

VORTI-SIV

POWDER CASE STUDY – DTM/3D SYSTEMS

THE APPLICATION

Recycling loose batches of Duraform™ powdered material after a parts build during the SLS® process. Process rates of 1 – 2 Kg. / min. at #70 TBC (.0106) mesh are required. An additional #94 TBC (.0071) mesh is furnished with each system.

THE PROBLEM

The need to remove small contaminates and oversize powder from the process. This prevents streaks on the part bed. The sieve must be compact and portable to fit beneath a parts breakout cabinet.

THE SOLUTION

The installation of a high-frequency center-discharge 3450RPM VORTI-SIV® Model RVM-15E with sealed inlet cover, outlet boot and stainless steel sanitary-type contact parts.

THE BENEFITS

Minimum Clean-up & Dust-free Processing-

Only two (2) stainless steel sanitary product contact parts allows faster powder clean-up. The contact parts are secured by four (4) quick-release camps, which enables easy screen access. A removable clear Lexan dome cover enables dust-free screening.

Compact Sieve –

The 34" high portable center-discharge unit is typically mounted inside the BOS cabinet. Four (4) casters are supplied. An optional stand-alone production version Model RBF-15 is available. See additional case study.

SFA® Ultrasonic Deblinding Kit – Optional

A single phase 110/220 volt Ultrasonic auto-tuned processor with a screen-mounted aluminum transducer supplies an additional 50 kHz of high-frequency energy to the 3450RPM mechanical gyrating mesh. Screen deblinding of SLS® powder is eliminated. Process rates increase up to 5 times.

Screen elements furnished with each system: #94 TBC (.0071) mesh & #70 TBC (.0106) mesh



Model RVM-15E with cover & discharge boot, located beneath breakout cabinet



Standard Model RVM-15E with SFA Ultrasonic Kit including generator & transducer



Stainless steel contact parts: discharge funnel & screen element



36135 SALEM GRANGE
SALEM, OH 44460
Ph# 330-332-4958
1-800-227-7487
Fx# 330-332-1543
www.vorti-siv.com
info@vorti-siv.com