GASEOUS EXTINGUISHING SYSTEMS
Introduction

1989 ISS has been serving industrial, commercial, government and oil & gas sites in the field of fire and security systems as specialized contractor and agent for many international firms.

2001 ISS opened its manufacturing facility, located in AL OBOUR city, provides blending foam concentrates, packaging of Egyptian civil defense and NRC approved fire pumps, CO2/Dry powder systems assembly and piping fabrication for firefighting systems.

2003 ISS under license from Chemguard-USA has been awarded the first UL approval in Egypt & Africa on blending AFFF - AR/AFFF - FP foam concentrates.

2006 ISS was certified by ISO 9001:2000.

2011 ISS has signed an OEM agreement with EPE (Ebara pump Europe) and PTEI (PT Ebara Indonesia) to assemble their quality pumps in Egypt and to submit for getting the UL/FM approval.

2012 ISS has been awarded the UL approval of its fire pump range.

2014 ISS has been awarded UL approval of aboveground tank for flammable liquids.

2015 ISS expands its UL/FM pump range to 2800 and 3560 RPM for 60 HZ countries.

2016 ISS is awarded the ASME certificate – “U-stamp” as a first step to apply for UL on bladder tanks.

ISS is the first Egyptian factory to have LPCB approval on its HFC-227ea gas system.

ISS is the first Egyptian factory to have CE mark approval on its bladder tanks.

ISS is the first Egyptian factory to have CE mark approval on its CO2- gas system and dry powder.

ISS is the first Egyptian factory to have CE mark approval on its AQUA FirePumps (100-3000 GPM).

Specialized in:

- Fire Detection Systems.
- Flame & Gas Detection Systems.
- Automatic Sprinkler Systems.
- Foam Extinguishing Systems.
- Fire Pumps Packages.
- Dry Chemical Systems.
ISS- has signed an agreement with FSL (Firetec Systems Ltd.) – UK. to provide the first LPCB Locally assembled HFC 227 ea (FM200) Systems and filling station in EGYPT.

Also, ISS-supply UL/FM FM200 and other gas systems by HYGOOD – UK. when specification required such approval.

The steel cylinders/containers are manufactured to the requirements various National Standards appropriate with their country of use.

The fill range shall be 0.4 to 1.12 kg/litre.

Note that the maximum fill range should only be used in conjunction with short pipe runs.

Cylinders shall only be mounted with the valve uppermost and secured with the supplied straps to sound wall or secured racking.
25bar Container Assemblies

<table>
<thead>
<tr>
<th>Assy/Part no.</th>
<th>Container Assembly</th>
<th>Valve</th>
<th>Empty wt. kg</th>
<th>Vol. l</th>
<th>Dia. mm</th>
<th>Cont. Basque</th>
<th>Outlet length</th>
<th>Hose length</th>
<th>Manifold height</th>
<th>Bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>NF2010020*10</td>
<td>15 litre</td>
<td>33</td>
<td>18.5</td>
<td>15</td>
<td>254</td>
<td>314</td>
<td>405</td>
<td>600</td>
<td>NA</td>
<td>9254</td>
</tr>
<tr>
<td>NF2030020*10</td>
<td>30 litre</td>
<td>33</td>
<td>34</td>
<td>30</td>
<td>300</td>
<td>369</td>
<td>664</td>
<td>500</td>
<td>1160</td>
<td>9306</td>
</tr>
<tr>
<td>NF2200020*10</td>
<td>30 litre</td>
<td>33</td>
<td>28.5</td>
<td>30</td>
<td>254</td>
<td>314</td>
<td>773</td>
<td>500</td>
<td>1325</td>
<td>9254</td>
</tr>
<tr>
<td>NF2220020*10</td>
<td>60 litre</td>
<td>33</td>
<td>45</td>
<td>50</td>
<td>300</td>
<td>360</td>
<td>895</td>
<td>500</td>
<td>1415</td>
<td>9306</td>
</tr>
<tr>
<td>NF2250020*10</td>
<td>50 litre</td>
<td>33</td>
<td>42</td>
<td>50</td>
<td>324</td>
<td>364</td>
<td>909</td>
<td>500</td>
<td>1308</td>
<td>9254</td>
</tr>
<tr>
<td>NF2250020*10</td>
<td>40 litre</td>
<td>49</td>
<td>63</td>
<td>80</td>
<td>300</td>
<td>360</td>
<td>1364</td>
<td>550</td>
<td>1320</td>
<td>9306</td>
</tr>
<tr>
<td>NF2110020*10</td>
<td>120 litre</td>
<td>49</td>
<td>93.5</td>
<td>120</td>
<td>406</td>
<td>466</td>
<td>1182</td>
<td>550</td>
<td>1810</td>
<td>9406</td>
</tr>
<tr>
<td>NF2110020*10</td>
<td>150 litre</td>
<td>49</td>
<td>105</td>
<td>150</td>
<td>406</td>
<td>466</td>
<td>1432</td>
<td>550</td>
<td>2060</td>
<td>9406</td>
</tr>
<tr>
<td>NF2110020*10</td>
<td>150 litre</td>
<td>49</td>
<td>129</td>
<td>190</td>
<td>462</td>
<td>522</td>
<td>1322</td>
<td>550</td>
<td>1950</td>
<td>9406</td>
</tr>
</tbody>
</table>

Discharge Valve, Pressure Port Connections • ISS CG²

Use this port to actuate additional discharge valves and or the Discharge pressure switch. Use discharge pressure switch NF280210A or Pilot hose NF271560
Pneumatic Slave Actuation • ISS CG²

Last actuator fitted with the Plug taken from the Master Valve Pilot connection

Pneumatic Actuator NF26010

Pilot Hose NF271560 (560mm) Use longer hose NF271560 (1300mm) between a large master container and a smaller slave container

Hoses are provided with appropriate swivel connections

Manual/Pneumatic Actuator NF26010

Connection G1/8

Fit ‘Discharge Pressure Switch’ NF308210 using ‘ Hose’ NF271560 to last valve or the discharge manifold

Container Discharge Hoses • ISS CG²

![Diagram of container discharge hoses]

<table>
<thead>
<tr>
<th>Hose Assembly</th>
<th>Min. bend radius</th>
<th>Dimension A</th>
<th>Dimension B</th>
<th>Valve Fitting</th>
<th>Fitting D ISO 7-1</th>
<th>Min. through bore</th>
</tr>
</thead>
<tbody>
<tr>
<td>NF23335000</td>
<td>500</td>
<td>500</td>
<td>77</td>
<td>1-7/8 x 12</td>
<td>R 1-1/2</td>
<td>33.3</td>
</tr>
<tr>
<td>NF23495500</td>
<td>635</td>
<td>550</td>
<td>99</td>
<td>2-1/2 x12</td>
<td>R 2</td>
<td>44.5</td>
</tr>
</tbody>
</table>

*Connect to Check Valve or discharge pipe work before attaching to the discharge valve with the swivel connection.

Note: Maximum bend between centre lines of fittings 20 degrees

Discharge Nozzles 180 & 360 Degree Coverage • ISS CG²

![Diagram of discharge nozzles]

Nozzle Information

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Length, mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/2&quot; DN15</td>
</tr>
<tr>
<td>A</td>
<td>34</td>
</tr>
<tr>
<td>2Ø</td>
<td>24</td>
</tr>
<tr>
<td>Connection</td>
<td>1/2&quot; BSP</td>
</tr>
<tr>
<td>Part Number 1800</td>
<td>NF 251521</td>
</tr>
<tr>
<td>Part Number 3600</td>
<td>NF 251522</td>
</tr>
</tbody>
</table>
Table 4: DOT Container details.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Minimum and Maximum Fills kg (lbs)</th>
<th>Valve Size mm (in)</th>
<th>Height from floor to outlet (nominal) mm (in)</th>
<th>Diameter mm (in)</th>
<th>Nominal Tare Weight kg (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>303.205.026 (4.5 litre)</td>
<td>2.3 to 4.5 (5 to 10)</td>
<td>25 (1″)</td>
<td>180 (11″)</td>
<td>178 (7″)</td>
<td>7.7 (17)</td>
</tr>
<tr>
<td>303.205.015 (8 litre)</td>
<td>4.0 to 8.0 (9 to 18)</td>
<td>25 (1″)</td>
<td>304 (12″)</td>
<td>254 (10″)</td>
<td>14.8 (32.6)</td>
</tr>
<tr>
<td>303.205.016 (16 litre)</td>
<td>8.0 to 16.0 (18 to 35)</td>
<td>25 (1″)</td>
<td>502 (19.8″)</td>
<td>254 (10″)</td>
<td>18.4 (40.6)</td>
</tr>
<tr>
<td>303.205.017 (32 litre)</td>
<td>16.0 to 32.0 (35 to 71)</td>
<td>25 (1″)</td>
<td>833 (32.8″)</td>
<td>254 (10″)</td>
<td>26.1 (57.5)</td>
</tr>
<tr>
<td>303.205.030 (40 litre)</td>
<td>20.0 to 40.0 (44 to 88)</td>
<td>50 (2″)</td>
<td>1352 (53.2″)</td>
<td>2272 (9″)</td>
<td>52.2 (115)</td>
</tr>
<tr>
<td>303.205.018 (52 litre)</td>
<td>26.0 to 52.0 (58 to 115)</td>
<td>50 (2″)</td>
<td>596 (23.5″)</td>
<td>406 (16″)</td>
<td>49.1 (108.3)</td>
</tr>
<tr>
<td>303.205.031 (67.5 litre)</td>
<td>33.8 to 67.5 (75 to 149)</td>
<td>50 (2″)</td>
<td>1526 (60″)</td>
<td>265 (10.4″)</td>
<td>81.6 (180)</td>
</tr>
<tr>
<td>303.205.032 (80 litre)</td>
<td>40.0 to 80.0 (88 to 176)</td>
<td>50 (2″)</td>
<td>1695 (66.3″)</td>
<td>276 (11″)</td>
<td>95.3 (210)</td>
</tr>
<tr>
<td>303.205.019 (106 litre)</td>
<td>53.0 to 106.0 (117 to 234)</td>
<td>50 (2″)</td>
<td>1021 (40.2″)</td>
<td>406 (16″)</td>
<td>71.8 (158.3)</td>
</tr>
<tr>
<td>303.205.020 (147 litre)</td>
<td>73.5 to 147.0 (162 to 324)</td>
<td>50 (2″)</td>
<td>1354 (53.3″)</td>
<td>406 (16″)</td>
<td>89.9 (192.2)</td>
</tr>
<tr>
<td>303.205.021 (180 litre)</td>
<td>90.0 to 180.0 (198 to 397)</td>
<td>50 (2″)</td>
<td>1634 (64.3″)</td>
<td>406 (16″)</td>
<td>105.8 (233.2)</td>
</tr>
<tr>
<td>303.205.022 (343 litre)</td>
<td>171.5 to 343.0 (378 to 750)</td>
<td>80 (3″)</td>
<td>1466 (57.7″)</td>
<td>610 (24″)</td>
<td>207 (456)</td>
</tr>
</tbody>
</table>

Where Specification require UL/FM Systems, ISS is proud to be the sole agent of (TYCO/HYGOOD) FM200 Systems.

The highest quality products in the globe can be supplied with approved Software hydraulic Calculations by trained engineers.

Variety of cylinder sizes, hoses, switches, nozzles can be supplied.
First -CE Mark- CO2 Systems

Declaration of Compliance

This Declaration of Compliance is hereby issued by the below-named company:


In accordance with the following applicable standards:

General Information

Applicant: EGY S.A.E.
International Safety & Security Systems
49 Alamein Rd, Aligned Industrial City, Cairo, Egypt.

Manufacturer: Same as above.

Product Description:
- CO2 Systems complete with CE - EGY - 45 Cylinder (90/34) Stainless steel, (99.9% purity), with 2 sets of CO2 Nozzles (1 for total application and the other for local application), (40kg CO2), (150bar), (30 bar), (15 bar), (7 bar). Discharge pressure switch. Weight device. CO2 signs.

Trade Mark: EGY and EGY-45

Certificate number: 241581
This certificate is valid from 24 May 2010 to 24 May 2017.

This Certificate is issued under the following conditions. The product is supplied by the applicant or company with the applicable directives. The company has performed a review of the technical documentation of the product and has provided the necessary information to the body competent for the certification. The certification body has performed an assessment of the product design and technical documentation. The CE mark may be used by the applicant under the sole responsibility of the applicant.

David Wilmer
Certification Manager

UNIVERSAL REGISTRARS
www.universalregistrars.com

This certificate can be verified at the above URL.

CE - Approved CO2 Systems Consists of:
- EGY - CO2 - 45 45 kg. CO2 cylinder-DOT.
- EGY - SV - 24 Solenoid valve.
- EGY - LN Local application Nozzle.
- EGY - TN Total flooding Nozzles.
- EGY - DV Directional valves.
- EGY - DH Discharge house.
- EGY - HL hose long.
- EGY - HS hose short.
- EGY - DS Discharge pressure switch.
- EGY - WD Weight device.
- EGY - CS CO2 signs.

CE - Approved Powder Systems Consists of:
- EGY - 6/12/25/50 kg. DP units with fuse and Nozzles.
Assembled Systems in Egypt

*CO₂ - 5 X cylinder bank with weighting - Scales - CE Mark approved.
*System approved by Egyptian Civil defence.
When Specification require UL/FM Systems, ISS is proud to be a main distributor of TYCO/ANSUL - CO2 Systems - made in USA.

The highest quality products in the globe can be supplied with approved software hydraulic calculation by trained engineers.

for complete details please contact us.

**CO2 System Reference List for UL - CE mark**

**CE-approved systems**
- TCI-SANMAR – PORTSAID - 70 CYL.
- MISR GLASS FACTRY -MOSTOROD – 50 CYL.
- JUSHI EGYPT FIBERGLASS– SUEZ – 180 CYL.
- COOK DOOR–AL BOUBIND. AREA – 40 CYL.
- AL-SHAMEYA – 10TH OF RAMADAN- 14-CYL.
- IFFCO EGYPT – ATAKA SUEZ. - 12 CYL.
- PETROJET MAIN NEW BUILDING – 200 CYL.

**UL/FM systems**
- HAC- BEER ERIDA AIRBASE- 46 CYL.
- PETROJET – SAWAMEA- 4-SITES - 72 CYL.
- PETROJET-MISR PETROLEUM W/H- 74 CYL.
- POLYETHYLYENE FAC.-PORSTAID- 50 CYL.
- CAIRO OIL REFINERY CO- CORC- 35 CYL.
- MERLOSE PETROLEUM -MANSOURA-6CYL.
- PAKIN PAINTS – ALOBOUR AREA- 18CYLINDERS.
LPCB Station

First LPCB Filling Station in EGYPT

CO2 System Projects

ISS- CE mark Local assembly of CO2 Systems using imported cylinders & accessories.

ISS-supply UL/FM systems by ANSUL – USA. when specification require such approval.

Also, VDS- approved CO2 system can be supplied by HYGOOD -UK upon request
Products Sold to:

SAUDI ARABIA
SUDAN
LIBYA
DJIBOUTI
UAE
QATAR
MOROCCO
TUNISIA
GREECE
INDONESIA
ROMANIA

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