



Safety Manual PIPE CLEANING NOZZLES

The handling of high-pressure water equipment may be dangerous. Breaches of safety instructions and recommended practices may provoke serious injuries or even death.

Please read this document carefully! The following safety instructions must be observed:

- Do not exceed the maximum pressure specified for any system component.
- Check all equipment before starting work. Verify that there are no visible damages, signs of deterioration or incorrect assembly. If the equipment is damaged do not use it until it has been repaired.
- Make sure that all the connections and threads are tightened and that they do not have any leak.
- When carrying out maintenance or replacing any piece, before opening any part, make sure all equipment is properly turned off. Otherwise, you may suffer serious injuries or even death.

First aids: it is MANDATORY to have adequate on-site first aids facilities available for the users.

Safety check prior start-up

- Mechanical stops, rigid nipples and recoil inhibitors should be installed accordingly when carrying out the cleaning of any pipeline, tube or container.
- Complete a job specific risk assessment and act accordingly with appropriate measures.
- Make sure that the area to be sprayed with high-pressure water is properly fenced and that warning signs have been placed.
- Make sure the work area is kept clutter-free at all times (loose pieces, hoses, tools...).
- High-pressure water must only be applied using high-quality hoses. Verify that all connections are thoroughly tightened.
- Make sure that operators do not connect, disconnect or adjust hoses, nozzles and accessories when the equipment is on.
- Make sure that all staff members are clear from the area where high-pressure water is to be applied.
- Make sure that all the operators are properly equipped with Personal Protective Equipment (PPE).

The use of the PPE depends on the pressure that is to be applied and on the type of cleaning to be performed. Managers, supervisors and operators must carry out a specific risk assessment for every assignment to define exact PPE requirements.

The Personal Protective Equipment may include:

- Ocular protection: complete protective visor
- Feet protection: impermeable and non-slipping boots with steel toe cap
- Hands protection: impermeable gloves
- Hearing protection: hearing protection equipment for at least 85 dB(A)
- Protective headgear: a rigid helmet compatible with the visor and the hearing protection
- Body protection: approved impermeable multilayer clothes for high-pressure water use
- Hose protection: hose cover
- Respiratory protection: This may be required. Check the section of the specific risk assessment for each type of work.