Hesse GmbH – Your partner for ultrasonic and thermosonic wire bonders for all common wire dimensions as well as ultrasonic flipchip bonders in combination with standardized or customized automation solutions.

Hesse GmbH, founded in 1986 and based in Paderborn, Germany, develops and manufactures fully automatic ultrasonic and thermosonic wire bonders as well as ultrasonic flipchip bonders together with standard or customer-specific automation solutions for the semiconductor industry backend. Hesse GmbH is one of the world's leading producers of wire bonders using the ultrasonic wedge-wedge and the thermosonic ball-wedge technology and develops customer-specific production processes.

All relevant semiconductor manufacturers are among the worldwide clientele of Hesse GmbH. Distribution and service are performed from the headquarters or by subsidiaries in Hong Kong, the USA and Japan and together with partners in over 30 other countries.

The core competencies of the company are mechatronic systems, ultrasonic technology, control engineering and the detailed understanding and knowledge of the processes and physical effects relevant in ultrasonic joining technology.

In order to maintain and expand technological leadership, we conduct intensive research and development in all aforementioned areas.
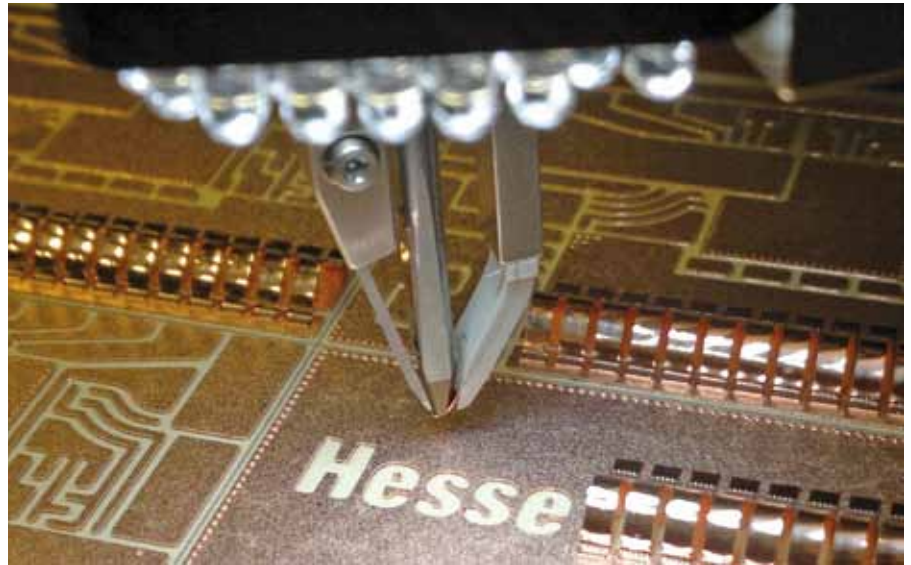
Copper ribbon bonding in detail

Development goals include simple and wear-free constructions with highly integrated functionality and the integration of intelligent systems for achieving fault-free processes like the patented process integrated quality control (PiQC) which records and evaluates quality-relevant parameters in real time.

Process support, development and consulting:
We support our customers in developing and implementing individual process requirements. Our range of services includes:
• Sample-bonding
• Pre-production prototype
• Design validation builds
• Small series production
• Module production
• Process optimization

Bondjet BJ935 – Fully Automatic Heavy Wire Bonder