# Ultrasonic Welding Line Is Flexible and Energy Efficient

Herrmann Ultrasonics has been setting technical benchmarks in the ultrasonic welding of thermoplastics for 50 years. At MD&W West 2011, the company will be presenting a completely new generation of machines—flexible and energy efficient. Because every welding application is different, the HiQ line adapts to all requirements with modular flexibility.

Ultrasonic welding of plastics is an intricate task. Each application is different and places different requirements on the complex interplay of factors. Acoustic waves—or ultrasound—are converted into mechanical vibrations to generate molecular heat. The weld process is controlled by sophisticated control software and must be adapted to the geometry and condition of the welded parts, which are made from amorphous or semi-crystalline polymers. Each welding tool, the sonotrode, is unique, as it is adapted to the application at hand.

The new HiQ generation of machines from Herrmann Ultrasonics adapts perfectly to this complexity. The product line addresses various customer requirements like never before and clients will find the right machine to suit their application, market, and budget. Thanks to intelligent output and equipment classifications, the HiQ offers a wealth of options and variants in both the machine environment and the software. Users can now configure welding applications in a more targeted and individual manner. Every one of the new HiQ machines satisfies Herrmann’s defined standard of reproducible high-quality welding with a stable and robust machine. Visualization of the welding process is accomplished in a user-friendly touch screen display. The machines are equipped with proportional valve technology and a position measuring system as standards. The safety concept meets all relevant

worldwide standards. Intuitive software menus electronically control all aspects of the weld process. The software is also Unicode-compatible for easy language adaptation.

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