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**Intelligent automation of the ISEC evo recycling machine**

**DynaShape® boosts productivity by ten percent**

**The more precisely the machine parameters can be matched to the input material, the higher the throughput and better the quality. PURE LOOP developed DynaShape® as an intelligent automation solution for the ISEC evo recycling machine to optimise settings on its own and maintain a consistent recycling process even when the feed material changes.**

Ansfelden/Düsseldorf, 10 October 2025 - PURE LOOP, a member of the EREMA Group, launches the next stage in development of the proven ISEC evo machine for recycling production waste at K 2025 in Düsseldorf. The new DynaShape® technology responds to changes in feed material shape and bulk density by automatically adjusting the machine to get the best possible results from the polymer. During exhaustive test runs that simulated different stages of production, including changes in the input material, PURE LOOP clocked an increase in productivity of up to ten percent.

**A stable recycling process that is easy to operate**

The ISEC evo has made its mark as a true material all-rounder over the past ten years. The integrated shredder-extruder combination with patented double feed ram system and conical transition to the extruder reliably processes clumps, guillotined rolls of film, film shreds, glass fibre-reinforced plastics and fibres into high-quality recycled pellets. Previously, an experienced technician was often needed to optimise the relevant machine parameters. Now, DynaShape® carries out this task automatically, ensuring that the machine operates consistently at maximum potential in all applications. This significantly reduces the time and labour required to get the best output.

"DynaShape® regulates our recycling machine to get the perfect settings. It does it as precisely as a professional technician with ten years of experience," says Manfred Dobersberger, Managing Director of PURE LOOP. "Our customers get the advantage of higher throughputs with consistent high quality and a noticeable reduction in operator workload. The technology is in a class of its own when processing challenging applications with fluctuations in feed material shapes and bulk densities; tasks for which the ISEC evo is predestined." These kinds of applications involve injection mouldings with material shapes ranging from start-up lumps to sprues and regrind, and PVC pipes, where production waste ranges from large sections of pipe to shavings (the fine chips produced during machining).

**The dynamic technology duo**

The core of DynaShape® is based on the interaction of two components. The proven double feed ram system, which now dynamically adjusts its speed to the rotor load, while the hydraulically adjustable intake apertures adjust automatically - instead of manually as before. Throughput is increased as a result, and so is the quality of the melt. Thanks to the consistent melt pressure and optimum extruder screw filling level, there is no oxidative degradation of the melt. What is more, the temperature of the melt can be trimmed automatically on a case-by-case basis by setting a maximum temperature for each polymer. In contrast to manual operation, DynaShape® reacts immediately to increases in temperature to make sure that the specified limit value is not exceeded.

Another practical feature is that the intelligent DynaShape® settings can be saved as a recipe. This means that the next time it is started up, the machine operates immediately with the optimum setting, further reducing the time required for manual intervention.

"We are positive that DynaShape® will unleash even more potential in the future. This technology is a significant move towards self-optimising recycling machines," says Manfred Dobersberger. The new automation solution from PURE LOOP will be available for all sizes of ISEC evo starting October 2025.

**Even more innovations from PURE LOOP**

K 2025 sees even more innovations launched by PURE LOOP. EcoGentle plasticising technology developed by sister company EREMA is now also available for polyolefins. The two companies worked together to optimise EcoGentle specifically for the ISEC evo machine, so it reduces energy consumption due to the lower temperature of the melt. PURE LOOP is also presenting an intelligent assistance system PredictOn:Plastification Unit. Developed by EREMA for monitoring the wear condition of the extruder screw and barrel, PURE LOOP extends the tool to monitor the conical intake zone between the shredder and extruder. This significantly increases the uptime of the ISEC evo machine. Especially when processing abrasive materials, such as injection moulded parts containing glass fibres, this system gives operators a decisive advantage and avoids unexpected downtime.

Visit PURE LOOP at K 2025: **Hall 9, Stand: C09**

Photos:

<<Picture 1>>

*Manfred Dobersberger, Managing Director of PURE LOOP, presents DynaShape®, the intelligent automation solution for the ISEC evo recycling machine at the K trade fair in Düsseldorf.*

**PURE LOOP**PURE LOOP GesmbH, a subsidiary of EREMA Group GmbH, specialises in recycling clean production waste. The headquarters are in Ansfelden near Linz in Austria. Its innovative ISEC evo shredder-extruder technology offers maximum flexibility in processing high volume and highly tear-resistant industrial and post-industrial materials into recycled pellets. As a member of the EREMA Group, PURE LOOP has the advantage of the extensive recycling expertise and innovative strength of the companies in the group.

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