Join2Scale

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From welding to wrapping

Changing the economics of steel fabrication

Applicable across large welded steel structures, starting with offshore wind

Join2Scale

Webinar

02 December 2026 (14:00 – 15:30 CET)

Registration (necessary):
https://us06web.zoom.us/webinar/register/WN_QGZaAqzHTsujwN1hrzPHVw

OBJECTIVE

What if fatigue-critical welded connections no longer dictated structural design? What if complex welding could be eliminated, enabling lighter structures, faster fabrication and more competitive European production using European steel?

This technical webinar explores how composite joint technology creates new opportunities for the design and fabrication of large steel structures. Discover how replacing conventional welded connections with composite joints can reduce fatigue-driven design constraints, lower steel consumption and simplify fabrication processes.

Through practical demonstrations and structural test results, we will share what has been achieved so far, including insights into structural performance, fatigue behaviour and predictive modelling. We will also discuss practical considerations, remaining challenges and the next steps towards industrial application through the WrapNode and Join2Scale projects.

PROGRAMME

Title	Content
Rethinking Steel Structures: Beyond Conventional Welding	- The challenges of conventional welded connections and opportunities for rethinking steel structures.
From Welding to Wrapping: How Does It Work?	- The principles of composite joints, load transfer and manufacturing methods.
Changing the Economics: From Design to Fabrication	- Reducing steel consumption, eliminating complex welding and accelerating fabrication.

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Putting Composite Joints to the Test: Demonstrations & Validation	- Key results from structural demonstrations, testing and predictive modelling.
Designing with Composite Joints: Practical Considerations	- Key considerations for structural design, analysis and fabrication integration.
From Demonstration to Industrial Application: The Join2Scale Journey	- Scaling up manufacturing and preparing for industrial application.
Key takeaways	- Main insights, demonstrated benefits and the road ahead.

INFORMATION

This webinar is free of charge.
For more information, visit https://www.steelconstruct.com/eu-projects/join2scale/