



## NEW 625 FLUX-CORED WIRE FOR PIPELINE WELDING

Acting in a highly competitive market, Serimax is constantly working on solutions to strengthen their global offer for pipeline welding. The next step in this development was to increase the productivity by replacing manual welding processes for CRA pipes in 5G position with automated FCAW and a bug system. As existing products did not meet the requirements, a new flux-cored wire was needed.

Serimax is a specialised welding company offering professional expertise in fully integrated welding, fabrication, engineering and technology; field joint coating, nuclear, inspection and training, research & development and full project management services. They operate in the most extreme conditions and challenging environments and tailor each project to the specific requirements of each customer, providing innovative technology and skilled staff. Serimax is part of Product Line Pipe within the Vallourec Group and offers their customers one of the largest fleets of specialized pipeline welding equipment in the world.

For their objective to become the first pipeline welding company able to offer a welding solution with an automatic welding bug system and a 625 type flux-cored wire for the welding of clad pipes in position 5G, they turned to voestalpine Böhler Welding for support.

### Key targets:

According to the requirements Serimax had communicated based on their experience and customer specifications, the following product features were crucial:

- » Good weldability in all positions
- » 5G welding with constant parameter setting
- » Good slag detachability
- » No defects (especially porosity)
- » Fulfilling mechanical properties

The team of Global R&D Joining Cored Wires developed a wire with better weldability, slag removal and resistance to

pore formation than other wires on the market. While the now replaced BÖHLER NIBAS 625 PW-FD was limited to welding in vertical-up position, FOXcore 625-T1 has proven to be able to partly or fully substitute stick electrodes and the TIG rods for manual welding and solid wires for automated processes in pipeline welding.

#### FOXcore 625-T1

After developing the right formula for the flux-cored wire and performing internal tests, voestalpine Böhler Welding delivered the first samples to the Serimax location for actual tests using their bug system Saturnax 01.

The 5G welds performed by Serimax passed the radiographic inspection (X-ray testing) and fulfilled all set requirements. After the validation of the suitability for FOXcore 625-T1 for production welding, Serimax also performed a process qualification and an audit of the manufacturing plant in Kapfenberg, Austria.

With this innovative solution for fast-track projects a high quality level can be offered. The increase in productivity due to the replacement of manual welding processes, enables time savings and therefore cost reductions. The perfect solution in every aspect.

## SERIMAX - NEW 625 FLUX-CORED WIRE FOR PIPELINE WELDING IN 5G POSITION WITH AUTOMATIC BUG SYSTEM

### Product summary with product and customer benefits

PRODUCT SUMMARY	CUSTOMER BENEFITS
<p><b>FOXcore 625-T1</b></p> <p>EN ISO 12153: T Ni 6625 P M21 2 AWS A5.34 / SFA-5.34: ENiCrMo3T1-4</p> <p><b>Product features</b></p> <ul style="list-style-type: none"> <li>» High resistance to pore formation</li> <li>» Suitable for all welding positions</li> <li>» Good slag removal</li> <li>» High ductility at low temperature</li> <li>» TÜV and DNV GL approvals</li> </ul> <p><b>Product benefits</b></p> <ul style="list-style-type: none"> <li>» X-ray safe welding in all positions</li> <li>» Higher productivity than SMAW and GMAW</li> <li>» Possible to weld against ceramic backing</li> <li>» Can be used for automation / robotic welding</li> <li>» Suitable for LNG applications</li> <li>» Can weld pipes and tubes in fixed position</li> </ul>	<ul style="list-style-type: none"> <li>» Flux-cored wire suitable for mechanized welding in 5G position</li> <li>» Good weldability in all positions</li> <li>» Same parameter settings can be used in all positions</li> <li>» Good slag detachability</li> <li>» X-ray safe welding in all positions</li> <li>» Higher productivity</li> <li>» Time and cost savings</li> <li>» Less rework and lower costs for repair</li> <li>» Safer qualification of welding procedures</li> </ul>

### JOIN! voestalpine Böhler Welding

Why us? Because we have over 100 years of experience, more than 40 offices in 25 countries, 2,300 employees and more than 2,000 distribution partners around the world. This guarantees customer proximity, individual solutions and permanent innovation. In order to meet your requirements and wishes, voestalpine Böhler Welding has developed three specialized product brands. Perfectly coordinated. And as unique as your company.

