



Product News

Kason: 3D Printing Metal Powder Recovery System cuts Material and Labour Costs

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Millburn (NJ), United States -

The new dust-tight, fully automated Kason 3D-ReKlaimmer Metal Powder Recovery System for 3D printing systems recovers and reconditions used powders to exacting particle sizes, reducing waste and lowering operating costs while preventing contamination of the product and plant environment.



Kason's 3D-ReKlaimer Metal Powder Recovery System with ultrasonic screening system confirms the quality of used powders prior to reuse in 3D printers. (Picture: Kason Corp.)

The system can reclaim metal powders utilised in all current additive manufacturing technologies including selective laser sintering (SLS), fused

deposition modeling (FDM) and stereo-lithography (SLA) and is offered in custom configurations to suit any AM requirement. The unit can accept bottles of used powder connected manually, or is offered with an integral vacuum conveying system that automatically transfers used powders from the build chamber into a filter receiver/hopper located above the screening chamber of the 3D-ReKlaimer system. Similarly, screened powders ready for reuse can be discharged into bottles for manual connection to the inlet of 3D printers, or can be transferred automatically by an integral pneumatic conveyor that discharges into a filter receiver/hopper located above the 3D printer inlet. Manufactured by Kason, the self-contained, pre-engineered system is ready to connect and run, and can serve multiple 3D printing stations when equipped with castors. Automated controls with an HMI simplify operation and minimise involvement of plant personnel. The 610 mm diameter Vibroscreen® vibratory screener imparts multi-plane, inertial vibration that causes on-size metal powder particles to pass through apertures in the screen, and oversize particles to travel across the screen surface into a sealed container. A Kasonic ultrasonic anti-blinding device, supplied as standard, transmits ultrasonic frequencies to the screen, allowing sifting as fine as 25 µm/500 mesh with no screen blinding. The closed-loop system can be purged with inert gas to isolate contamination-sensitive powders from ambient air and moisture. Stainless steel construction finished to sanitary standards eliminates dead spots, allowing total evacuation and easy cleaning. Optional HEPA filtration and ground resistance monitoring further enhances emission containment and operator safety.