

Friction Stir Welding FSW on cast applications

Stirtec accompanies its customers from the conception to start of serial production



FSW Forefront innovation leader ✓

from development phase to serial production ✓

100% gastight welding procedure ✓

force-controlled welding process ✓

highest seam quality due process monitoring ✓

Established joining process for similar material and dissimilar welded joints: Sand casting, die casting, aluminum, steel, copper

The product range of welded cast components extends from various engine housings of well-known automotive manufacturers to e-mobility characteristic die-cast components such as inverter housings, heat exchangers and battery boxes

Improvement of the microstructure in the welded area (compacting of pores and voids in the casting)

Gas/helium-tight welding process without additives and auxiliary materials such as shielding gas, powder or welding rod

Various test methods for pressure verification on the component and metallography of the weld seam according to ISO: 25239

STIRTEC – FSW Full-Line supplier

Stirtec is a leading high-tech company in the field of friction stir welding (FSW) and offers complete manufacturing solutions, from the very first idea to serial production, from one single source.

Our service portfolio ranges from FSW technology training and application development to contract welding of prototypes and small series with pressure tests.



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FSW



Welding the unweldable