



Press release  
05.08.2019

## Seal packaging sustainably using the new digital ultrasonic generator

### SONOTRONIC Nagel GmbH at FachPack 2019 (Hall 1, Stand 1-121)

The key word of sustainability is gaining more and more importance in the packaging industry. The aim is not only to save material or use recyclable films, but the packaging processes must also be optimised. The use of ultrasound technology more than anything else is ideal for sealing packaging. Thanks to the short cycle times and the use of cold tools, the energy consumed for ultrasonic welding is up to 80 percent less, depending on application, compared with thermal methods. Moreover, the innovative technology also enables even monofilms, such as recyclable mono-PE, to be reliably and tightly sealed, without damaging the film or visually impairing the seam. Using ultrasound also reduces production waste, because product adhesions in the sealing area are simply “shaken off” owing to the action of ultrasound. The weld itself is much smaller – for one pack this may be only a few millimetres but when producing 80 bags per minute, for example, the result is a considerable saving of material at the end of the day.

With digital ultrasonic generators, cycle times may be reduced further, because they start oscillating more quickly compared with their analogue predecessors. The latest generation of CE-tested ultrasonic generator from SONOTRONIC, with its fully digital control, also provides great precision in data capture. It can be integrated into packaging lines via an industrial Ethernet interface (Profinet); the housing is made from stainless steel and can be incorporated in control cabinets.

Ultrasound is also suitable for continuous sealing processes as found, for example, in fin seals in horizontal and vertical tubular bag machines. Here too, the roll seam tools mounted on one side are not heated but rather made to oscillate at a frequency of 35 kHz – the film heats up as a result of the surface friction in the sealing area, caused by the 35,000 oscillations per second and the pack contents are thus not impaired by heat. The ERM ultrasonic roll seam module from SONOTRONIC has no interfering contours, meaning that the roll seam sonotrode mounted on one side, can be fitted directly underneath the filled bag. SONOTRONIC will be exhibiting this and other ultrasonic solutions for the packaging industry at this year’s FachPack.

### SONOTRONIC Nagel GmbH

With innovative energy and always with an eye to quality, we at SONOTRONIC Nagel GmbH, design and produce machines, components and systems for joining plastics by ultrasound. Our products are used world-wide by well-known OEMs in the manufacture of plastic interior and exterior parts. Above and beyond this, SONOTRONIC also develops and manufactures Hi-Tech ultrasonic systems for the packaging, foodstuff, textile, medical and environmental industries. As a strongly developing technology company we work with more than 350 employees at the headquarters in Karlsbad, as well as in our branches in Spain, USA and China.

SONOTRONIC Nagel GmbH  
Becker-Görling-Straße 17-25  
76307 Karlsbad-Ittersbach,  
Germany  
Phone: +49 7248 9166-0  
Fax: +49 7248 9166-144  
[www.sonotronic.de](http://www.sonotronic.de)  
[info@sonotronic.de](mailto:info@sonotronic.de)

Press contact:  
Heidi Ochs  
Head of Marketing & PR  
Phone: +49 7248 9166-268  
[h.ochs@sonotronic.de](mailto:h.ochs@sonotronic.de)



© Copyright SONOTRONIC Nagel GmbH  
Caption: Digital ultrasonic generators