

# AM specialist chooses efficient powder handling solution for new facility

## AMS invests in the AMPro® Lite to minimize material waste and ensure perfect recovered powder quality

Additive Manufacturing Solutions (AMS) is a leading additive manufacturing specialist in the U.K. The company was created in 2017, building on the founders' experience of more than 15 years within the additive manufacturing industry. It aims to improve the adoption and industrialization of AM through three key pillars - developing skills, enhancing AM capabilities, and expanding material availability.

AMS runs a training academy to address skill gaps within manufacturers and support the growth of **additive manufacturing**. It provides material development as well as the atomization of recycled materials. AMS also offers an in-house powder-based metal AM capability via laser and electron beam powder bed fusion.

The AM specialist supports motorsports, aerospace, and defense companies and is expanding into nuclear, renewable, and other heavy industrial sectors. Customer requirements include the development of AM supply

chains and critical parts manufacturing.

### The challenge

During consulting work, AMS had seen different customers face problems with appropriate powder handling. Without a reliable method to control powder, up to 40% of the material used by these organizations could be wasted or not screened to the correct quality.

When the AM specialist expanded its services to offer in-house additive manufacturing, it knew that qualifying and recovering powder was essential for successful production. As AMS aimed to provide advanced and cost-effective AM capability, it needed a reliable and efficient powder handling solution.

The AM specialist worked with a range of powders, including inconel, titanium, aluminum, and other nickel superalloys. As a result, the powder handling solution it chose had to support frequent changes in the type of powder used.

### The solution

When AMS designed its U.K. production facility, the company went to Russell Finex as its first choice for powder handling. Robert Higham, AMS' founder, had worked with Russell Finex and its **AM solutions** previously in his career and had experienced the high performance and reliability of the sieve units provided by Russell Finex.



The AMPro® Lite integrated with the SLM280 printer

“There is nobody who handles materials better than Russell Finex. As soon as I decided to buy a machine, it was always going to be a Russell Finex”, said Robert Higham, CEO and co-founder.

AMS chose the **AMPro® Lite** for powder sieving and recovery from its SLM280 printer and the other sides of the business, allowing the specialist to switch between different powders easily and minimize material waste. The machine is a lightweight and adaptable solution that uses powder vessels or bottles. Operators control the powder recovery station through a simple one-button control system.

A further benefit of the AMPro® Lite is its unique feed method that helps the powder to flow freely on to the mesh. AMS had experienced aluminum humidity, where static powders pick up moisture, and so valued the AMPro® Lite’s ability to break up powder before being used for production.

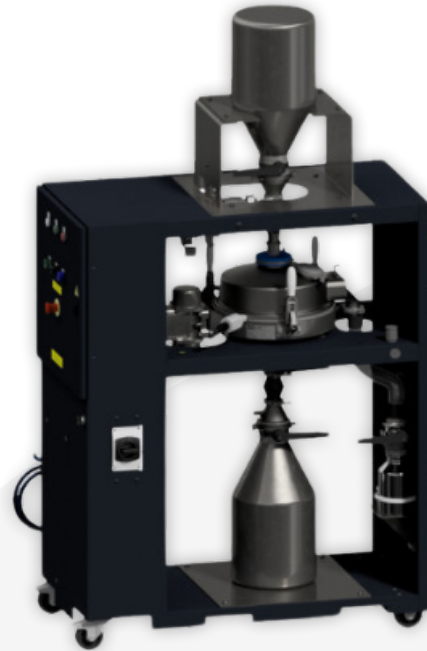
AMS has successfully used the AMPro® Lite to process a variety of batch sizes, from R&D to machine output sizes. The flexibility of the machine means the company can support varying customer requirements. The unit’s high productivity is not comparable with any other sieve providers. The AMPro® Lite has a small footprint to avoid impacting floor space while exponentially increasing the quantity of powder sieved.

Higham continued, “One of the best things about the Russell Finex machine is that it doesn’t matter what size of batch we have. We’ve used batches of less than 5 kilos right up to very large batches of 95 kilos.”

AMS has also appreciated the service and support it has received from Russell Finex before, during, and after the implementation of the powder handling station.

“No organisation has supported us better than Russell Finex. When we had an issue, the responsiveness was

out of this world. After sending a text on a Friday morning, we had a guarantee that the engineer would be here by the afternoon to help out.”



## The AMPro® Lite

### Key benefits:

- **High-quality sieving performance**  
Optimizes the reclaim and reuse of metal powders
- **Prevent cross-contamination**  
Minimal contact parts and tool-free strip down for easy cleaning
- **Adaptable and lightweight machine**  
Suitable for connecting to most bottle sizes

## About Russell Finex

Russell Finex are the only manufacturer in the world that makes their own **screening and filtration equipment** alongside **ultrasonic mesh deblinding systems**. They do this for virtually every industry around the world and, with over 90 years of experience, have helped the process industry with measurable impact. **Contact** Russell Finex today to find out more about its range of sieves, separators, and filtration equipment.