



GENESIS QUARTERLY

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CONSULTING

By Dave Sharman

Genesis brings to the table much more than the time-honored Westcapper® sealing technology. We bring a complete understanding of the parenteral package itself. Our technical experts maintain long-standing relationships with parenteral package component manufacturers. We know the vial package. Our expertise in the science of sealing is deep-rooted and so is our commitment to seal integrity.

The topics below are two of the many building blocks in the pursuit of understanding the parenteral vial sealing process. Our Consulting team can assist in process education and training, package development, validation, and sealing process optimization.

Vial Sealing Process Principles

Gain insight and understanding of the various concepts, practices and hurdles involved with effective vial sealing.

Residual Seal Force Principles

Learn the theory of operation, application, and essential insight on the importance of RSF.

For more information, please visit our website here: [Genesis Packaging Technologies - Consulting. \(gen-techno.com\)](http://Genesis Packaging Technologies - Consulting.gen-techno.com)



RESIDUAL SEAL FORCE

By Dave Sharman

The Vera evaluate's seal tightness by measuring the Residual Seal Force in the stopper/seal combination of a parenteral package created as a result of the vial sealing process.

The Residual Seal Force (RSF) tester has indeed come a long way. Since its inception in 2001, we have continued to improve the operational capabilities and the resultant RSF measurement. With a focus on our current generation, to the right are a few comparison points.

What is Residual Seal Force?

The force applied to deform the stopper creates a reciprocal force in the stopper. Once the applied force is released from the crimped stopper the reciprocal force created by the deformed elastomer becomes the Residual Seal Force (RSF) of the package. Residual Seal Force, then, is the stress an elastomeric closure will continue to exert against the glass vial finish and the overseal after the capping operation is complete.

For more information on our Vera RSF tester, please visit our website at Genesis Packaging Technologies - Vera Residual Seal Force Tester. (gen-techno.com)

GROWING UP VERA

FIRST GENERATION

1. Does three to five tests, very quickly then creates an average RSF. In this approach, the seal is initially disrupted and does not allow the rubber to recover between the measurements.
2. Top sampling speed of 0.010 in/s
3. Samples data in 0.001-0.002" increments. (Not programmed to sample based on distance moved)

SECOND GENERATION

1. Does only one test without any initial disruption of the seal.
2. Has a calibrated distance and results in a sampling speed of 0.001 in/s.
3. Samples data in 0.0002" increments. It is programmed to sample on the distance moved. (This is 5 to 10 times more data points than the Gen 1)
4. Data can be exported as Excel Data report.
5. Factory upgrade to current generation is available.

CURRENT GENERATION

1. Data and graphs can be exported to an Excel spreadsheet or to Crystal Reports in pdf format.
2. Audit trail can be exported to Crystal Reports in pdf format, including 4 different types of reports.
3. Ability to use 2nd connection to the PLC to generate customized reports from the SQL data base.
4. Increased security features available, possibly defaulting to a locked down "kiosk" mode.
5. Better PC: A faster, more powerful PC platform with more internal RAM.
6. UPS battery backup system to prevent crashes and allow for a safe shutdown.
7. Available remote access via Team Viewer software



ORGANIZE

MACHINE CABINETS

By Dave Sharman

The machine cabinets are configured specifically to create additional, mobile lab real estate, for machine location and component storage. This approach centralizes the machine and its components for convenience and efficiency.

Machine Cabinets

Available in Stainless Steel or Coated Carbon Steel

Intended to be a mobile support platform for the Integra and Residual Seal Force lineup.

Our change parts cabinets are devoted to improved organization and protection of these crucial components and assemblies. They offer the ability to achieve an enhanced level of housekeeping accountability and changeover efficiency, while providing protection and additional workspace.

Change Parts Cabinets

Available in Stainless Steel or Coated Carbon Steel

Heavy duty rolling cabinets to organize and store all your change parts. Intended to be a mobile storage, protection, and security for all sizes of cap and vial handling change parts.

To learn more about optimizing your change parts storage, visit here: [Genesis Packaging Technologies - Change Part Cabinets. \(gen-techno.com\)](https://www.gen-techno.com)



WWW.GEN-TECHNO.COM

Genesis Packaging Technologies is a Worldwide Leader in the Science and Technology of Parenteral Vial Sealing and Residual Seal Force Testing

We provide advanced vial sealing equipment for the packaging of critical injectable pharmaceutical products. Genesis designs, develops and builds vial cappers with innovative technologies that meet the technical challenges of parenteral pharmaceutical packaging, assuring seal integrity and in compliance with advancing regulatory requirements for aseptic processing and container closure integrity. Offering our customers the tools and knowledge to consistently achieve container closure integrity remains our priority.

Purchasing equipment from Genesis offers customers support from a company with over 75 years of experience dealing specifically with vial handling equipment and technologies. Service is available on all equipment manufactured by Genesis and the former Machinery Systems Division of The West Company.