50 Years of Bonding Competence

Ultrasonic Welding. On the occasion of its anniversary, Herrmann Ultraschall engineering company held its first Ultrasonic Technology Days. Apart from many workshops, demonstrations and personal talks, the enterprise celebrated 50 years of existence in a worthy setting.

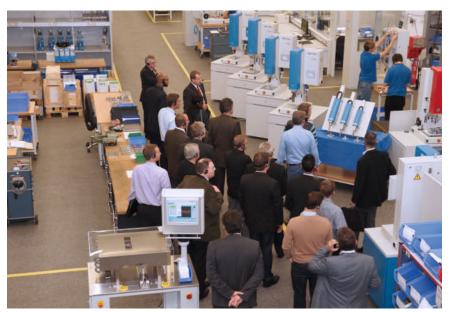


Fig. 1. At the Technology Days, the individual groups of visitors were given the opportunity to take part in guided tours to have a look at the production facilities (photos: Herrmann Ultraschall)

hen a person celebrates their 50th birthday, then they can look back on some ups and downs in their lives. They will certainly enjoy looking back on the successes they had, and think back with some pride on the hard and difficult times they handled well. Walter Herrmann, founder and partner of Herrmann Ultraschalltechnik GmbH & Co. KG in Karlsbad, Germany, probably felt like this in the beginning of November. However, it was not his own birthday he celebrated, but that of his enterprise. The idea to produce ultrasonic frequency via a machine generator at low voltage range was the initial idea underlying the business Walter Herrmann established with the support from his wife Ingeborg in

Translated from Kunststoffe 1/2012, pp. 14-15 Article as PDF-File at www.kunststoffeinternational.com; Document Number: PE110958 1961. Following several failed trials, the first successful test run was in 1962. At first, the company sold the generators for ultrasonic cleaning units merely, later it was complete machines too. When the first ultrasonic welding plants from America entered the market at the end of the sixties, Walter Herrmann saw the potential included for his own enterprise. At the beginning, customers' machines were equipped with the generators, but as early as at the 1972 Hanover fair, the first generation of ultrasonic welding units "made by Herrmann" were introduced, featuring the same principle according to which the current plants still operate today.

Workshops and Demonstrations

Approx. 350 visitors accepted the invitation of Herrmann Ultraschall and came to the company's site in Karlsbad on November 3 and 4. The central event of the two-day forum were the 12 workshops that looked into various aspects and subjects of ultrasonic welding, starting from basic information for beginners, up to the economic aspects of this bonding technique. If compared to other meetings of this type, two things were striking at the Ultrasonic Technology Days: First, the workshops, which took roughly 45 minutes, were offered at different times, four times a day, so that visitors could make their own daily schedule according to their personal demands (Fig. 1). Second, the organizers included three live demonstrations into the series of workshops. The number of interested visitors was thus restricted, which did not only facilitate a close-up look on the machine, but also made it easier for visitors to talk to the staff in charge. The "Ultraschallschweißen live" demonstration of ultrasonic welding offered hands-on options, and, by us-



Fig. 2. The high-speed calendar was one of the highlights at the Technology Days



Fig. 3. Two generations of the Herrmann family of entrepreneurs (left to right): Son Thomas with his parents Ingeborg and Walter Herrmann, and his sister Sabine Herrmann-Brauss

ing examples from practical application, explained the main parameters of bonding technology, ranging from machine set-up, via plant design, up to evaluation of the welding results.

The "Ultraschallsiegeln live" demonstration of ultrasonic sealing was interesting to visitors from the packaging sector, mainly. At the technology center for packaging, a machine was introduced designed for the production of tubular bags. Flat and gusseted bags served to show the differences between vertical and horizontal seals here. The workshop also informed visitors on the sealing of different types of seams, bag geometries and valves, as well as on the collection of process data and its evaluation.

At the center of the third live demonstration was a high-speed calendar, used for welding non-wovens applied, for instance, in baby diapers or in filter industry (Fig. 2). Supplied on rolls, the non-wovens allow for welding to be continuous, and operate on stationary or rotating sonotrodes, or cylinders.

Multimedia Ceremonial Act

To make the 50th anniversary of the enterprise an experience never to be forgotten, the organizers decided to celebrate the evening event at the "Schwarzwaldhalle" in Karlsruhe. The Herrmann family personally welcomed each of the 750 guests, who saw a modern multimedia performance by Enno-Ilka Uhde. The artist combined music, acrobatic and artistic elements, as well as video clips, representing the highlights of the history and technology of Herrmann Ultraschall, to give a spectacular show. Walter and Ingeborg Herrmann were also honored at the event, for leading the company for more than 40 years. The couple has passed on their responsibility to the next generation: their son Thomas Herrmann is a member of the management, and their daughter Sabine Herrmann-Brauss works in the finance sector (Fig. 3).

The Herrmann enterprise shows that it is well prepared for the future, not only due to developments in technologies. Being one of the main subjects of the year 2011, sustainability in an enterprise is certainly an issue of economy and technology, but it is also a matter of handling the issue of leadership to stand up against future challenges. And as far as this is concerned, the engineering company is in a very good position for the next decades. ■

Andreas Stein, editor

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