



Genesis Packaging Technologies

SPRING 2025

GENESIS QUARTERLY

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INSIDE:

RSF, MAINTENANCE & SERVICE AND HOW TO GET ORGANIZED

This edition will talk about the importance of RSF, maintaining your equipment and keeping your change parts organized and stored properly - all of which contribute to the seal integrity of your product.



THE VERA AND MEASURING RESIDUAL SEAL FORCE

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. BRONZE - Our basic support level; best for lab-scale machines and low volume production users. Provides up to 16 hours of virtual tech support or consulting services during the contract year.

Residual Seal Force (RSF) has been used to assess vial sealing since the 1970s. A well-sealed vial must have sufficient stopper compression to achieve a leak rate cut-off; therefore, RSF was originally developed as an indirect method of measuring stopper compression. During the sealing process, a force is applied to the top of a stoppered vial, and as a result, the elastomeric stopper flange is compressed against the vial sealing surface, creating a strain that becomes "locked-in" as the aluminum seal is crimped. This locked-in internal energy is the RSF. RSF is defined as the strain that a compressed elastomeric rubber stopper flange continues to exert on the vial crown sealing surface after the crimping of an aluminum seal.

RSF is included in USP <1207.3> as one of the seal quality test methods, which are "checks used to characterize and monitor the quality and consistency of a parameter related to the package seal, providing some assurance of the package's ability to remain integral." The RSF is a measure of the tightness of the vial seal. By correlating the RSF with a Container Closure Integrity Test (CCIT), the optimal range for a particular package can be determined.

RSF is an easy-to-use quantitative method that helps standardize seal quality, regardless of the capping equipment used for crimping, and assists in setting capping parameters to ensure consistency and facilitate capper validation.

To upgrade your current instrument, or to inquire about purchasing a Vera RSF tester, email sales@gen-techno.com





KEEP YOUR LINE PRODUCING

Maintenance & Service

Upgrades

Enhancing functionality, increasing production capabilities, future proofing with new technologies, meeting evolving regulatory requirements, or simply improving maintenance task time. These benefits, and others, can be achieved with standard or custom upgrades. As a standard upgrade example, we now offer a modular plastic conveyor belt to replace the stainless-steel mesh belt on our large cappers. Replacing the mesh conveyor belt eliminates the eventual slippage due to worn O-rings, as the new modular belt is directly driven with toothed sprockets. Additionally, the modular belt enables quick disassembly, cleaning, and replacement, along with reduced or eliminated particulate risks. The self-lubricating nature allows for quieter operation and the uniform edging allows for smoother vial transition. A win all around!

Other available options include:

- Cap Handling
- Controls & Electrical Systems
- Recipe Driven Auto Head Height Adjustment
- Add or Replace Vision Systems for Pre and Post Cap Inspection
- Electronic, Recipe Driven Clutch System

Need Help?

Consider remote consulting and technical support contracts, offered at three levels, tailored to best meet your needs.

BRONZE - Our basic support level; best for lab-scale machines and low volume production users. Provides up to 16 hours of virtual tech support or consulting services during the contract year.

SILVER - Intermediate level of support; best for those with multiple lab machines and/or one or two production machines. Provides up to 40 hours of virtual tech support or consulting services throughout the duration of the contract year.

GOLD - Advance level support; best for those with 3 or more production machines or machines with on-board vision systems. Provides up to 80 hours of virtual tech support or consulting services during the contract year.

For added peace of mind, set up an Emergency Service Retainer.

Plans are available to ensure rapid response in emergencies, eliminating delays caused by the standard PO approval process. Guarantees a service tech will be on site within 24 to 48 hours (contingent on geographic location) to assist with getting your equipment back to production. Contact your Genesis Sales or Technical Service Representative to learn more.



GET YOUR PARTS ORGANIZED

Change Parts Cabinets

Heavy Duty Rolling Cabinets to Organize & Store All Your Change Parts

Piling pristine 2025 Chevrolet Corvettes in a crumbling, abandoned garage is like storing precision parenteral vial change parts in an easily contaminated, disorganized, rack, bin or box: the environment undermines the value of what's inside. Just as Corvette's performance and engineering demand a clean, controlled space, high-quality pharmaceutical components require a meticulously organized and protective storage system.

An orderly cabinet—clearly labeled and optimized for workflow—not only protects critical parts but also reflects a commitment to quality, safety, and efficiency. In both cases, the surrounding environment either enhances or erodes the integrity of what it contains.

Custom rolling cabinets that are tailored to your Genesis capper to securely house its change parts. Each cabinet is made from high grade steel and utilizes ball bearing drawer slides that allow you full, uninhibited access to the entire drawer. The chassis rolls on 6-inch Polyurethane wheels. Each cabinet is secured with a key that can be configured to unlock a single cabinet or an entire set of cabinets depending on your needs. The cabinet meets and exceeds the 5S standard by ensuring your change parts stay safe, protected from damage, dust, debris, and always kept organized on kaizen boards for parts accountability and quicker change overs.

Drawers include custom labels that are visible from across the room, which indicate the contents of the drawers or what size vial the enclosed set uses. Our 60-inch cabinet supports the option for a 304 Stainless Steel top work surface.

Available in 45 inch and 60 inch width sizes.





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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.

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