

# **SERVICE INSTRUCTION**

Technical overview and operations maintenance of fire extinguishers foam

GPN-6x, GWG-2x

**I S - 2** Issue 10 Date ed. 09.2020

Instruction is in accordance to PN-EN on fire extinguishers, to a project of PN-EN 12367 "Fire extinguisher - Maintenance" and the proposals contained in the International Standard ISO 11602 - 2 developed by the Technical Commission ISO / TC 21 "technical means and facilities for fire protection subcommittee SC 2 "Fire extinguisher".

Instruction is designed in accordance with the requirements of the "Regulation of the Minister of Internal Affairs and Administration of 7 June 2010 (Journal of Laws No. 109 poz.719) on fire protection of buildings, other buildings and sites.

#### REVIEW, MAINTENANCE, REPAIR, LIQUIDATION

Instruction covers all technical and administrative activities, including surveillance activities, to maintain equipment in, or return to the state, in which it can fulfill the required functions. These activities are designed to "restore the pattern, which has been certified by the fire extinguisher in Jozefow CNBOP. The scope of actions to maintain the readiness of fire extinguishers include:

### **1. Control** - made by the owners, users.

- Check if the extinguisher is in place for that purpose;
- Is not blocked and easily available;
- Has a readable label instructions;
- It is not visibly damaged;
- Has the seal intact and indicators;
- Pressure gauge works properly;
- Is of suitable type and size of filling;
- If the extinguisher has been approved for maintenance, must be replaced by a fire extinguisher of the same type of fires and to the same group and at the same fire extinguishing efficiency.

Frequency of inspections by the user should not be less than every quarter.

**2. Inspection** - Trained and authorized conservator (serviceman) keep an extinguisher in good condition.

Lp	Item name	Requirements	Frequency steps
1	Cylinder	<ul> <li>Check the overall condition of the cylinder;</li> <li>Date of manufacture and durable markings;</li> <li>State of varnish coating (covered with corrosion extinguisher must be scrapped);</li> <li>Condition and readability of the label.</li> </ul>	In accordance with the instructions set by the manufacturer but not less frequent than every 12 months
2	Valve, manometer	<ul> <li>Check the external components (condition of levers, body, etc.);</li> <li>Check the seal;</li> <li>Check if there is no trace of foam in the body and in the front of valve;</li> <li>Check the condition of the pressure inside of tank through a control manometer or pressure gauge performance.</li> </ul>	In accordance with the instructions set by the manufacturer but not less frequent than every 12 months
3	Hose	<ul> <li>Check the technical condition (cracks in the outer shell, the condition of endings and terminals);</li> <li>Check the patency;</li> <li>Check in accordance with the completion certificate issued.</li> </ul>	In accordance with the instructions set by the manufacturer but not less frequent than every 12 months

**3. Repair** – when the essential elements of fire extinguishers have been damaged or term of validity of an extinguishing agent expired; Repair is performed by the authorized maintenance person.

Lp.	Item name	Requirements	Frequency
1	Cylinder	<ul> <li>Check the overall condition of the cylinder;</li> <li>Date of manufacture and durable markings;</li> <li>State of varnish coating (in case of severe corrosion extinguisher must be scrapped);</li> <li>condition and readability of the label;</li> <li>Slowly unscrew the valve, allowing the descent of the pressure get of the cylinder;</li> <li>Empty cylinder with extinguishing foam;</li> <li>Check the quality of internal coating;</li> <li>For cylinders with capacity more than 6 liters of water check internal, external quality of screw joints and quality of valve;</li> <li>Fill with proper foam, in accordance with a certificate issued by certification body on one type of fire extinguisher;</li> </ul>	Every 5 years

		<ul> <li>Period of life of cylinder is 20 years only if no damage to the anti-corrosion coating is observed.</li> </ul>	
2	Valve	<ul> <li>- Unscrew the valve from the cylinder;</li> <li>- Unscrew the deep tube and check the patency;</li> <li>- Check the condition of spring, in the case of corrosion change to a new;</li> <li>- Thoroughly cleaned and, if necessary, wash and dry the valve;</li> <li>- Replace the rubber seals on plunger and body;</li> <li>- Check the condition of the body surface to the fact the occurrence of mechanical damage or cracks;</li> <li>- Check the condition of the thread;</li> <li>- Assemble the valve according to the documentation.</li> </ul>	Every 5 years
3	Hose	<ul> <li>Check the technical condition (cracks in the outer shell, the state of endings and terminals), in case of damage change to a new one;</li> <li>Check the patency;</li> <li>Check the completion according to the issued certificate.</li> </ul>	Every 5 years
4	Fire-extinguishing foam	<ul> <li>Carefully pour out the old foam.</li> <li>Refill with the new foam according to the certificate.</li> </ul>	Every 5 years

# **4. Liquidation** - elimination of the fire extinguisher which is not suitable for maintanance.

Lp.	Item name	Control Requirements	Frequency
1	Cylinder	Liquidation carried out in the following cases: - Bends in the cylinder's pressure part Corrosion on a substantial part of the cylinder; - Damage of internal anticorrosion coating layer Bad quality of screw joints.	
2.	Valve	<ul> <li>In the case of lack of spare parts in accordance with the certificate.</li> </ul>	
3	Hose	<ul><li>Cracks in the outer shell;</li><li>Damage to the terminal or terminals.</li></ul>	
4	Fire-extinguishing foam	<ul> <li>Lack of foam in accordance with the certificate;</li> <li>Mechanical and chemical contamination;</li> <li>Physical changes in extinguishing agent (precipitation).</li> </ul>	

### 5. The statement of work performed:

Before inspection and maintaining the fire extinguishers, the personnel must be trained and authorized for above-works. Trainings and Authorization can be done by Producer or its Authorized Partner.

Once carried out the overview as well as maintenance, authorized factory or authorized partner company should give certification for above-works. The proof of completion of these actions is also information on control label, which should include:

- Type of service activities (review, maintenance, repair);
- Name and address of the executing maintenance service;
- The competent person datas;
- Date (year and month) of performed maintenance operations;
- Date (year and month) of the next test.

## 6. The list of key legislation and standards:

- Regulation of the Minister of Internal Affairs and Administration of 7 June 2010 (Journal of Laws No. 109 poz.719);
- PN-EN for fire extinguishers;
- Project of PN-EN 12367 portable fire extinguishers maintenance.

ATTENTION! For service work use only tools approved by the KZWM Ogniochron S.A. company.

An inspection of the compliance sites of the maintenance locations is carried out by the manufacturer to assess the conformity of the equipment required for proper maintenance and repair of the fire extinguishers and to assess the conformity of the maintenance service with the requirements specified by the manufacturer. After conformity check, the manufacturer issues a certificate of conformity to the maintenance site.

During the examination, maintenance and repair use only original spare parts and extinguishing agents used by manufacturers for fire extinguishers production.

Technical condition of the fire extinguisher after repair examination must exactly match the pattern, for which manufacturers have received attest or certificate. For not complying with this rule, criminal sanctions will be used, according to the Fire prevention act.