

EJOWELD® REF

Universal joining of aluminium and fibre reinforced plastics



In addition to the innovative EJOWELD® friction element welding for joining of light-weight materials and steels, in particular ultra-high strength steels, EJOT has extended its technology portfolio by a new element - the EJOWELD® REF. The REF joining element has a hollow shaft and a similar shape like the well-known EJOWELD CFF®. It allows the joining of aluminium plates and plates of fibre reinforced plastics (FRP) onto aluminium sheet metals.

Joining Process EJOWELD® REF



Step 1
Cutting



Step 2
Creating centre cut-off and welding



Step 3
Spreading



Step 4
Compression

Advantages EJOWELD® REF

- Gradually controlled process for an optimised joint regarding the original materials
- No delamination of the fibre reinforced plastics because of gentle joining process
- Concurrent usage of REF and CFF element with one device (special anvil and second feeder needed)
- Increasing of efficiency and flexibility by the possibility to join three different material pairs (Al/St, Al/Al, FRP/Al) while reducing complexity

Modular Design EJOWELD® REF System

- Feeder
- Control cabinet
- Setting device
- Various anvil adapters with different lengths
- Carrier system C-frame



Anvil adapter versions



C-frame with immersion depth from 200 - 600 mm

