

## Atlas Vac Machine Model 18:30S Medical Tray Heat Sealer

### OVERALL STANDARD FEATURES

- Heat Sealing Area - 18 in. X 30 in. (45.7cm x 76.2cm)
- Tool height opening up to 4.5"; others on request
- Manually operated **SINGLE** aluminum shuttle (clear anodized) on smooth 1" dia. stainless shafts w/non-lube linear bearings
- Two hand Banner Opti-touch safety rated sensors (not single button) per OSHA 1910.212 & 1910.144 requirement, ergonomically correct positioning
- Emergency stops, includes stationary safety shields yellow/red meet CE, UL, CSA, OSHA, ISO13850
- Heating Elements - 240v or 480v, Flat 1" heat plate w/internal heaters, 6000W
- Seal Platen - precision machined Aluminum, Dupont Teflon Silverstone coating is included
- Electrical Requirements – 208v; 220/240v; 480v, w/1ph or 3ph, others available (**specify at ordering**)
- Sealing Pressure adjustable to over 10,000+ pounds, precision stationary nickel plated steel surface plate for correct support of tooling shuttle
- Air reservoir included; 4.7 gallon ASME rated; includes ASME pressure relief safety valve
- Air Dump Safety valve, OSHA approved.
- Floor Space – 45"W x 55"L (114cm x 140cm), no wasted space compared to old rotary types
- Machine mounted non-mar casters w/height adjustment
- Rigid welded 3/16" steel tubular framework w/special powdercoat paint; White standard. NEMA 12 enclosures under framework.
- Components compliant with IEC 60204-1, CE/CSA/UL as applicable to touch protection.
- Stainless steel physical operator guards on Auto Shuttle models. Guarding meets OSHA 1910 sub-part O, 1910.145, EN415-1 & -3.
- Stainless steel shelving at operator eye level for convenient staging of packaging materials.
- Quick change lift off tooling shuttles to provide versatility and productivity; includes SS locator pins for tooling plates. Includes extra shuttle plate mounting holes to fit standard AV 15:18 tooling (2) on shuttle as well as our standard 18:30 (1) tooling. Clear anodized surfaces.
- Air filter (5 micron) included, 3/4" NPT ready for non-regulated supply air connection

- Single exhaust port with 20 micron filter or for connection to discharge line from room. Sound levels comply with OSHA 1910.95
- Weight - 1410 pounds (667 kg); 2.72 lb/sq.in. of seal area; built to be rugged, durable (not made of angle and sheet metal), check the weight/sq. in. of seal area on other brands.

## STANDARD FEATURES

- Mitsubishi PLC FX3u
- Beijer 10" color touch screen operator interface terminal (OIT-HMI); stores multiple recipes, requires ID/PW sign-in for Operators.
- On-screen programmable Time and Temperature controls w/alarm limits is standard
- Individualized operator (optional), supervisor/engineer or calibration unique sign in ID/PW for assigned access levels
- Odometer and resettable cycle counter
- USB port for off load of data.
- Powered USB ports (2) for barcode scanner (not included) entry of UDI, sign-on, etc. Manual input on screen permitted also.
- Data Logging memory of all sign-on access, recipe changes and UDI as well as process data per each cycle. Memory accessible for manual offloading only. No edits permitted.
- Capability to match recipe with barcoded tooling and barcoded device/paperwork during setup of production
- Redundant automatic heater over temperature safety cutoff control circuit, Factory Mutual approved controller, 300F cutoff standard
- Electronic process monitoring with temperature & air pressure sensor fail-safe alarms for parameter recipe settings, PW protected.
- Four (4) dual lead special grade thermocouples for control feedback & accurate individual temperature displays on OIT while providing signals to calibration ports for simultaneous reading.
- Individual thermocouple calibration connectors (4). On screen calibration of each (4) thermocouples.
- Alarm screen detail history list on screen and in memory.
- Low profile Banner multi-color signal light for recipe parameter alarms
- Pressure regulation w/precision manual adjustment & liquid filled precision gauge as well as on screen digital reading.

- Pressure calibration port for easy calibration gage connection to pressure circuit. On-screen calibration of pressure circuit.
- Timer calibration connector (1) 24vdc signal
- Eye level controls including 10" color touch OIT/HMI screen, reset(s) and others.
- English units of measure readouts
- Air Usage 11-13 CFM @ 80 PSI at 4 cycles per minute. Supply @ 100psi with 3/4"+ diameter line minimum

Owner's manual (1 copy) with operation instructions, maintenance information, recommended spares list, schematics, Atlas Vac calibration document and Atlas Vac PLC programs on USB. Sealer is ready for operation upon connection to correct air and electric power; air filter included. Any additional FAT, or other documents and procedures, may require additional charge based on scope and hours needed to complete.

Tooling nests not included, quoted separately.

### **18:30S OPTIONS AND ACCESSORIES**

1. **Auto Shuttle System**; electrically operated for extremely smooth cycle, single speed with gentle acceleration and deceleration of shuttle (1). Interlocked with Banner hand sensors for safe platen operation. Includes stainless steel side guards over the shuttle bearings. Reduces operator repetitive motion fatigue and harsh displacement of tray contents.
2. **Direct Force Sensing System** (patented) provides a digital reading of the force (lbs.-force) exerted by the tray sealer press against the tray or blister seal tool area (requires controls option a below, auto regulation). Results from adjustments in press air pressure can be directly read on the PLC operator screen. By knowing the lbs-f exerted across the tray sealing tool face, packaging engineers can more closely monitor design variables. Defining the desired lbs-f in a tray sealing protocol can accommodate variations in air pressure, brands or models of tray sealers, and even tooling designs. Speeds validation experiment settings with new package designs. For reference only, not a closed loop system.
3. **Light Curtain, Class 3, OSHA Compliant**. Provides angled light curtain across protected tool loading area with stationary side guards of SS and Lexan. Class 3 OSHA, ISO13849, ISO13857 compliant with separate safety circuitry and safety

controller. Keyence light curtain system positioned at correct distances to meet ISO13849 integrated to a) safety rated dual channel Ross air supply valve to moving seal press and, b) safety contactor for electric shuttle motion circuit for operator safety. Eliminates the standard Banner Optitouch hand sensors and is replaced by single green push button to initiate the entire cycle. Any light curtain violation will require the cycle to re-home and start over. Includes Short Cycle alarm and acknowledgement screen for interrupted press cycle. Auto Pressure regulation is still provided by standard Festo system per above.

4. **Seal Tool Recognition System**; RFID electronic sensing feature for accurate program changeovers, requires Process Control System option for pre-programmed menu selections matching the tool ID, no tooling mix-ups ever again. RFID chip on the tooling verifies the use of the correct PLC recipe on every cycle.
5. **Stainless steel framework**, welded 3/16" rectangular tubing far superior to angle iron and sheet metal, includes stainless steel controls cabinet

#### **18:30S PROCESS CONTROL & DOCUMENTATION OPTIONS**

- a) Upgrade from standard manual pressure regulator. **Auto Pressure Process Control System** including additional programming to Mitsubishi PLC & Beijer operator interface, Festo pressure transducer using I/P transmitter for automatic programmed fine air pressure closed loop control with PLC controlled auto regulator through OIT-HMI screen setting. Always includes AV standard digital pressure and temperature monitors with alarm system on OIT-HMI. Provides Auto Air Pressure Control settings on the screen in lieu of standard manually set regulator. Stores 99 programs and can utilize optional tooling ID sensor system to prevent mix-ups and operator delay or errors on changeovers (see Tool ID System).
- b) **Wireless Network** connectivity for remote Atlas Vac support.
- c) **Calibration Services**
- d) **Translations** of PLC Screens and Manuals
- e) **CE or CSA** rating certification
- f) **UL listing** on controls cabinet

#### **TOOLING AVAILABLE, PRECISION CNC MACHINED:**

- Simple lift off tooling, CNC machined aluminum rigid design that locks into place quickly

- Design and retrofit services for non-Atlas Vac Machine units including Alloyd and others.
- Aluminum tool nest assembly w/molded FDA silicone seal gaskets, easy change of gaskets
- Aluminum nest assembly with optional die cut silicone seal gaskets for some configurations.
- Aluminum nest assembly hard anodized standard
- Relieved hot plate option to reduce heat transfer to product
- Seal Tool Recognition System electronic ID sensing feature used with Process Control System providing special sensing feature to match tool with selected program in stored memory

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