

Application example

Attaching a nipple to a moulded part

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



Task

A small nipple, which has springs moulded on as a holder, is to be welded onto an injection-moulded automotive part made from PA6.6 GF 40. The problem is the high glass content of the small part and, above all, the attached springs which would be destroyed by the amplitude required for longitudinal ultrasonic welding. Other procedures were equally unsuccessful (thickness of the part at the base, sensitivity, glass content).

Solution

In this case, the task was performed reliably with torsional technology with TSP3000 machines.

Configuration advantages

The torsional technology is able to transfer the high energy required for PA6.6 GF 40 into the part in a gentle process. This is not possible with longitudinal ultrasonics. As the ultrasonics do not need to penetrate the part because the weld is created exclusively at the interface, there is no damage to the part and a very good weld is produced. The parts are welded reliably in large quantities with very short welding times.



The application was produced on a torsional TSP3000 SONIQTWIST® welding system, or with corresponding components in a special system.