

PRESS RELEASE

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The Steintl-Group at the FAKUMA 2021 / Hall 4 - 4128

Large machines for thermoplastics, Bonding technology for the e-car production and Biomaterials new in focus.

The Steintl Group, headquartered in Altdorf-Landshut / Bavaria, has grown into a broadly diversified group consisting of seven companies within the last ten years. Three companies will present their current highlights at FAKUMA in Hall 4 - Booth 4128. Besides LWB-Steintl-machinery, these are the adhesive bonding technology supplier DREI BOND GmbH/Ismaning and the biomaterial manufacturer Biofibre GmbH / Altdorf-Landshut.

LWB-Steintl machinery: New large vertical machines for 2C parts production

LWB-Steintl machinery, established as one of the leading suppliers of elastomer injection molding machines and presses, is increasingly using its vertical machine know-how for thermoplastic applications as well. As an example of this, LWB presents a large vertical machine with a clamping force of 12,000 kN for the production of 2-component automotive components - but only virtually due to its size and the space available on the booth. Its exact type designation is VR 12000 / 1097 / 220 Dual S. The technical concept is based on the VR (vertical frame) series, which holds a special position between the tie-bar-less C-frame machines and the conventional tie-bar machines.

The clamping unit consists of closed loop portal frame elements made of thick semi-finished sheet steel plates. This allows maximum flexibility in sizing and matching to specific production requirements.

The presented machine is combined with a horizontal rotary table with a diameter of 2.7m, which can accommodate molds with a platen size of 2200 x 1600 mm or 2000 x 1800 mm and weights of up to 27 tons. The horizontal orientation of the rotary table offers as major application advantages that no wear-promoting weight influences act unilaterally on the rotary table bearing and the rotary media feeds. And that the clamping force is applied symmetrically and vertically via 4 pressure modules under the rotary table (Fig.1).

Additional advantages of the VR concept are:

- > The easily accessible position of the two injection units. They are located on top of the portal frame modules.
- > The significantly smaller footprint compared to conventional horizontal machines.

> The comparatively less complex molded part manipulation by standard industrial robots, which are positioned next to and not on top of the machine.



Photo: LWB-Steinl

Fig.1: A vertical portal frame rotary table machine with two thermoplastic injection units injecting from above has proven to be an advantageous alternative to conventional 2C horizontal machines at a globally active automotive supplier.

DREI BOND: Sealing and Bonding Expertise for the e-Mobility

DREI BOND GmbH in Ismaning near Munich, which has been part of the Steinl Group since 2013, develops adhesives and sealants for high-volume production. Based on more than 40 years of experience, system solutions are offered - starting with the development of adhesives and sealants to the design and manufacture of reliable application systems. Applications are not only bonding and sealing, but also oiling and lubricating of bearings, bores and threads, or the grouting of sealing rings.

In addition to the equipment development, a special focus of DREI BOND is on the application-specific development of one- and two-component adhesives and sealants, which is driven forward by an in-house team of chemists. The current focus here is on sealants with wide-ranging chemical resistance for electric vehicle drives and battery systems.

Due to this optimal combination of adhesives and sealants as well as the matching application technology, all from DREI BOND, it has been possible to supply not only the sealants for drive- (electric motor + gearbox) and battery-systems to several well-known, globally producing manufacturers of electric vehicles, but also the matching application systems designed and manufactured by DREI BOND.



Photo: Dreibond

Fig.2: Dreibond Fakuma-exhibit: Adhesive application system for sealing a rear axle drive unit of the Audi E-tron.

Biofibre: Biomaterial Expertise since 2011

Biofibre GmbH, founded by LWB-Steinl in 2011 and based in Altdorf/Landshut, develops, produces and sells natural fiber-reinforced plastics for the thermoplastic processing with the focus on injection molding. The plastics produced are characterized by high eco-efficiency. It results from the production without using fossil fuels and the high proportion of integrated recycled material and natural fibers. The alliance with Lower Saxony-based Naftex GmbH, linked with Biofibre through a controlling Interest acquired in 2019, ensures the compounding of the biofibre materials in industrial quantities.

At FAKUMA, Biofibre will present an overview of its range of sustainable plastics and exemplary products made from them.

The plastics range consists of the following product groups:

- > Biofibre® Silva (bioplastic with natural fibers; biobased and biodegradable),
- > Biofibre® Sustra (recycled PP with natural fibers),
- > Biofibre® Solva (bioplastic, biobased and rapidly biodegradable),
- > Biofibre® Lenta (bioplastic with mineral fillers, biobased and durable).
- > Biofibre® Customized (special developments according to customer requirements).

A Biofibre® Silva variant optimized for processing on 3D printers will be presented as a trade show novelty, which will be demonstrated by means of product examples (Fig.3).



Photo: Biofibre

Fig.3: Protection against deer browsing produced by 3D printing from Biofibre® Silva.



About the Steinl-Group

Founded in 1962 by Alfred Steinl, the company is now managed by the second generation of the Steinl family and is one of the world's leading manufacturers of rubber presses and injection molding machines. The product portfolio includes the complete range of rubber and plastic injection molding machines, from vertical C-frame machines to vertical 4-column or plate frame machines, to horizontal machines in column and C-frame design.

LWB-Steinl currently employs around 250 people and builds around 500 machines per year.

In total, the Steinl group of companies currently consists of eight companies, which are divided into four divisions. The largest division is Mechanical Engineering, consisting of LWB Elastomer Injection Molding Machinery, LWB Automation the batch-off cooling system manufacturer Prodicon Ind. Srl and the injection molding machine manufacturer URP (United Rubber & Plastic Machinery Ltd in Langfang/China). In the stamping technology division, STG-Carrier GmbH produces metal scaffolding strips for automotive sealing profiles. The third division is Sealing and Bonding Technology with Dreibond GmbH, a manufacturer of adhesive systems and the necessary application technology. The fourth division is biomaterial production with the company Biofibre, in Altdorf and the sister companies Naftex GmbH in Wiesmoor / Lower Saxony.

More under: www.lwb-steinl.de

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