Friction Stir Welding

Description of facility
The FSW is performed on a very stiff bed plate milling machine (operating range 500 x 1000 mm) that has been continuously upgraded and modified to fulfil the friction stir welding needs. Currently online tool temperature as well as load and torque measurements are used to control the process and to speed up the welding parameter optimisation procedure. The tool load and temperature measurements can be combined with the output of up to 16 thermocouples fixed at various locations on the plates and the clamps. Therefore this FSW data acquisition set-up is perfectly suited for the generation of input or validation data for FSW process simulations.

Application
Friction Stir welding with operation range of 500 x 1000 mm

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This handout, and cross-references to related measurement techniques and facilities are available at: http://messtec.dlr.de/link-275-en.