Innovation happens naturally, ask Stanyl



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Stanyl is a high-performance polyamide with a number of unique features: a very high melting point (300° C), superb wear resistance and excellent flow properties. It's what makes this DSM product eminently suitable for applications that involve exposure to high (peak) temperatures, such as car components. Stanyl is produced here at Chemelot before being processed in compounding facilities all over the world. Since the very beginning, Chemelot's innovative community culture has played a major role in the development of this product. Stanyl's researchers work in close cooperation on the Chemelot Campus to develop new products and processes. The involvement of plant personnel, Stanyl's marketing managers and external companies such as engineering firms, ensures that every possible angle of each new development is considered. Wilma Nijenhuis, Research & Technology manager of Stanyl comments: "This form of cooperation, with such short communication lines, is really unique. Chemelot has all the facilities that we need to realize the best products for our customers."





Stanyl, developed and manufactured here

Stanyl was created at the University of Twente (The Netherlands). However, DSM soon realized the value of this product, embarked on its development and went into production. Stanyl turned out to be a huge success, and the Chemelot site proved to be a good choice. "Here we have everything that we need to manufacture a top quality product at a minimum cost per tonne: expert personnel, reliable utilities like power and waste water treatment, in addition to well-appointed laboratories and a dedicated team of site contractors. This enables us to utilise state-of-theart technology and achieve highly stable production with high on-stream times", commented Loek van Everdingen, Program Manager at Stanyl.





Best in class, acknowledged globally

The explanation for Stanyl's success is simple; it is a unique product with properties that are very special for a polyamide. This has enabled Stanyl to carve out a name for itself in a relatively short time, so much so that the product is now being used by global brands such as Volkswagen, Peugeot, Nokia and Sony Ericsson. But the unique properties alone were not enough to ensure its success - its reliability and exacting quality have just as important a part to play. This is realized by a high-quality plant and well-trained staff, as well as ongoing research into new product and process development. A task that is carried out by Stanyl's researchers on the Chemelot Campus, but always in cooperation with customers.





Trusted by the best

Thanks to its unique qualities Stanyl is suitable for a wide variety of applications for which high temperature resistance is essential. Stanyl is also often used in applications where glass fibres and other materials are added to plastic, such as connectors and plugs for mobile phones and laptops. This is done in DSM Stanyl's compounding plants in Belgium, the US and China. Because of the excellent infrastructure and transportation networks around Chemelot, the company can ensure that these plants receive a continuous supply of Stanyl granules.





Stanyl is now working on...

It is only by listening to its customers that Stanyl can gain a thorough understanding of the market and its requirements. For example, the connector industry is setting ever higher demands on the plastics it uses. There is also a continuous trend towards ever smaller and thinner components, that are still robust enough to not break, for example if a product is dropped or knocked. This has prompted Stanyl to develop two new grades: Stanyl High Flow and Stanyl Super Flow, the best flowing plastics in the world. The company also undertakes an ongoing search for innovative applications. One case in point is the use of Stanyl in the gears for Joysteer, a type of joystick that replaces the steering wheel, thus enabling people who are differently abled to drive a car. But attention is not just focused on innovative products and applications, process innovation is important too. It's the reason why the new Stanyl plant is fitted out with the latest technology. Many features are the result of experience gained in other plants on the Chemelot site, or are derived from the polymer and process know-how of the researchers and contractors on and around the site. It's this shared know-how that makes Chemelot such a solid basis for the success of DSM Stanyl, now and in the future.











