OPERATING PROCEDURE

Additional Fire Safety Measures
for Showcasing Welding or Other Hot Work in the Crocus Expo International Exhibition Centre

# I. General.

1. Managers/representatives of companies that display welding/other hot work at the exhibition stands, booths, or within the leased area shall be responsible for the fire safety when showcasing the welding/other hot work.

2. Hot work shall mean gas welding, electric welding, plasma metal cutting, mechanical metal cutting, and any other jobs resulting in sparks.

3. The company manager shall issue an order nominating persons responsible for

the fire and electrical safety of the exhibition stand for the duration of the exhibition. A copy of the order shall be directly available at the stand intended for displaying the welding/hot work.

4. Only trained welders certified as Electrical Safety Qualification Grade III or higher and holding the respective certificates may engage in welding.

5. To prevent visitors from being exposed to hazards, such as gas, molten metal splashes, blinding flashes, welding shall be showcased according to the Showcase Schedule.

6. Not later than one day prior to the welding display, the responsible person shall obtain a Hot Work Permit and approval from the Fire Safety Unit, Crocus Expo Krasnogorsk Branch, Crocus JSC (hereinafter referred to as the “FSU”).

7. The organizer of the display shall arrange for the below precautions:

- Rent a fire fighting vehicle from the Fire Department of CROCUS JSC,

- Ensure that a mobile fire-fighting facility/fire safety instructor is deployed.

# To obtain the Hot Work Permit the below documents shall be submitted:

1. High-Risk Work Permit in 2 copies,

2. A copy of the order nominating the person responsible for the stand's fire and electrical safety,

3. A copy of the Basic Fire Safety Training Certificate of the person responsible for the stand's fire safety,

4. A copy of the Welder Qualification Certificate evidencing qualification as Electrical Safety Qualification Grade III or higher,

5. Conformity Certificates for the employed welding equipment,

6. Documents for any fire extinguishers and gas cylinders: manufacturer certificates and proof of recent verification and recharging,

7. A Show Schedule specifying the participant name, stand number, type of equipment/work, manner and particulars of the display, date and time of the display.

Upon receiving full documents, the authorized representative of the FSU, Crocus Expo Krasnogorsk Branch, Crocus JSC shall check the welding/other hot work site and approve the Hot Work Permit **valid for the entire duration of the expo.**

**Participants from the CIS or other foreign countries** must submit equivalent documents, effective in the respective country, with a translation into Russian.

1. High-Risk Work Permit in 2 copies,

2. Documents certifying special training of the welder and the person responsible for fire safety at the exhibition stand,

3. Conformity Certificates for the employed welding equipment,

4. Documents for any fire extinguishers and gas cylinders: manufacturer certificates and proof of recent verification and recharging,

5. A copy of the order nominating the person responsible for the stand's fire and electrical safety, The representative of the participant’s company in Russia or of the expo organizer shall be responsible for the fire safety at the exhibition stand.

6. A Show Schedule specifying the participant name, stand number, type of equipment/work, manner and particulars of the display, date and time of the display.

# II. Procedure for Showcasing Welding or Other Hot Work

6. **The welding/other hot work site shall be equipped with emergency fire extinguishing equipment:**

- Two fire extinguishers of 6 litres maximum,

- A 0.1 m3 sand box and a shovel and/or a 10-litres water tank,

- A 1.5x2 m asbestos fire blanket,

- A filter smoke-exhaust machine,

- FFP3 aerosol-filtering respirator masks (up to 50 MAC) or similar personal respiratory protective equipment,

7. Process equipment to be employed for showcasing welding/other hot work shall be fire/explosion-proof, meaning:

• Freed from any explosives and flammables,

• Disconnected from any operating utility lines, except for those used for the welding preparing and display,

• Prior cleaned, washed, steamed, vented, getter-purified, inerted, etc.

8. Building structures, finishing, panelling, insulation, and any equipment components made of combustible materials must be shielded from sparks by asbestos fire blankets, metal shields, or other non-combustible materials.

Floors at the welding display sites shall be made of non-combustible materials or protected against metal splashes by metal sheets.

9. The welding/other hot work sites in the hall must be enclosed by non-combustible partitions when showcasing. The opening for viewing the welding/other hot work display shall be protected by a non-combustible protective mesh with mesh dimensions of 1.0 x 1.0 mm maximum. Furthermore, the partition must be at least 1.8 m high, and the gap between the partition and the floor must not exceed 5 cm. To prevent any hot splashing, this gap shall be protected by a non-combustible mesh with mesh dimensions of 1.0 x 1.0 mm maximum.

10. **When showcasing gas welding:**

Gas cylinders shall be stored and transported only with screwed-on safety caps. No gas cylinders may be stored at the exhibition stand for a period exceeding the permissible hours per day.

10.1. Gas cylinders shall be delivered and installed immediately before the commencement of the welding display upon the authorized representative of the FSU, Crocus Expo Krasnogorsk Branch, Crocus JSC signing an Equipment Entry Notice.

10.2. After the welding display at the end of the exhibition day, the gas cylinders shall be stored within the exhibition stand.

10.3. Any extra gas cylinders above the daily allowance shall be stored at a special site allocated outside the pavilion.

The procedure for storing gas cylinders and showcasing gas welding may be amended only if approved by the authorized representative of the FSU, Crocus Expo Krasnogorsk Branch, Crocus JSC.

11. **When showcasing electric welding:**

11.1. No uninsulated wire, wire with damaged insulation,or non-standard safety fuses may be used.

11.2. Welding wires should be connected by crimping, welding, soldering, or special clamps. Electric wires must be connected to the torch, the welded workpiece, and the welding machine by copper bolted cable lugs fastened with washers.

11.3 The manual welding torch must be designed to ensure secure clamping, allow for fast change of electrodes, and prevent any short-circuiting between its case and the welded workpiece during any temporary breaks or if accidentally dropped onto metal objects. The torch handle must be made of non-combustible dielectric and heat-insulating material.

11.4. The welding electrodes must be factory-made and designed for the rated welding amperage. When replacing the electrodes, their deposits/stubs should be placed in a special metal box installed at the welding site.

11.5. The electric welding system must be earthed while in use. In addition to earthing the main electric-welding equipment, in welding systems, the secondary coil terminal of the welding transformer connected to the conductor leading to the workpiece, i. e. the return conductor, shall be earthed directly.

11.6. Individual components of the welding system (transformers, bearings, brushes, feeder contacts, etc.) must not heat above 75° C.

12. Once the welding display has been completed, all equipment and machines must be turned off and the work site must be cleaned up.

13. **NO welding/other hot work may be showcased:**

• Using defective equipment,

• On freshly painted structures and objects,

• In clothing or gloves with traces of oil, grease, gasoline, petrol, or other flammable liquids,

• With electrical wires touching compressed/liquefied/dissolved gas cylinders,

• With an open burner or incandescent objects used to heat up the welding equipment,

• With purging of the combustible-gas hose by oxygen and visa versa and interchanging the hoses when in operation,

• Using hoses longer than 30 m,

• Using twisted, bent, or clamped gas hoses,

• When boosting acetylene generators by deliberately increasing their internal gas pressure,

• Without protective welder clothing used for welding/other hot work,

• With copper used for soldering any acetylene equipment or other areas that might come into contact with acetylene,

• By handing over the welding/other hot work equipment to any persons not specified in the Work Permit,

• With welding/other hot work carried out without adequate personal protective equipment, including FFP3 respirator masks (up to 50 MAC) or similar personal respiratory protective equipment.

# III. Fire Emergency Procedure

14. **If a fire or any signs of burning are detected:**

• Immediately discontinue the welding display and turn off the welding equipment,

• Communicate verbally to any persons at the stand that a fire/burning has been detected,

• Immediately inform the Fire Department of CROCUS JSC by calling the operator line: **35-01, 8 495 727-11-37**.

State the exact location of the fire (stand number and name, room, floor), what is burning, your name and phone number used to make the phone call.

• Proceed to evacuate people from the stand/booth and the exhibition hall.

• Proceed to extinguish fire with the available emergency fire equipment.

• Managers and officers responsible for fire safety in exhibition booths and at exhibition stands arriving at the fire site shall:

• Repeatedly report the fire/burning to the Fire Department of CROCUS JSC, notify the duty shift supervisor of the Data Room, Security Coordination Department of CROCUS JSC at 55-55, 495 980-11-11, the Security, the exhibition management, and senior management.

• Should the situation escalate to life-threatening, immediately commence people rescue by employing available means and resources. Direct all employees and visitors not involved in extinguishing the fire/burning away from the hazardous area.

• In addition to the fire fighting efforts, proceed to recover and protect any material assets.

• After the fire response crew of the Fire Department, CROCUS JSC, the emergency fire response crew of Crocus Expo International Exhibition Centre, or the fire unit of the local fire service of EMERCOM, Russia arrive, inform them of the existing conditions, structural/technical specifics of the stand, its location, and any other necessary details.

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