

News release

Distinguishing PA6 from PA66 at the push of a button: trinamiX adds new application for plastic sorting to its Mobile NIR Spectroscopy Solution

04 March 2021 - Ludwigshafen, Germany - trinamiX, a wholly owned subsidiary of BASF SE, now supports the reliable differentiation between polyamide 6 (PA6) and polyamide 6.6 (PA66) with its Mobile Near-Infrared Spectroscopy Solution. Within seconds, plastic waste from the two polyamides can be sorted using a handy measuring device as part of trinamiX's solution. With this new application, trinamiX is responding to customer wishes and expands its broad offering for plastic sorting.

PA6 and PA66 belong to the most sought-after engineering plastics. Thanks to their robustness, they are suitable for a wide range of applications – from fishing nets to resilient components. Since PA6 and PA66 have similar properties, they are used interchangeably in numerous applications – and it is virtually impossible to distinguish them with the naked eye. At the same time, the separation of PA6 and PA66 has gained traction in recent years in light of growing requirements within the recycling industry. As a result, the production of high-quality single-grade plastic recyclates - including PA6 and PA66 - is becoming increasingly lucrative.

"For many recycling companies, sorting PA6 and PA66 previously involved a cumbersome analysis process – and, therefore, proved often times neither profitable nor feasible," explains Adrian Vogel, Manager Sales and Business Development Spectroscopy Solutions at trinamiX.

"With our new application, recycling companies can quickly determine the polyamide type and process the waste streams accordingly."

Besides the recycling industry, plastics processing companies who rely on PA6 and PA66 in their products also benefit from trinamiX's new application. They are now enabled to perform a clean separation of PA6 and PA66 production rejects or waste. In-house recycling processes can thus be geared towards an optimized and more efficient use of valuable resources.

In addition to distinguishing PA6 and PA66, trinamiX Mobile NIR Spectroscopy Solution can already identify all common plastics - from classic polyolefins such as PE and PP, to PET (polyethylene terephthalate) and engineering plastics such as ABS (acrylonitrile butadiene styrene). Recycling companies as well as manufacturers, traders and processors of goods made from recyclate benefit from a flexible and mobile solution that offers user-oriented applications for the sorting of plastic components and packaging materials.

Launched last year, trinamiX's solution combines robust hardware with intelligent data analysis and a mobile app. NIR spectroscopy is a proven technology that trinamiX has integrated into a

portable format for on-site analysis. In doing so, trinamiX relies on cloud-based data processing, which ensures continuous development of the solution – there is no need to replace hardware. This way, trinamiX can continuously develop new applications and react flexibly to new challenges in the field of plastic sorting – while working closely together with customers as in the case of its new PA6/PA66 application.

About trinamiX

trinamiX GmbH develops and sells cutting-edge 3D vision and infrared sensing solutions for use in both consumer electronics devices and industrial designs. The company's products enable humans and machines to better capture data, with the goal of understanding the world around us. This results in improved decision-making as well as stronger biometric security. trinamiX, based in Ludwigshafen, Germany was founded in 2015 as a wholly owned subsidiary of BASF SE. The company employs 170 people worldwide. Further information on www.trinamixsensing.com.

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