

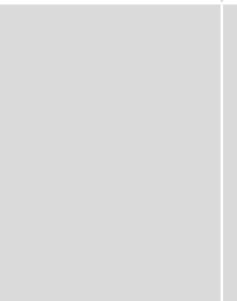




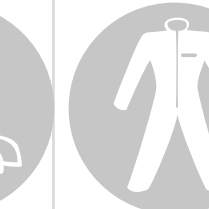

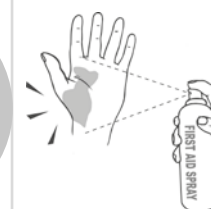
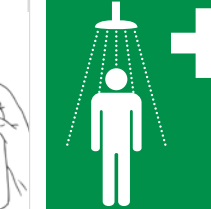


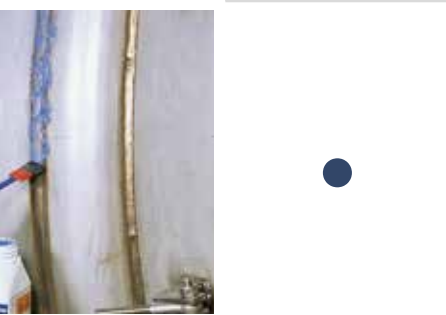
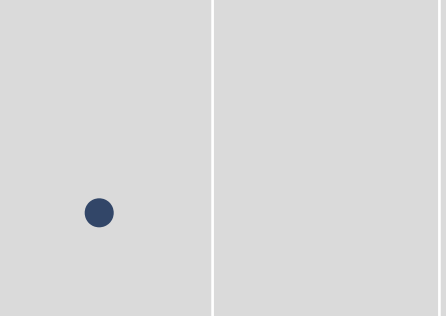

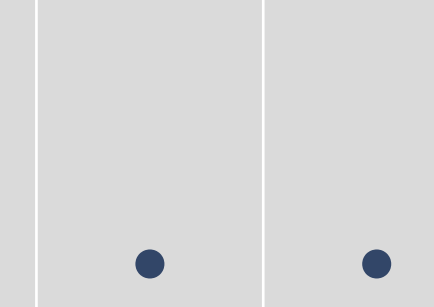



## GENERAL HANDLING INSTRUCTIONS FOR DEGREASING/PICKLING/PASSIVATION

voestalpine Böhler Welding is a leading manufacturer and worldwide supplier of filler metals for industrial welding and brazing applications. With more than 100 years of experience, the enterprise has decisively influenced the development of welding technology, setting the benchmark with its innovative solutions. The finishing chemicals are manufactured in Malmö, Sweden, by voestalpine Böhler weldCare AB, a leading producer of superior pickling products for stainless steel and special alloys.

069/2018/EN/GL

Products	Method	Example	Pickling Process			Personal protective equipment					Warning symbols				
			Brush	Spray	Bath	Protective gloves	Eye protection	Face shield	Safety boots	Protective clothing	Respiratory protection	Avesta First Aid Spray**	Emergency shower	Corrosive substances	Toxic substances
Cleaner	Avesta Cleaner 401	<ul style="list-style-type: none"> <li>» Apply the Cleaner with a brush or by spraying or dipping</li> <li>» When spraying use an acid resistant pump, preferably Avesta Spray Pump SP 25</li> <li>» Leave to work 15-30 min at room temperature</li> <li>» Rinse off, preferably using a high-pressure water jet. Treat the wastewater before discharge</li> </ul>													
Pickling Paste / Gel	Avesta Pickling Gel 122 Avesta BlueOne® Pickling Paste 130 Avesta RedOne® Pickling Paste 140	<ul style="list-style-type: none"> <li>» Stir or shake the paste/gel before usage</li> <li>» Apply by brushing with an acid resistant brush</li> <li>» Leave to work 30 min to 4 hours, depending on pickling product type, temperature and steel grade</li> <li>» Rinse off, preferably using a high-pressure water jet. Treat the wastewater before discharge</li> </ul>													
Pickling Spray	Avesta Pickling Spray 204 Avesta RedOne® Pickling Spray 240 Avesta Duplex Pickling Spray 250	<ul style="list-style-type: none"> <li>» Pre-clean before pickling, remove oil and grease using Avesta Cleaner 401, and then rinse off with water</li> <li>» Stir the spray before use. Apply by spraying using an acid resistant pump, preferably the Avesta Spray Pump SP 25</li> <li>» Leave to work 45 min to 5 hours, depending on pickling product type, temperature and steel grade</li> <li>» Rinse off, preferably using a high-pressure water jet. Treat the wastewater before discharge</li> </ul>													
Pickling Bath	Avesta Pickling Bath 302	<ul style="list-style-type: none"> <li>» Pre-clean before pickling, remove oil and grease using Avesta Cleaner 401, and then rinse off with water</li> <li>» Before first time use, mix the bath with water, proportion depending on the steel to be pickled</li> <li>» Immerse the object in the bath. Leave to react 5 min to 4 hours depending on temperature, steel grade and condition of the bath</li> <li>» Rinse off, preferably using a high-pressure water jet. Treat the wastewater before discharge</li> <li>» Analyse the bath content on a regular basis, to check the levels of acids and metals to optimise the pickling effect</li> </ul>													
Passivator	Avesta FinishOne Passivator 630	<ul style="list-style-type: none"> <li>» To avoid smut formation after spray pickling, the passivator should be applied before rinsing while the surface is still wet "wet on wet". Leave the fluid to react 30 seconds.</li> <li>» To passivate after mechanical treatment, first pre-clean using Avesta Cleaner 401, rinse with water, then apply the passivator "wet on wet" and leave to react 3-5 min</li> <li>» Apply the passivator with a brush or by spraying or dipping</li> <li>» When spraying use an acid resistant pump, preferably Avesta Spray Pump SP 25</li> <li>» Leave to work 15-30 min at room temperature</li> <li>» Rinse off, preferably using a high-pressure water jet. The wastewater from Passivator 630 is acid free and neutral.</li> </ul>													
Neutraliser	Avesta Neutraliser 502	<ul style="list-style-type: none"> <li>» Add the neutraliser to the rinse water, resulting from pickling, while stirring</li> <li>» Check the pH with litmus paper. Optimum precipitation of heavy metals (Cr/Ni) is achieved at pH 9,5</li> <li>» The neutralised clear water and the remaining sludge should be sent for deposition according to local regulations</li> </ul>													

\* For larger volumes of pickling agents, larger containers of Hexafluorine are required  
 \*\* Avesta First Aid Spray is only sold in Europe