



# TTMJ NEWSLETTER – May 2019

## THE NEW DIAPHRAGM WALL JOINT SYSTEM

(European Patent 2732101 Validated in: France, Germany, Italy & UK. US Patent 9371623. Other patents pending)

TTMJ, the new diaphragm wall joint system allowing greater depths and higher quality joints, was first presented at the DFI annual conference in New Orleans in October 2017. Further details of the system were presented at the EFFC – DFI conference in Rome in June 2018 and ICOLD in Vienna in July 2018. More information about the TTMJ Development can be found on the project website: [www.ttmj-h2020.eu](http://www.ttmj-h2020.eu). To request inclusion on the distribution list for the TTMJ newsletter please email: [info@ttmj-h2020.eu](mailto:info@ttmj-h2020.eu)



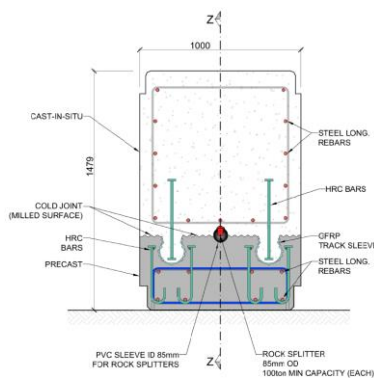
### TTMJ FIELD TRIALS

The first phase of the field trials of the TTMJ System took place in Cesena, Italy in March 2019. A 20m deep rectangular test shaft, normally used for testing hydro-mills, was used for the tests. To simulate forming a joint, the face of three concrete beams were trimmed to full depth by the TTMJ Trimmer. The beams had three different surface profiles and two different concrete strengths. A pouring test, simulating placing concrete into an adjacent diaphragm wall panel, also took place in March 2019. An optic fibre monitoring system was used to assess the flow and quality of the concrete into the TTMJ track and around the headed bars.



A split test is planned to take place this month, to measure the strength of the tension connection across the joint.

Three blocks 2.5 m long have been sawn from the combined beam formed in the pouring test. Rock splitters set in a cored hole along the construction joint at the center of the block will apply the necessary force.



### BAUMA

The TTMJ team were in attendance in the Soilmec booth at BAUMA in Munich, from April 8<sup>th</sup> to 14<sup>th</sup> 2019. There was considerable interest from industry professionals in the development.



We have invited interested Clients, Engineers and Contractors to witness the second phase of trials that will take place at the end of June 2019 in Cesena, Italy. If you would like to be invited, please email: [info@ttmj-h2020.eu](mailto:info@ttmj-h2020.eu)



A 1:20 3D scale model was on display showing the shape of the trimmer and the construction stages that make up the TTMJ system.

### DIAPHRAGM WALL PROJECTS

We are currently looking for diaphragm wall projects, due to start in 2020 or later, that would benefit from the use of the TTMJ system. Circular or peanut shafts are of particular interest. If you have such a project and would like to hear how the TTMJ System can provide a higher quality diaphragm wall at reduced cost, please email: [info@ttmj-h2020.eu](mailto:info@ttmj-h2020.eu)



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