

News release

NPE 2024: trinamiX presents its full portfolio of plastic and textile identification solutions for packaging design, sorting, recycling, and quality control

April 23, 2024 – Ludwigshafen, Germany – At NPE 2024, the Plastics Show in Orlando, Florida, trinamiX GmbH, a leading provider of mobile spectroscopy solutions and subsidiary of BASF, will showcase their versatile plastics and textile identification technology. From designing plastics packaging that is sortable, to quality control for in- and outgoing plastics, to cleaner sorting for improved recycling; mobile identification of plastic and textile types adds benefits across the supply chain. Meet trinamiX at BASF booth #S19033 from May 6-10, 2024.

Join Brian Schmatz, Business Development and Sales for trinamiX in North America, for his talk about “How Companies are Investing in their Recycled Supply Chain with Mobile Spectroscopy” on **May 8, 2024, at 10:00 AM at the sustainability stage #S38171**. He is sharing insights about the growing demand for recycled plastics and how accessible identification technology can help fulfill this demand. Case studies include collection programs for hard to recycle plastics as well as quality control at plastic recyclers and manufacturers.

trinamiX Mobile NIR (Near-Infrared) Spectroscopy Solutions: Accessible plastic identification

trinamiX enables flexible identification of plastics and textiles at the push of a button. The solution consists of a robust, mobile NIR spectrometer, an easy-to-use app backed by advanced cloud data analysis and a customer portal to manage results, download reports, and export data. The plastic identification solution can reliably identify over 30 types of plastics including consumer plastics like HDPE, LDPE, PP, PET, PS, PVC as well as engineering plastics like PA, ABS, PC, PLA and quantify blends of PE and PP.

The textile identification solution supports a wide range of fiber materials used in clothing, furniture, and household goods like, acrylic, cotton, PA 6/6.6, polytrimethylene terephthalate (PTT), polyester, polypropylene (PP), silk, sisal, viscose, and wool. In addition, textiles that are made from more than one material can also be identified.

Mobile quality control along the manufacturing and recycling process

Quality control in plastic production and recycling facilities is essential for producing high-quality products. A key element for efficient recycling of plastics is the sorting of mixed plastic waste into pure waste streams, as impurities can compromise the quality and integrity of the recycled products. From checking incoming materials to approving bales of sorted plastics or textiles, trinamiX makes quality control simple and easy.

Better sorting – Differentiating PA 6 and PA 6.6

Polyamide fibers, commonly known as nylon, are the base for various textiles, including functional apparel, outdoor and sports gear. The two most common types of polyamides, PA 6 and PA 6.6, are difficult to identify and separate and are not collected by curbside recycling programs. These factors lead to a low recycling rate of polyamides. Closing the loop on these materials is a crucial step towards a more sustainable future. With the ability to differentiate PA

6 and PA 6.6, trinamiX helps brands close this loop. For example, BASF has utilized trinamiX technology to qualify PA 6 waste streams for their new loopamid® product, the first polyamide 6 entirely made from textile waste. With loopamid, BASF creates new and highly sustainable materials from end-of-life textiles. The fashion brand Zara has turned the material into a jacket made entirely from loopamid. Following a “design for recycling” approach, all parts, including fabrics, buttons, filling, hook and loop and zipper are made from loopamid. The jacket will be on display at NPE.

Design for recyclability

Packaging Design has a significant impact on a product’s sortability, and therefore recyclability. If a container cannot be identified properly by NIR, it has high probability of ending up in a landfill. Packaging features like color, labels, additives and more can impact a packages ability to be identified. With trinamiX, brands can assess the impact of these features to provide insight into product recyclability early in the design process. By designing packaging with recyclability in mind, manufacturers can help to reduce the amount of plastic waste that ends up in landfills. This is a crucial step towards creating a more sustainable and circular economy.

More information: www.trinamiXsensing.com

More information about BASF at NPE: www.basf.com/npe2024

About NPE 2024

trinamiX at BASF booth

Date: May 6-10, 2024

Location: Orlando, Florida,
Orange County Convention Center
Booth location: S19033

Talk: “How Companies are Investing in their Recycled Supply Chain with Mobile Spectroscopy”

By: Brian Schmatz

Date: Wednesday, May 8, 2024

Time: 10:00 AM - 10:30 AM

Location: S38171

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About trinamiX

trinamiX GmbH develops cutting-edge biometric and mobile NIR spectroscopy solutions, which are used in both consumer electronics 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 over 240 people worldwide and holds more than 600 patents and patent applications.

Web: www.trinamiXsensing.com

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