Automation - the future of wire harness production?

Wire harnesses are becoming more complex, cross-sections simultaneously larger (high-voltage range) and smaller (for sensors, consumer electronics). Automated or semi-automated production of wire harnesses can reduce sources of error and thus increase quality. This is particularly true for complex wire harnesses with the smallest cross-sections, which are difficult to produce manually. There are already research approaches for the automated bending and fastening of wire harnesses on the cable board (e.g. at the Karlsruhe University of Applied Sciences*).

In the next step, the cables are connected to each other. Ultrasonic welding is the leading joining technology. Is automated production conceivable here? Schunk Sonosystems already offers semi-automated and fully automated welding machines for power electronics and cell contacting (battery technology). The demand for solutions for automated wire harness production is also increasing as a result of new requirements such as autonomous driving. Our goal is to develop tailor-made solutions for and with our customers.

Do you also have ideas or approaches?

Write to us at sonosystems@schunk-group.com

*https://www.hs-karlsruhe.de/presse/automatisierte-herstellung-von-kabelbaeumen/