| Name of Appendix: | **Safety in autogenous welding and cutting works** |
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| Safety directives |  | Reserve canisters of oxygen and acetylene that are not being used for work should be stored in a ventilated place that is far from heat sources, the sun’s rays and increased fire risk. In places where welding gas canisters are stored, smoking is absolutely prohibited. |
|  |  | Acetylene canisters should be stored standing upright. If an acetylene canister was stored lying down, it should be placed upright at least half an hour before being used. |
|  |  | Ensure that welding gas canisters do not fall or receive any kind of blows. Store and transport gas canisters only if they are equipped with a protective cap screwed on top of the valve. |
|  |  | When handling oxygen canisters, be sure there is no oil on your hands or on your clothes. Be sure that oils and grease, even in minimal amounts, do not come into contact with oxygen gas as this will cause an explosion. |
|  |  | Gas canister valves must be opened slowly. The valve keys should be left near the gas canister when using it, to enable quick closure in an emergency. |
|  |  | As soon as you are finished using the canister – shut the valve and release the pressure from the entire system (tube regulator and burner). |
|  |  | In the event of a fire near welding gas canisters, close the canister valves and move them away from the danger zone, if this is possible. |
|  |  | If acetylene gas catches fire after escaping from a canister whose valve was not closed, it should be put out using a powder fire extinguisher, gas extinguisher, or by cooling the canister with streams of water. In case of extreme danger, warn those who are exposed to risk and take cover. |
|  |  | Use only regulators and pressure gauges designed for the gas you are using. Before attaching the regulator to the canister, clean the dust from the valve by opening and closing it, quickly and briefly. |
|  |  | Repairing the pressure regulator for the welding systems is not the job of the welder – unless he has been specifically trained to do so. In case of a malfunction, the damaged parts should be sent for professional, qualified repair. Leaks of welding gas can be identified using soapy water (not using a flame).  |
|  |  | When using a new (flexible) pipe for welding work, it should be cleaned with low-pressure compressed air (about half an atmosphere) before its first use. |
|  |  | Use suitable clamps for flexible pipe connections – do not rub screws and connections of an autogenous welding system with oil or any greasy substance whatsoever. Under no circumstances may you use tubes that were used with acetylene for oxygen, and vice versa. |
|  |  | The burner should be lit with a special lighter device, and not with a match or other open flame source. |
|  |  | After welding do not leave a burning or hot burner, or any other hot object, unsupervised. |
|  |  | Before any welding or autogenous cutting work, particularly outside the workshop, check the surrounding area and make sure that the welding work will not cause a fire or explosion because of its proximity to hazardous materials. Based on the circumstances, use protective screens made of non-flammable materials and prepare fire-fighting equipment. |
|  |  | Suitable protective goggles for welding and cutting work are required, as is inspecting the quality of the welding and other ancillary works. |
|  |  | When welding you must wear a full work outfit that is free of grease. For “heavy” works, use gloves, leg protectors, a hard hat, apron and so on, made of appropriate materials – according to the circumstances. |
|  |  | Cutting and welding of containers must be done only when the container’s contents is known and have been previously neutralized. Before welding the container should be completely filled with water. |
|  |  | When welding in “closed spaces,” an “observer” should be stationed who can identify risky situations and come to the welder’s assistance. The space must be ventilated before welding and, if necessary, check the atmosphere in the space using an explosimeter. |
| Responsible for performance |  | Employees engaged in autogenous cutting and welding, and those supervising these workers are responsible for performance of these directives. |