

MIG-MAG ORBITAL WELDING OF PIPES IN TUBULAR PLATE

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SUMMARY

Within the hereby paper we present one phase of the heat exchanger manufacturing process, namely the MIG-MAG mechanic welding of pipes of 48-78mm diameter in steel tubular plates 16 Mo3. The mechanization method we propose employs a specialised device by the intermediate of which both circular welding and the self-calibrating in every pipe, thus obtaining both an increased productivity and an enhanced quality of joining, a decrease of productions costs, and its appliance for a large scale of sizes in the case of a large variety of pipe-tubular plate joints of different types and dimensions.

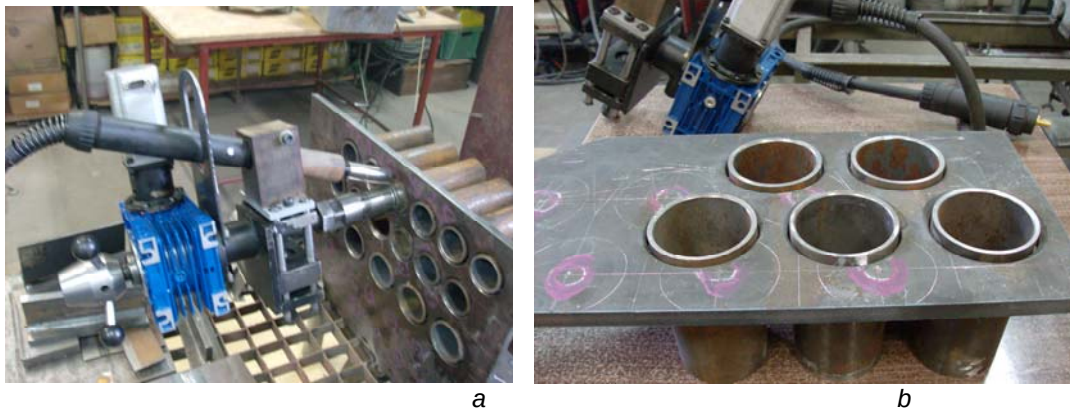


Figure 1. Orbital welding: a- setting appliance; b-sample test.

CONCLUSION

Pipe-tubular plate joints compounding heath exchangers are suitable to mechanization process both from the shape and geometry points of view and from the large number of identical welds imposed to be performed on a single product. If the product is mass produced, the mechanized implementation is so much more important.

Last but not least, the mechanization leads to an increased productivity and of the quality level of products, to suppression or decreasing of correction operations, to decreasing the quality costs, all these on the basis of some minimum and affordable investments.

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