

## EJOWELD® CFF

Reliable joining of composite materials by friction welding



Lightweight material can be joined to the highest strength sheets using the EJOWELD® CFF (Composite Friction Fastener). This versatile and reliable joining technology allows a large variance in material thickness combinations. The introduction and implementation of flexible material-body concepts is facilitated by this method.

### Joining Process EJOWELD® CFF



**Step 1**  
*Penetration of the cover sheet  
(Lightweight material)*



**Step 2**  
*Cleaning and activation  
of the surfaces*



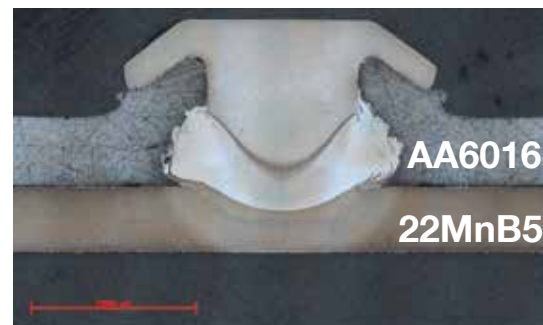
**Step 3**  
*Plastification of friction element  
and base sheet*



**Step 4**  
*Compression / forming  
the welded joint*

### Advantages EJOWELD® CFF

- No pilot hole
- No pre or post treatment of the joined elements
- No brittle intermetallic phases, because the process works without the thermal adhesive bond between aluminium and steel
- Control of the linear expansion differences between aluminium and steel induced by temperature changes
- A number of material thickness combinations can be realised without modification of the machines



### Modular Design EJOWELD® CFF System

- Feed
- Control cabinet
- Installation tool
- Support system (C bracket)
- Anvil adaptor
- Friction elements



For more information please contact Mr. Sebastian Schrodt, phone +49 36252 42-290, e-mail [sschrodt@ejot.de](mailto:sschrodt@ejot.de)