluid!
- Check rapid coupling and snap into socket again.
- Check fluid tube for buckling and breaks.

SMOKE FACTORY
FOG AND HAZE GENERATORS

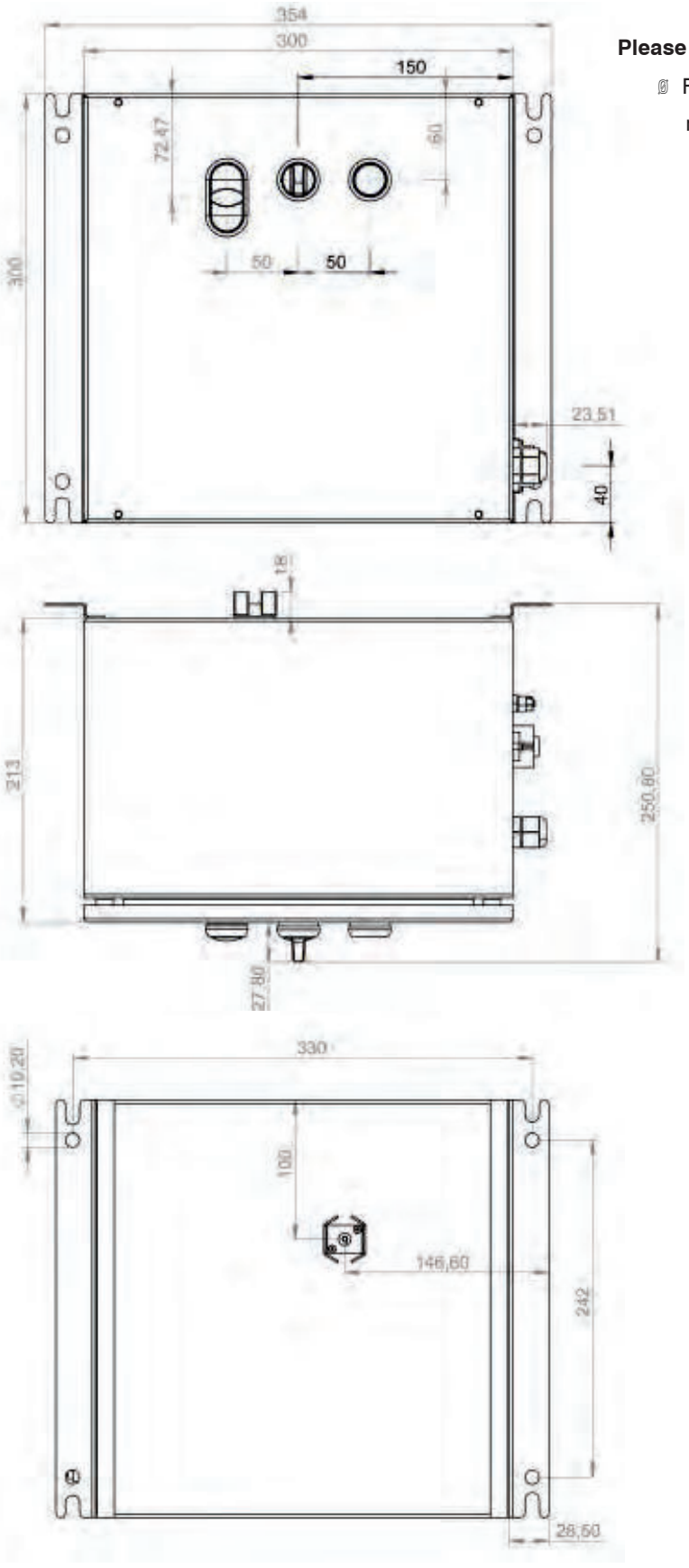
8. Technical specifications

On this page you will find detailed information on the Fire Trainer. Please note that we cater to your individual needs and support you with all our professionals.

Procedure:	vaporizing fog generator
Power:	2300 Watt
Supply voltage:	230 V/50 Hz
Fluid consumption:	At max. fog emission 200 ml/min At permanent fog 46 ml/min
Capacity fluid tank:	5 ltr or 25 ltr.
Fog emission:	Switch with 3 positions 1-2-3
Operating options:	0 -10 V (+) DC stand alone
Heating-up time:	~6 min.
Temperature control:	Microprocessor-controlled
Overheating protection:	Heating block in thermostat pump with temperature switch
Protection class:	IP 64 in accordance with DIN 40050-9 with lid closed IP 22 in accordance with DIN 40050-9 with lid opened
Ambient temperature:	5 °C to 45 °C
Dimensions (WxHxD):	354 x 300 x 213 mm
Weight:	~13 kg
Accessories:	Cable remote control
Scope of supply:	Fire Trainer, canister cap for canister 5 ltr. or 25 ltr., power connection, connector IP 68 for configuration

Mounting dimensions:

sideview / mountig side to the wall



Please ensure:

- For wall mounting we recommend to use a wall mount with 40 cm distance from the wall.

9. Warranty conditions

Effective only for the Federal Republic of Germany

SMOKE FACTORY grants you warranty for the “Fire Trainer“ according to the following conditions:

1. Free of charge, subject to the following conditions (No. 2 - 6) we will repair any defect or fault in the unit if it is caused by a proven factory fault and has been advised immediately after appearance and within 36 months of delivery to the end user. Insignificant deviations of the regular production quality does not guarantee replacement rights, nor do faults or defects caused by water, by generally abnormal environment conditions or an unavoidable accident.

2. Warranty Service will be done in the following way: Faulty parts will be repaired or replaced according to our choice with the correct parts. Faulty units have to be brought to us or our authorized service centers or to be sent to us or our service centers at the customers expenses. The invoice and/or receipt showing the purchase date and the serial number has to come with the faulty unit, otherwise we cannot honor the warranty. Parts that are replaced become our property.
3. The customer loses all rights for warranty services, if any repairs or adjustments are done to the units by unauthorized persons and/or if spare parts are used which are nor approved by us. The right of warranty service is also lost if fluids other than the original SMOKE FACTORY-fluid have been used or if units are sent to us with full fluid bottles. Also non compliance with the instructions in this manual or mistakes by incorrect handling/treating of the machine will lead to a loss of guarantee and also any faults and damages caused by undue force.

4. Carrying costs caused to warranty services are borne by the customer himself.

5. Warranty services do not cause an extension of the warranty time or the start of a new warranty time. The warranty for replaced parts ends with the warranty time of the whole device.

6. If a defect/fault can not be repaired by us in a satisfactory time frame, we will do one of the following within 36 months after sale (customer may choose):

   - replace the whole unit for free or
   - refund the lesser value or
   - take back the whole unit and refund the purchase price, but not more than the usual market price at the time of the refund.

7. Further claims, especially for damages, losses etc. outside the unit are excluded, if the liability is not statutory.

Outside the Federal Republic of Germany the warranty conditions of our local agencies take effect. Our local agencies in and outside the Federal Republic of Germany will provide you with the warranty conditions any time.

See the Performance

Sehen Sie die Leistung

Allow us to advise you

We will support you

Request documents quickly and easily

Service and contact

Fog, Smoke & Haze Factory GmbH
Schulze-Delitzsch-Strasse 8A
D-30938 Burgwedel

Tel.: ++49 (0) 511 - 51 51 02 - 0
Fax: ++49 (0) 511 - 51 51 02 – 22

Email: info@smoke-factory.de
Internet: www.smoke-factory.de

Responsible for the content: Fog, Smoke & Haze Factory GmbH

www.smoke-factory.de