



BLOW / FILL / SEAL SPECIALISTS

SINCE 1987 · OVER 39 YEARS IN THE BFS INDUSTRY



- ★ **Turnkey Blow-Fill-Seal Production Lines Utilizing Fully Rebuilt BFS Machinery Delivered “Like-New”**
- ★ **Custom Molds & Parts Supply from Design Through Manufacturing**
- ★ **New, Used, & Rebuilt Equipment to Outfit Your Entire Plant!**

The HealthStar Rebuild Process

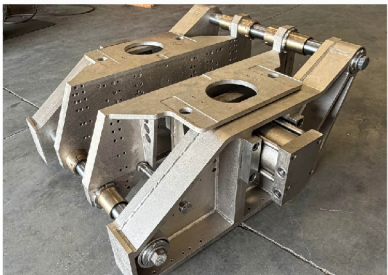
01



MACHINE STRIPPED

Machines are completely stripped to the bare frame. All surface cleaned, polished or painted. Extruder bares are then removed for complete overhaul. Gear box completely rebuilt. Repaint all mechanical spaces with white epoxy.

02



MOLD CARRIAGE REFINISHED

Mold carriage is completely disassembled and refined. New bushings, tie bars and hydraulic cylinders installed. New rails installed in the base.

03



HYDRAULIC CONTROL UPGRADE

Hydraulic control valves are changed from 120 HVAC to NEW 24 VDC for added safety.

04



HYDRAULIC POWER PACK OVERHAULED

Under the base, hydraulic power pack is completely overhauled. New High/Low Pressure pumps and heat exchangers added as are all new hoses. Mokon extruder cooling unit is replaced with new. All ASCO vacuum valves are new. Wiring simplified – LAN PLC eliminates “Home Run” device connection.

05



NEW CIP/SIP SYSTEM

New sanitary control valves, filter housing and buffer tank are provided as part of the system. The system is completely automatic and a single MMI is part of the system for easy operator control. New Eurotherm chart recorder for 21 CFR Part 11 compliance.

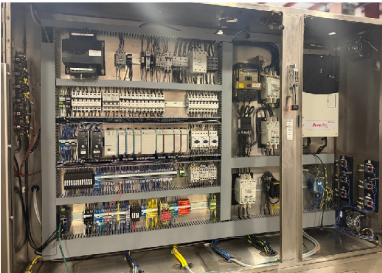
06



MAN MACHINE INTERFACE

Old operator interface replaced with new Allen Bradley PanelView 1000 control panel. All control switches and sensors replaced with new devices. HealthStar's controls package allows for unique user logins and locked audit trails on recipes, set points, changes, and alarms.

07



NEW ELECTRICAL PANEL

Old electrical panel is completely stripped to bare mounting board. The finished electrical cabinet is simplified as a result of the elimination of "Home Run Wiring". Only the black Ethernet IP cable goes back to PLC. Local devices are easily plugged in or out for fast repair or trouble-shooting.

FILLING SYSTEM

Fill system built new or complete upgrade. Electronic fill system with stainless steel contact parts designed for specific applications. New product filter housings installed.

AIR SYSTEM

New piping of air system as required with new filter housings.

EXTRUDER / PARISON HEAD

Rework or replace barrel and screw, install new motor and drive. Parison head is either rebuilt or made new. New parison tooling designed to meet application.

DEFLASHING

New or rebuilt deflasher. Built to project specifications with custom trim tooling.

GUARDS AND SAFETY

Complete safety interlocks with hydraulic lock-out and quick pressure dump. Additional guards incorporated where needed. Manual function security code through PLC for manual operation.

ELECTRICAL UPGRADE

New PLC machine control with plasma touch screen interface and user-friendly prompts for easy and precise control.

ANNEX 1

Parison area design package developed to support EU GMP Annex 1 expectations for critical zone protection, air flow control, and environmental monitoring. Controls package updated per Annex 1 requirements.

The Result: A **"LIKE NEW"** Machine!



CUSTOM MOLD MANUFACTURING

Complete mold design and manufacturing services, built by HealthStar to user specifications.



HealthStar, Inc | 781.961.5400 | info@healthstaronline.com | www.Healthstaronline.com
62 Johnson Lane Braintree, MA 02184