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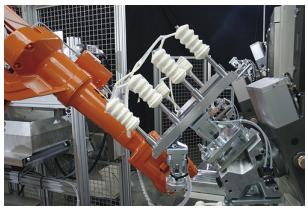
Klöckner Desma: Fully automatic production of industrial spring aids

The demand for high performance industrial spring aids is increasing year by year firstly, due to increasing prosperity in emerging markets, like Brazil, India and China which has resulted in a growing demand for mobility, especially for cars. The second reason for the rising demands of PU spring aids is the ongoing substitution for rubber by polyurethane.

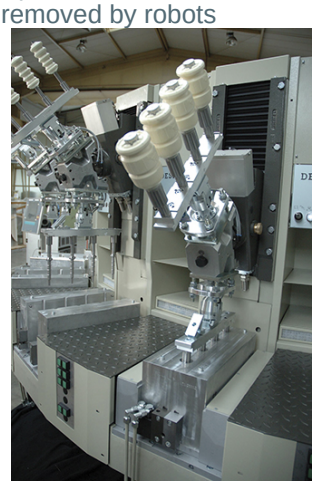
Finished industrial spring aids

DesmaTec, a division of **Klöckner Desma GmbH,** located in Achim near Bremen, Germany, is focused amongst other things on the manufacture of production equipment for this application. At the company's exhibition stand at K 2010 the production of PU spring aids will be demonstrated on a single mould carrier.

Spring aids are injection moulded on big rotary tables. The moulds are designed with multiple cavities. Depending on the product sizes, up to eight cavities could be injected in a single mould. The release agent will normally be sprayed with electrostatic guns, adapted on robots. After opening the mould, the runner systems are cut, also by robots so no manual work is necessary. After these processes the dampers are de-moulded fully automatically before passing an injection printer for labelling production day codes "on the fly". The tier one suppliers need that production code for their monitoring and in case of claims. Once printed, the parts are correctly sorted by a conveyor system, adapted on the rotary table. After finishing the parts they are ready for shipping.



Sprues and runners are removed by robots



Production of spring aids on a Bumperspeed machine

It's not only possible to produce springs aids for the automotive industry on the so called **Bumperspeed** machines. DesmaTec customers are also producing parts for the crane and elevator industry. In this industry customers often request to place inserts in the bumpers to allow their installation in-situ. Often steel plates have to be foamed into the bumpers.

Special developments regarding adaption and sealing technologies allow that to happen. Often camera systems are installed into the manufacturing equipment to ensure the correct insert is placed in the right mould and to avoid crashes in the mould.

Another unique selling point of the Desma equipment, especially the low pressure mixing technology, is the fast component and

colour change from shot to shot. Up to four main components and four colours/additives or catalysts can be driven at the same time. It is possible to run two polyols and isocyanates in parallel to serve the customers with two different qualities. The individual dosing of four additives, colours or catalysts creates a vast number of setup possibilities, says Desma.

Adresse:
http://www.gupta-verlag.com/polyurethanes/news/k-2010/8841/kloeckner-desma-fully-automatic-production-of-industrial-spring-aids