

# Press release

Application - shock absorbers for furniture

32TC13  
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Telsonic torsional technology for reliable and leak-proof welding, including oil-covered objects

***Text and images also at [www.pressearbeit.org](http://www.pressearbeit.org)***

## No frothing!

**(Erlangen) For the reliable seal welding of shock absorbers for the furniture industry a machine and equipment manufacturer uses Telsonic's torsional ultrasonics technology. Thanks to this unique process the ABS shock absorber cylinders can be reliably seal welded without causing the oil to froth and air to enter. Any air entering would have a negative impact on the function and service life of these drawer dampers which are produced in their millions. That would spell the end of quietness in the households of this world.**

"Because the SONIQTWIST® torsional ultrasonics welding initiates a torsional movement rather than a linear 'hammering' one as in longitudinal welding, the oil remains calm and does not start to froth", explains Wolfgang Ott, head of the department for plastic welding at Telsonic GmbH in Erlangen. Frothing oil causes air to enter the cylinder, which would have a negative impact on the function of the shock absorber. Millions of these so-called drawer dampers, which are made of ABS plastic and are about 200 millimetres long, are used in the furniture industry and ensure that drawers in kitchen and livingroom furniture close quietly.

## Reliable seal welding in oil baths

The shock absorbers are manufactured in a fully automatic production line. Part of the process requires them to be seal welded gas-tight at the bottom and top. Since 2008, that operation has been performed by torsional welding machines from Telsonic which are integrated into the production plant. Once the base has been welded, the tube with the piston, the spring and the piston rod is fitted and the unit is overfilled with oil. This is followed by the second seal weld at the lid, in the oil bath and through the oil.

"No air must get into the cylinder; for this reason the oil is overfilled to above the edge of the shock absorber tube", explains Mr Ott. For torsional ultrasonic welding the oil on the surface does not

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present a problem. The process is accomplished in a few milliseconds - totally sealed from the air. The Telsonic SONIQTWIST® torsional welding system is integrated into a special machine and reliably seal welds the lid so that it is leak-proof for oil and gas.

**Sealed shock absorbers make sure the house remains quiet**

Two counteracting converters with two drives quietly and evenly apply the 1000 Watt output from the latest generation generator to the welding zone. The oil does not react at all and does not start to froth. Thus millions of durable shock absorbers all over the world prevent the drawers of furniture in people's homes from closing with a loud bang.

*350 words, 2,580 characters*

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**((Company information on Telsonic AG))**

**Pioneer and technology leader in Switzerland**

Telsonic AG is a pioneer in ultrasonics technology. The company, which was founded in 1966, has subsidiaries in Germany, England, South-East Europe, China and the USA, is part of a joint venture in India and has agencies in many countries. Today, TELSONIC is one of the leading ultrasonics companies worldwide and owns numerous patents. Ultrasonics technology is used for welding, cut-and-seal welding, cleaning and screening as well as in chemical processes and packaging. Having introduced the Torsional Welding Power Wheel, Telsonic has again achieved leadership in technology. The technology has spawned new solutions in many automotive engineering applications and has paved the way for numerous potential savings.

**Register of TELSONIC AG images. Download [www.pressearbeit.org](http://www.pressearbeit.org)**

<p><b>Image - shock absorber</b></p> <p>Image No. 32-01 TC_.jpg.</p>	<p><b>Image - machine</b></p> <p>Image No. 32-02 TC_.jpg.</p>
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