



# Mechanized Welding for CCUS and Hydrogen Pipelines

## Why we are right for the job.

The requirements and constraints for welding in CCUS and H<sup>2</sup> pipeline sectors closely mirror those encountered in sour service developments within offshore oil and gas industry an area where Serimax holds a significant leadership position. Our extensive experience in sour service environments, which demand stringent welding specifications and robust quality control to handle highly corrosive and demanding conditions, directly translates to the needs of the CCUS and H<sup>2</sup> pipeline markets.

### AT A GLANCE

#### Challenges

- Safety first
- Previous experience in Oil and Gas
- Mechanized Welding for Repeatable welding
- H<sup>2</sup> projects ongoing

#### Benefits

- 45+ years' experience.
- Project assessment for most suitable welding application including: Material Selection, Weldability Testing, Welding Processes, Mechanized Welding and Data Monitoring
- Flexible team ready to integrate on-site.



## **Solutions that come with Skills Transfer and Mechanized Repeatability**

With our expertise, we're driving innovation in the energy transition, enhancing welding operations for unparalleled and repeatable excellence. With this in mind, we can manage the welding challenges that hydrogen or CCUS infrastructures bring to the table. Identify and develop new assessment methodologies of hydrogen induced damage at microstructure level either for pipe girth welds and pipe material. Some of our work includes providing welds using our latest welding strategy to keep control of the hardness level. Our secret recipe of successful welding of hydrogen or CCUS application pipeline & piping evolved from our experience of sour & severe sour service projects.

### **Proof we know how to get it right first time!**

Serimax' oil and gas track record and internal coated welds (over 100 000 welds with internal coating already done in production) allow us to confirm the capability of our welding strategy to meet the specifics requirements associated with H<sup>2</sup> and CCUS pipeline challenges.

### **Preventing costly repairs**

Our welding strategy of using mechanized GMAW-controlled short circuit combined with GMAW constant voltage process is field-proven, demonstrating its compatibility with stringent hardness requirements (welding strategy used for H2S projects). Making for a repeatable, reliable mechanized welding strategy.

## **BENEFITS OF CHOOSING SERIMAX**

- **Previous expertise in delivering quality welding in challenging environments.**
- **The repeatable welding solution for CCUS and H<sup>2</sup> pipelines.**
- **Transferrable skills from oil & gas enable us to provide robust solutions.**
- **We understand deep-water and sour service welding in order to maintain the integrity of the pipeline.**
- **Training is at the heart of everything we do.**
- **We provide the best balance of welding quality and productivity.**

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