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From Augsburg to Australia: Conflux Technology strengthens Advanced Manufacturing Capabilities with Solukon Depowdering System

Conflux Technology, a global leader in heat exchange solutions produced using additive manufacturing and headquartered in Geelong, Australia, has further strengthened its production ecosystem with the integration of Solukon's advanced depowdering system and peripheral equipment, including the SFM-AT800-S and SFM-PCU.

As Conflux continues to scale production to serve the demanding needs of aerospace, automotive, space, and industrial sectors, Conflux has secured Solukon's SFM-AT800-S system, which ensures safe, automated, and repeatable depowdering of Conflux's high-performance heat exchangers.

SFM-AT800-S and SFM-PCU spotlight

The SFM-AT800-S is an automated depowdering system designed for complex metal components with a height of up to 600 millimeters. This cutting-edge solution enables fully automated and highly efficient depowdering of even the smallest internal channels of complex parts. By combining programmable, unlimited two-axis rotation with vibration in a controlled atmosphere, the system ensures thorough powder removal. These features make the SFM-AT800-S also the world's best-selling depowdering system.

To complete its depowdering ecosystem, Conflux selected the SFM-PCU powder collection unit for its closed-loop, fully automated recovery capabilities. By safely managing reactive powders, the system enhances operator protection, improves efficiency, and ensures reliable material reuse supporting high-volume, serial production at scale.

Why Conflux opted for Solukon technology

"The Solukon SFM-AT800-S is integral to our ability to process highly complex geometries efficiently and reliably," said Dr. Ian Fordyce, Head of R&D at Conflux Technology. "It eliminates the variability of manual processes, improves operator safety, and ensures consistent quality across production. Our cooperation with Solukon has been seamless, with responsive support and a shared commitment to innovation."

The system's high-frequency knocking capability has proven particularly critical in clearing residual and compacted powder from Conflux's intricate fin structures and channels. This accelerates cleaning cycles while protecting the thermal and fluid performance of finished components.

Conflux Technology's Geelong facility is dedicated exclusively to thermal management innovation. With expertise in manufacturing heat exchangers from aluminium, stainless steel, and nickel-based alloys, Conflux provides end-to-end design, prototyping, additive manufacturing, advanced depowdering, and rigorous validation. This specialized focus enables Conflux to deliver thermal solutions with performance well beyond conventional designs.

Figures

Figure 1: The SFM-AT800-S and the SFM-PCU

About Solukon

Solukon Maschinenbau GmbH is a German high-quality supplier of powder removal and processing systems for metal and polymer additive manufacturing. In 2015, Solukon presented the world's first system for automated depowdering. Founded by Andreas Hartmann and Dominik Schmid, the Augsburg-based company has extensive experience in the development of AM systems and related peripheral equipment, and offers a full range of industrial powder processing systems. Since 2022, Solukon has also been offering the world's first and unique intelligent software for automated simulation and (pre-)calculation of the depowdering of laser-melted metal parts, the SPR-Pathfinder®. Solukon products meet the highest functionality and safety standards and are approved for safe and reliable removal of tough-to-handle and reactive materials such as titanium and aluminum. Solukon has established itself as the market leader in the field of industrial powder removal with its powder removal systems for metal.