

CSM glass fibre cutter for longer service life

The German company Hennecke GmbH from Sankt Augustin has launched a new cutting unit for CSM processing plants with chopped fibreglass metering system that has a ten times longer service life than other processes on the market. The system uses a new cutting technique, that significantly reduces downtime, maintenance, and costs.

The use of chopped fibreglass in the form of glass fibre rovings when producing composite parts using the PU spray process as a continuous or selective reinforcement is often indispensable. Fibreglass rovings make for less expensive base material than semi-finished products. Moreover, less glass is wasted during processing and they do not have to be preformed as semi-finished products do. In the CSM process, glass fibres are cut to the desired length with a cutting unit that is attached directly to the mixhead. The Venturi effect that occurs when the fibres are metered directly into the spray jet provides optimal wetting and saves the user time since the mixhead does not have to be cleaned with solvents as is absolutely necessary in an integrated fibreglass metering process.

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Customary cutting units cut the glass fibres to the correct length by using a knife roller which is next to a press roller. Due to the system, the knife roller and the integrated blades suffer from a relatively high degree of wear and tear, which is first made visible by the changed length of the chopped fibreglass and at a later stage can even lead to blades breaking. In the worst case, broken bits can end up in the part. Depending on the application, the roller has to be changed after less than a hundred kilograms of glass fibres have been cut. In cyclical or large-volume production this can result in downtimes and a loss of working time because of subsequent maintenance. In the past, great importance was placed on changing components as fast as possible but any change under time pressure involves additional risks that jeopardise smooth production.

Hennecke is now presenting a new cutter which is attractive in terms of service life and ease of maintenance, and thus enables fibre-reinforced composite parts to be produced in a more reliable and cost-efficient manner. This is thanks to a completely new cutting process that needs neither a knife roller nor blades and therefore eliminates the main cause of downtime when cutting fibreglass rovings. The service life compared to standard cutters is increased by over 1,000 % and furthermore the process is only interrupted when the rovings are changed, says the company. The formation of atomised spray depositions is prevented thanks to the unit's geometry, which has been tailored to suit the company's spray mixheads. According to Hennecke, thanks to the modular design, the cutter can be retrofitted to existing CSM spray mixheads in a fast and easy manner, regardless of whether these are already equipped with a chopped fibreglass metering system.

Adresse:

<http://www.gupta-verlag.com/general/news/technology/11075/csm-glass-fibre-cutter-for-longer-service-life>