Enabling engineering for the impossible

**Covestro and Arcesso Dynamics launch breakthrough in solid-surface manufacturing**

* **New manufacturing technology is first-ever use of reaction injection molding (RIM) on aliphatic polyurethanes – previously considered impossible**
* **It quickly produces seamless, lightweight, durable and repairable materials**
* **It enables new combinations of performance and design freedom in applications including furniture, bathrooms, electronics, and casing**
* **Launched at K 2022 in Düsseldorf**

[Covestro](https://www.covestro.com), a leading polymer manufacturer, and [Arcesso Dynamics](http://www.arcesso-dynamics.es), a manufacturer of custom polyurethane parts, launch [Arfinio](https://solutions.covestro.com/en/highlights/campaigns/arfinio-technology-for-truly-seamless-solid-surfaces/?utm_medium=offline&utm_source=physical_mailing&utm_campaign=ca_arfinio&utm_asset=21806&utm_content=arfinio_launch_press_release)®, a breakthrough manufacturing solution, at K 2022 plastics trade fair in Düsseldorf, Germany. The solution is based on reaction injection molding (RIM) on aliphatic polyurethanes. Previously considered impossible, this technology enables manufacturers to benefit from new combinations of design freedom, functional performance, and sustainability in multiple solid-surface and injection-molded applications.

Arfinio® material is made by injection-molding of a combination of high-performance liquid polymers and unique minerals. This produces truly seamless shapes without requiring sheets. In this way, the technology combines the key benefits of aliphatic chemistry, injection molding, and solid surfaces: mechanical resistance, light-stability, and repairability, as well as low product weight, quick production, and improved design freedom.

These properties are now opening new possibilities in applications including an Estoli shower plate, and a luxury design chair. In bathroom furniture, Arfinio® provides a solution at least 50 percent lighter than traditional solid surfaces with improved wet slip resistance and increasing safety during installation and use. Its formulation can also be supplemented with antibacterial additives, enhancing hygiene on high-touch surfaces. In furniture, injection molding enables a quick production of complex, truly seamless structures. Finally, the thermal coefficient of Arfinio® makes it warm to the touch, and its texture and color can be customized. This also allows for backlighting in electronic applications.

Arfinio® also contributes toward a more circular, sustainable world. Its excellent impact, abrasion, and chemical resistance properties give it a long service lifetime. Additionally, as a monomaterial, it can be easily repaired by sanding or milled and recycled into new products.

Joan Miquel García Martinez, Senior Project Manager at Covestro: "We’re proud to have joined forces with Arcesso to bring the benefits of RIM-produced aliphatics to the market! Arfinio® will open new opportunities for a wide range of designers and OEMs, and we’re looking forward to exploring how it can be used in even more applications."

Ernest Montón, CEO Arcesso Dynamics: "It’s been great working with Covestro to bring our innovation for aliphatic PUR to life. Our partnership has already helped customers in several industries to solve key product challenges. Together, we’ll continue to develop exciting new Arfinio® products that are designed to meet our customers’ and end-users’ needs."

**About Covestro:**

Covestro is one of the world’s leading manufacturers of high-quality polymer materials and their components. With its innovative products, processes and methods, the company helps enhance sustainability and the quality of life in many areas. Covestro supplies customers around the world in key industries such as mobility, building and living, as well as the electrical and electronics sector. In addition, polymers from Covestro are also used in sectors such as sports and leisure, cosmetics and health, as well as in the chemical industry itself.

The company is committed to becoming fully circular and is striving to become climate neutral by 2035 (scope 1 and 2). Covestro generated sales of EUR 15.9 billion in fiscal 2021. At the end of 2021, the company had 50 production sites worldwide and employed approximately 17,900 people (calculated as full-time equivalents).

**About Arcesso Dynamics:**

Arcesso Dynamics S.L. is a Spanish medium-sized manufacturer of custom polyurethane products. It specializes in meeting the high technical requirements of demanding industries, and focuses strongly on research and development.

**Forward-looking Statements**

This news release may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro’s public reports, which are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.