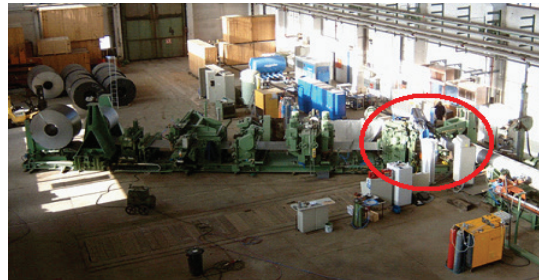


Laser beam welding of large-diameter pipes

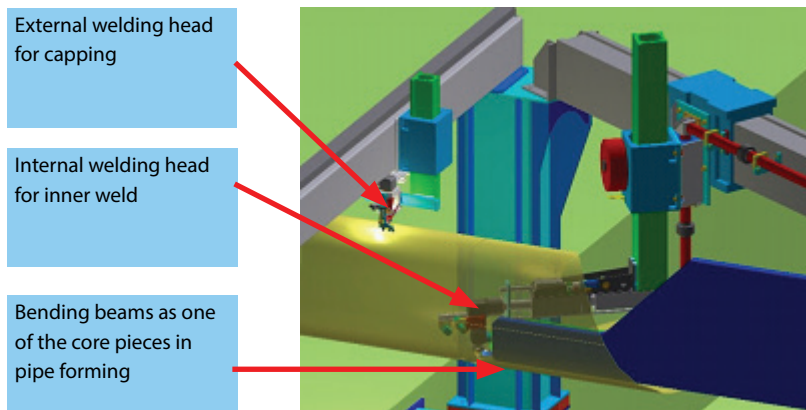
In co-operation between Europipe GmbH and SLV Halle GmbH, the integration of laser welding equipment in a spiral pipe welding machine was studied. The integration was field-tested in an industrial environment.



Overall view of the pipe welding system

System concept

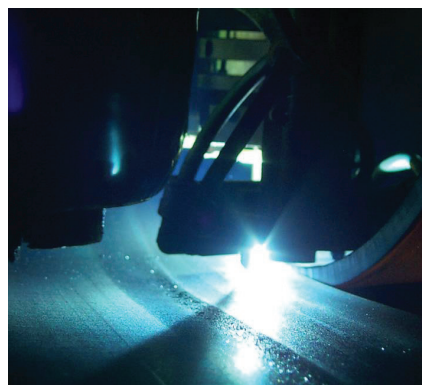
According to the system concept, the pipes were welded with two laser sources. The results show that the laser is a suitable tool for this manufacturing process.



Concept for pass/cap technology

Performance of test

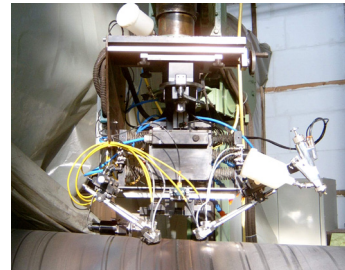
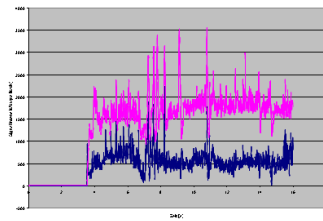
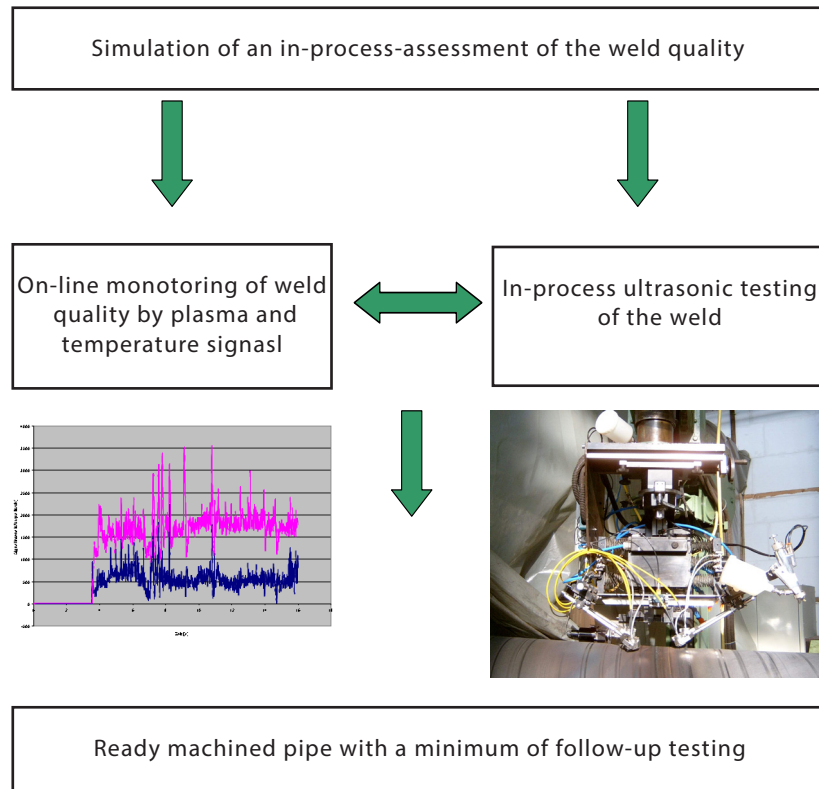
The subject of the test was the optimized matching of pipe spheroidization and laser beam welding process, on the one hand, and the evaluation of the result of welding by extensive materials testing, on the other.



Concept for pass/cap technology



In-process assessment



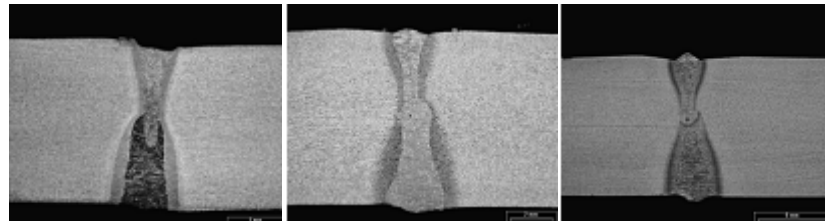
Technological studies using pipes of different thickness

6 mm

8 mm

10 mm

Technological studie



In co-operation with



Contact

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