

# Schunk Ultrasonic Welding Systems MINIC-II

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## Schunk Ultrasonic Welding Systems



The MINIC - II ultrasonic welding system is an economic production set-up for wire harness manufacturing. Wire cross sections up to 30 mm<sup>2</sup> can be welded, depending on the output power of the generator.

The compact design offers abundant application possibilities. For example, the system can, among other things, be set up as a table unit or as a component for special purpose set-ups (e. g. cutting machines).

Various cross sections can be welded quickly and easily due to the servo-motor-controlled working area. Sequence welding is similarly possible.

These are the ideal conditions for production on the transfer line.

The exchangeability of the welding modules without impairment of the welding process is guaranteed by ID-Chip and the digital height-measuring system. The ID-Chip stores all module

specific data, which are configured via system alignment during installation.

For the production of customer specific wire harnesses, welding systems are linked with the PPS-systems of our customers, which considerably increases production efficiency.

The control unit, a high-frequency generator and an industrial PC are mounted in a 19" control rack. The integrated dynamic process control makes possible a governing within given tolerance ranges. As such, a high standard of welding quality as well as process safety are guaranteed.

All relevant process data and parameters are displayed to the user in his/her own native language through the visualization software. More than sixteen languages are currently available to choose from.

❖ Digital height-measuring system

❖ ID-Chip for storage of module specific data

❖ Automatically system alignment

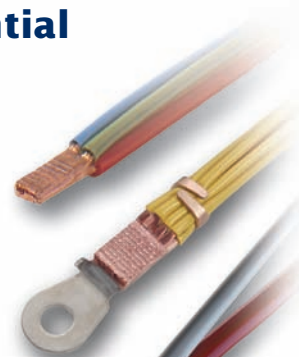
❖ Optimized cycle times based on new control concept

# MINIC-II-GT

## Providing a Broad Basis for Rationalization Potential

The guiding principle of this innovation was the quest to develop a new machine concept for board assembly. In addition to wire to wire applications, this new machine was also to be capable of connecting wires to terminals. The MINIC-II-GT is the first generation of machines which can be used for both application spectrums.

Due to its compact design, this welding system is equally suitable for board assembly and production at the work bench. This new development offers enormous rationalization and cost-saving potential for the user.



### Wide Range of Applications

- ✓ End splices / butt splices
- ✓ Inline splices / head to head splices
- ✓ Inline splices with middle stripped wires (with outlet wires)
- ✓ Desplicing protection for single wire ends
- ✓ Wire to terminal connections

### The Welding System

- ✓ One piece of equipment – five types of applications
- ✓ All applications in one sequence
- ✓ No retooling
- ✓ No adjusting the crimping height
- ✓ Reduced cycle times for wire to terminal connections

### Welding on the Assembly Board

- ✓ No additional work stations (pre-production) for wire to terminal connections
- ✓ Increased use of capacities of ultrasonic welding equipment
- ✓ Simplified production organization
- ✓ Faster material flow

### Multiple Wires on One Contact

- ✓ Shorter assembly times
- ✓ Reduced material requirements (grounding bolts, crimps ...)
- ✓ Weight reduction

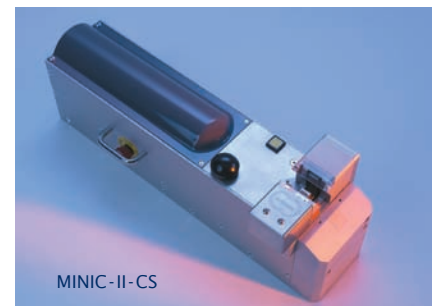
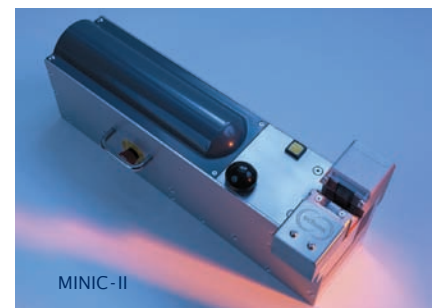
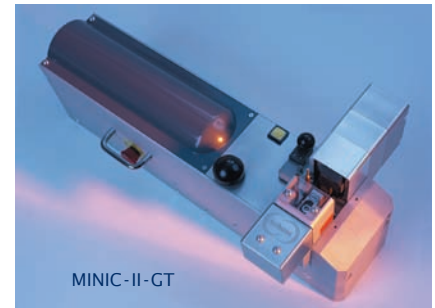
### Stock Management

- ✓ Simplified stock management due to reduced number of parts



Your requirement –  
our solution

# MINIC-II-CS



## The Peak of Process Reliability

The basic version of the MINIC-II can be expanded to include a cutting system. This facility eliminates the possibility that splices with insufficient strength are further processed when manufacturing wire harnesses.

If the process monitoring system recognizes an error related to welding time or splice height after welding, the wire splice will be arrested in the working area of the machine. The splice will only be released after the cutting system has been engaged, and the splice can be removed.

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