Certificate of Conformity with European standards

for Components and Systems

Member of

Number of Certificate	Valid from dd-mm-yyyy	Valid until dd-mm-yyyy
EN-ST-000224	**01-07-2016**	**30-06-2020**

Subject matter of Certificate:

smoke generating mashine
Titanium (Ti 70) Smoke Screen

Owner of Certificate:

Concept Smoke Screen Limited
1-2 North End
GB-PE20 3LR LINCOLNSHIRE

Basis for certification:

EN 50131-8:2009

Use, the product disposes of the following parameters:

Intrusion and hold-up systems, Grade 2

The tests were carried out at VdS Schadenverhütung GmbH and the results are documented in ***test report:***

STE 13/1508-AU01 dated 30-06-2016

VdS Schadenverhütung GmbH
Certification Body
Amsterdamer Str. 174
D-50735 Köln

A company of the German Insurance Association (GDV) accredited by DAkkS as certification body for fire protection and security products

DAkkS Deutsche Akkreditierungsstelle D-ZE-11149-01-01

To guarantee the permanent quality of products a regular surveillance of the manufacturing process is performed.

This certificate comprises **5** *pages and shall only be reproduced without any modifications and including all enclosures.*

Date: **01-07-2016**

Managing director

p.p.

Head of certification body

Enclosure 1 **Sheet 1**

To Certificate No.: EN-ST-000224 Date : 01-07-2016

The approved component/system comprises the following parts:

Description of component	Type	Applicant's Registration No.	Approval number of component (only complete for system approval)
Fog Generator consisting of: - Powder coated, vandal resistant, metal housing and cover (tamper monitored), 2 engineering compartments accessed via tamper monitored covers, additional safety guards and covers and covers Additional protective guards on ventilation slots - Dimensions of device: 470 mm(H) x 310 mm (W) x 130 mm (D) - Weight of device: 14.3 kg (installation weight), 19 kg (incl. fluid and batteries) - Precision machined steal heat exchanger with machined brass fog ejection nozzle (interchangeable) - Fog fluid reservoir with fluid level sensor - 1 high pressure, continuously rated, fog fluid pump - automatic temperature cut-off breaker (manual reset) - 2 rechargeable batteries with min. 12V/2,1Ah - electrical terminal block with fuses and automatic circuit breakers - Lid contact - Mounting bracket (wall and ceiling)	EX5 WP 1223A		

Enclosure 1 **Sheet 2**

To Certificate No.: EN-ST-000224 Date : 01-07-2016

The approved component/system comprises the following parts:

Description of component	Type	Applicant's Registration No.	Approval number of component (only complete for system approval)
- Mainboard PCB with software version 1.0 with: Event log stored on non-volatile flash Inputs: set, alarm, hold-off, external tamper Outputs: ready, fog verification, fluid low, fluid empty, mains failure, battery failure, tamper - Programming interface comprising push button operated LCD, LED indicators and audible indications - Inputs that enable automatic re-triggering via suitable detector (i.e. fog density sensor) - 2 industrial grade heating elements			

Enclosure 2 **Sheet 1**

To Certificate No.: EN-ST-000224 Date : 01-07-2016

The approved component/system is described as follows:

Type of document	Manufacturer's identification	Date	Number of Pages
Description			
- Table of Content	P2161182-TZ1000		03
User Documentation			
- CONCEPT S70 installer manual	P2161182-TZ1001		20
- CONCEPT S70 user guide	P2161182-TZ1002	01.10.2014	08
- CONCEPT S70 inspection schedule	P2161182-TZ1003	01.10.2014	08
Technical Documentation			
- Parts list exploded diagram	P2161182-TZ2001	20.06.2016	01
- Machine external dimensions	P2161182-TZ2002	17.12.2014	01
- Machine internal layout	P2161182-TZ2003	06.03.2016	02
- Machine internal metal work	P2161182-TZ2004	07.06.2016	18
- Heater block dimensions drawing	P2161182-TZ2005	07.06.2016	01
- Machine nozzle drawing	P2161182-TZ2006	07.06.2016	01
- Machine flow chart	P2161182-TZ2007	16.06.2016	03
- Main PCB component description	P2161182-TZ2008	22.01.2015	02
- Main PCB schematic and layout	P2161182-TZ2009	20.06.2016	10
- LCD PCB schematic and layout	P2161182-TZ2010	20.06.2016	02
- Battery protection PCB schematic and layout	P2161182-TZ2011	22.04.2014	03
Ancillary documentation			
- Heater datasheet	P2161182-TZ3001	12.11.2015	01
- Transformer datasheet	P2161182-TZ3002	01.12.2013	04
- Battery datasheet	P2161182-TZ3003	06/2016	01
- Material Safety Data Sheet Fluid R	P2161182-TZ4001	02/2016	02
- Safety Certificate Fluid R	P2161182-TZ4002	28.05.2014	06

Enclosure 3 **Sheet 1**

To Certificate No.: EN-ST-000224 Date : 01-07-2016

Instructions for the application of the approval component/system (see enclosure 1):

As to approval ST000224:

1. Fog generators may be triggered exclusively by VdS-approved IASs as a response to an intruder signal raised by intruder detectors. They shall never respond to a hold-up alarm. The IAS to this end shall be equipped with remote alarm transmission to an alarm receiving and service control center or with a direct line to the police – which in turn requires previous approval by the police and also the installation of an external alarming system.
   Note: External alarming shall not be delayed in this case.
2. Use of fog generators shall be coordinated with the local fire brigade and the police forces, both authorities shall be informed not only of the existence of such devices but also of their functionality – including possibilities for ventilation (see also VdS 2311, Section H.1.10). Police and fire brigade shall also be aware that alarm plans should be supplemented accordingly.
3. It is important to ensure as far as possible that fog generators cannot be released erroneously or by mistake. Under no circumstances they shall be released
   - by hold-up signals
   - by an unset IAS
   - by an internally set IAS and
   - by a total power failure of the IAS.

   Connection of a fog generator to an IAS shall take place not before the IAS during the past 6 months of operation at a minimum has raised no false alarms.
4. Information on power supply failures of the fog generator of more than 20 minutes in duration shall be transmitted at once to the maintenance staff, an authorized body (e.g. security company) or any other permanently manned place on the operator's premises (e.g. gatehouse).
   Note: Power supply failures of the fog generator shall be remedied soonest possible. Corrective action shall be agreed with the insurer (e.g. repair of the power failure within 3 hours).