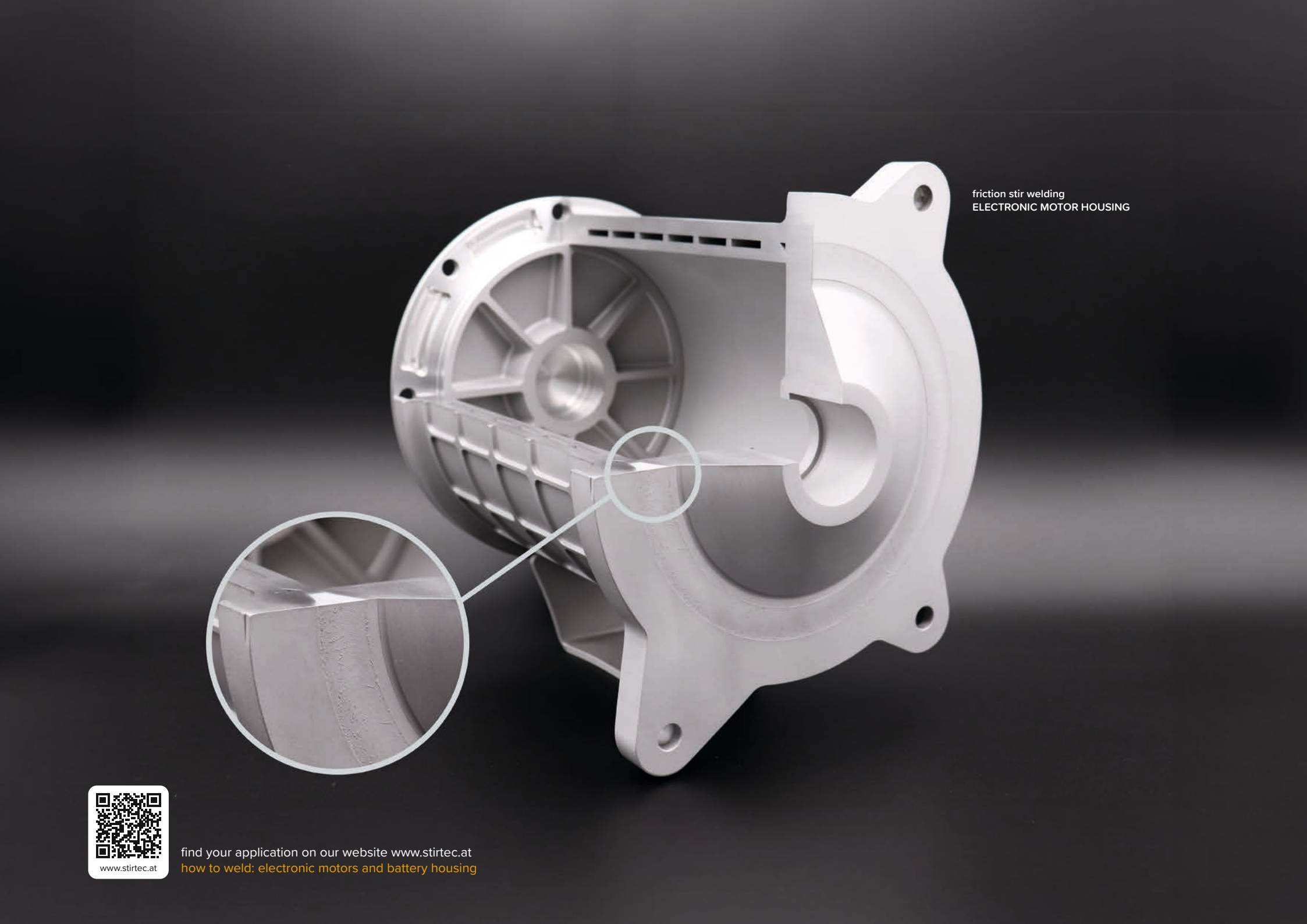
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how to weld: electronic motors and battery housing

# V-FSWC2080
## HIGH-PERFORMANCE FRICTION STIR WELDING UNIT

### Specifications

The Stirtec V-FSWC2080 is used for the production of a large variety of applications within the automotive industry for the FSW welding process on EV battery trays and electric motor housings. The V-FSWC2080 machine type stands out as a global solution, seamlessly integrating cutting-edge FSW technology with upgradeable milling functionality within a singular production center (Stirtec 2-in-1 concept). With the capability on integrating additional axis (4th and 5th axis), limited accessibilities for welding can be achieved.

- STIRlytics process software for 100% traceability
- FSW force and position control system for optimum welding results
- suitable for all aluminum die casting components and copper applications
- automatic tool change system for 24 tool pockets
- upgradeable milling functionality in a single production center
- preparation for integrating 4th and 5th axis for welding

| MACHINE INFORMATION | |
|---|---|
| machine dimensions | 2300 x 2535 x 2780 mm |
| spindle orientation | vertical |
| **OPERATING TRAVELS (3-AXIS FSW UNIT)** | |
| X-axis binder | 900 mm |
| Y-axis cross slide | 1000 mm |
| Z-axis slide ram | 300 mm |
| **FSW WELDING FORCES & FEED RATES** | |
| max. welding force in Z-direction | 25 kN; spindle rotation speed 15.000 rpm |
| rapid traverse in X, Y, Z-axes | 30.000 mm/min |
| positioning accuracy in X, Y, Z-axes | 0,01 mm |
| **CONTROL SYSTEM** | |
| control system | SIEMENS 840D sl / Sinumerik one |
| **MACHINING TABLE (DIMENSIONS)** | |
| table dimensions | 2200 x 780 mm |


- electronic motor housing and PHEV battery tray with part size up to L 1900 x W 600 mm
- high process reliability under the achievement of rapid welding speeds due to merging power and precision
- optional integration of additional axis to weld in constrained areas