

Non-destructive quality assessment of polymer tube joints

The Swiss Commission for Technology and Innovation (CTI) presently funds a collaborative project between Empa and Georg Fischer Piping Systems Ltd. The project concerns the development of a non-destructive inspection system for quality control of butt-welded PVDF and PP tubes. Air-coupled ultrasound and liquid-coupled phased array technologies will be adapted, optimized and assessed in terms of weld defect detection. A novel non-contact inspection will be possible which is mandatory for PVDF application in cleanrooms. The work will include the setup of technology demonstrator systems for in-situ measurements.



Materials Science and Technology