

LUMAG invests in a modern production line for antisqueal shims

LUMAG - the global manufacturer of brake pads under the Breck brand, located in Budzyn, Wielkopolskie, once again raises the Automotive industry standard. With an investment of PLN 14 million the company has extended its offering by introducing an ultra-modern production line for shims. This investment allows not only an improved process of manufacturing, but also will have influence on the innovation of offered products in the future.

Shims are one of the key elements of a brake pad's structure which dampens vibration and prevents brake squeal. The previous method of manufacturing required many different presses and the process itself was complicated. Based on the solutions provided by our machinery partner, Bruderer (Swiss manufacturer of industrial machinery), the R&D Department at Lumag has developed a new method of shim manufacture.

Previously machines were used that at any particular time could carry out only one process of the total pressing activity. As a result, total process is less efficient in terms of economy because of the necessity to reinforce the tooling and have many different presses.

The investment also creates an opportunity for the Breck brake pad manufacturer to improve its offering to the market. A modern production line for shims will be perfect support for the very well equipped dynamometer used for testing brake pads. It will, therefore, be possible to manufacture innovative products at the trial stage and to fully analyze them, paying special attention to functionality.

„Technology developed by Lumag assumes creation of the finished good with one machine. As a result, the complicated logistics of coordinating many intermediate products manufactured on several separate devices, will be replaced by one machine. In addition, by concentrating the production inside one plant in Budzyn it is possible to control the quality of the finished goods, which will have a direct impact on improving the reliability of the manufactured elements” – explains Marek Paszkiel, Head of production at Lumag.

Since the beginning of its manufacturing activity, the company has always placed at the heart of its ethos an emphasis on innovation. The best example is the establishment in 2003 of the Breck brand of products designed for passenger car vehicles, in which the Compress Control System was a key element.



„We believe that putting attention on every detail and constantly searching for new solutions allows us to offer products which are able to meet even the most demanding customer’s requirements. By using this unique method for shim production we have confirmed our continuously developing excellence in manufacturing – says Marek Żak, CEO.

In connection with implementation of the project amounting to PLN 14 milion Lumag purchased and has implemented a new production line for shims. It is composed of a BSTA 510 press and peripheral devices: decolier unit which straightens the tape of material on machine input, automatic receipt, packaging and labeling. The manufacturer of the equipment (the Swiss company Bruderer) is an unquestionable world leader in the production of high performance punching presses, and by using the unique construction solutions which have never before seen in other machines of this type in the world.

„Apart from the dampening of vibration and the prevention of brake squeal, shims also offer expanded thermal insulation properties by providing an additional barrier against excessive heating of the brake caliper and brake fluid. Shims are one of the key elements in a brake pads structure, and are usually made using metal plate of thin thickness (approximately 0,4 mm) which is covered , on one side or both sides, by a thin layer (approximately 0.15 mm) of rubber. Another key property is additional vibration damping provided by the multi-layer elements resulting from the adhesion of the metal and rubber. The addition of shims to a brake pad is an expensive solution which may increase production costs by 10-20%, which is why not every manufacturer of brake pads uses it. Breck brake pads are equipped with shims covering 90% of the range” – Tomasz Orłowski, R&D manager.