

Invitation to RIFTEC's "Round Robin 2022"

Dear welding colleagues,

In recent months, we have carried out a process comparison of four common welding methods:

- Friction Stir Welding (FSW)
- Laser Beam Welding (LBW)
- Metal Inert Gas Welding (MIG)
- Laser MIG Hybrid Welding (LMH)

The task was to weld aluminium extruded profiles for battery trays. We chose those four welding methods for the comparison, because all of them are well established and approved for industrial production. In our comparison friction stir welding turned out to be the best.

But maybe you could do the welding better than our suppliers did? Or you would like to try out a totally different joining technique?

Then please feel free to apply for our "Round Robin 2022".

Here are the details of our comparison:

We provide you free of charge with sufficient material for your welding. This will be ten aluminium hollow profiles made of EN AW 6063 T6 measuring 1.200 x 400 x 12 mm. Weld penetration 3 mm. You may adjust the joint geometry so that it is suitable for your welding technique. Then you do your welding.

When you are satisfied with your results, you do the testing, including tensile test, bend test and macroscopic examination (we will send you more details when we send you the material).

What we like to get from you is: Your results, the welding parameters, your consumption and certainly some pictures of the welding seam.

We will collect the results from all participants, share them with you and publish them. Certainly you may also use your results for your own publications.

Time frame:

Application by 2021/11/28 Shipment of test material by 2021/12/15 You provide us with your results by 2022/06/30

Please send your application to:

RIFTEC GmbH Dr. Axel Meyer Mercatorstraße 65b 21502 Geesthacht Germany E-Mail: <u>info@riftec.de</u> Tel.: +49 4152 13693 0



Please tell us who you are and which joining technique you will use. We will make a selection from all applications to cover the widest possible range of joining methods. By the beginning of December 2021 we will tell you if you are part of our "Round Robin 2022" or not. We will then send you the test material and discuss the details with you.