

# Thermal Barrier Machinery

## FILLAMETER™ SERIES 60 TRIPLE-HEAD PRODUCT INFORMATION

**Metering – Mixing – Dispensing**



## CORE FEATURES

Built with durable components, the Azon Fillameter™ Series 60 meters, mixes, and dispenses a two-part polyurethane polymer. The thermal barrier liquid is dispensed into the aluminum extrusion cavity for window, door, and curtain wall applications. The Fillameter is one part of the Azon Thermal Barrier Machinery line and is designed to work seamlessly with existing Azon machinery, such as the SN70 Lancer™, AZO-Brader™, SN25 Bridgemill™, and the Azon Conveyor System.



- **Tornado III Mixer**
- **Recipe Recall:** Set and recall job settings per extrusion, including chemical ratio, four axis mix head positioning, including lead and tilt angles, drive wheel repositioning, throughput speed, cavity size, SN70 Lancer wheel position and Lancer hold-up/hold-down positions
- **Electric Actuation:** Flow rate, mixing, drive wheels, and wheel positioning
- **Dual and Triple Heads:** Up to three heads for higher capacity and throughput
- **Inline Heating:** On-demand precise temperature control with the ability to raise chemical temperature by 27°F at max flow rate in one pass
- **Automatic Pump Wear Compensation:** to maintain ratio
- **Fume Exhaust System**
- **Throughput:** three filled cavities in one pass
- **Azon On-site Support:** Quarterly on-site technical maintenance
- **Azon Remote Support:** Ethernet VPN for remote monitoring and diagnostics

| Core Features by Model                | Fillameter HMI Model 55                                                       | Fillameter HMI Series 60 Dual or Triple Head                                                          |
|---------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Tornado III Mixer                     | Yes                                                                           | Yes                                                                                                   |
| Dispensing Heads                      | 1                                                                             | 1, 2 or 3                                                                                             |
| Total Flow Capacity                   | 1.76 Gallons / Minute                                                         | 1.3, 2.6 or 3.9 Gallons / Minute                                                                      |
| Throughput Capacity                   | 180 Feet / Minute                                                             | 180 Feet / Minute                                                                                     |
| Human Machine Interface (HMI)         | 15" Proface w/WES 7 Installed                                                 | 12" Allen-Bradley 5310                                                                                |
| Recipe Recall                         | No                                                                            | Yes                                                                                                   |
| Maximum Extrusion Width               | 13.7"                                                                         | 15.6"                                                                                                 |
| Maximum Extrusion Height              | 9.8"                                                                          | 10.63"                                                                                                |
| Machine Power                         | Electric and Hydraulic                                                        | 100% Electric                                                                                         |
| Ratio Metering                        | Yes                                                                           | Yes                                                                                                   |
| Head Positioning Joystick             | Yes                                                                           | No                                                                                                    |
| Energy Saver                          | No                                                                            | Yes                                                                                                   |
| Purge System                          | Yes                                                                           | Yes                                                                                                   |
| Inline Heating                        | No                                                                            | Yes                                                                                                   |
| Number of Tanks                       | 2-3                                                                           | 3                                                                                                     |
| Pump Options                          | Standard Pulley System                                                        | Programmable with Infinite Mix Ratios                                                                 |
| Number of Cavities Filled in One Pass | 1                                                                             | 2-3                                                                                                   |
| Electric Actuation                    | Partial                                                                       | Full                                                                                                  |
| Dual Chemical Capability              | No                                                                            | Yes                                                                                                   |
| Machine Footprint                     | <b>Fillameter:</b> 68" W x 81" L x 101"H<br><b>Tank:</b> 75" W x 59" L x 77"H | <b>Single and Dual Head:</b> 67" W x 131" L x 91.5" H<br><b>Triple Head:</b> 73" W x 148" L x 91.5" H |
| Automated Metering                    | Yes                                                                           | Yes                                                                                                   |



## PRODUCT SPECS



### Dimensions:

**Single and Dual Head:** 67" W x 131" L x 91.5" H **Triple Head:** 73" W x 148" L x 91.5" H

### Electrical Requirements:

480/3/60Hz

### Maximum Extrusion Size:

Width up to 15.6" (400mm) and height up to 10.63" (270mm)

### 3 Head Flow Rate:

1,040 in<sup>3</sup>/min at 77°F (350 in<sup>3</sup>/min/Head)

### Chemical Temperature Change at Maximum Flow Rate:

Up to 27°F

### Environment:

For Indoor Use

Ambient Operational Temperature 32°F – 122°F

### Max Drive Wheel Speed:

180 ft/min

### Chemical System Max Pressure:

41.4 bar (600psi)

### Compressed Air Supply Minimum Requirement:

6.2 bar (90 psi)

## FILLAMETER THROUGHPUT SPEEDS FOR STANDARD AND CONCEPTUAL CAVITIES PER HEAD

| Cavity<br>Standard<br>Designation | Area<br>(in <sup>2</sup> ) | Speed<br>(Ft/min) |  | Conceptual<br>Designation | Area<br>(in <sup>2</sup> ) | Speed<br>(Ft/min) |
|-----------------------------------|----------------------------|-------------------|--|---------------------------|----------------------------|-------------------|
| AA                                | 0.11                       | 180               |  | FF                        | 0.433                      | 67                |
| BB                                | 0.156                      | 180               |  | GG                        | 0.464                      | 63                |
| CC                                | 0.191                      | 153               |  | HH                        | 0.372                      | 78                |
| DD                                | 0.257                      | 113               |  | II                        | 0.565                      | 52                |
| EE                                | 0.309                      | 94                |  | JJ                        | 1.272                      | 23                |
|                                   |                            |                   |  | KK                        | 2.261                      | 13                |



## FILLAMETER HUMAN MACHINE INTERFACE (HMI) DISPLAY



The Fillameter HMI is equipped with a 12" Allen-Bradley 5310 touchscreen interface with a movable arm.

### THE FOLLOWING FUNCTIONS ARE CONTROLLED AND MONITORED THROUGH THE HMI:

- Recipe setup and recall
- Temperature set points
- Chemical ratios
- Heaters
- Level controls
- Drive wheel positions
- Drive wheel speed
- Chemical flow rate
- Mixer RPM
- SN70 Lancer wheel positions
- Lancer hold-up/hold-down positions
- Safety alarms
- Loading station, runout conveyor and transfer conveyor

**Azon USA, Inc.**  
2204 Ravine Rd.  
Kalamazoo, MI 49004  
USA  
269 385 5942  
800 788 5942  
[azonintl.com](http://azonintl.com)

**Azon UK Ltd.**  
Block C – Unit C14-15  
Duffryn Park, 1 Alder Avenue  
Dyffryn Business Park  
Ystrad Mynach  
CF82 7TW  
UK  
P: +44 (0) 1443 814657

**Azon Asia Inc.**  
E1-Space  
19 Samseong 122 St.  
Gangnam, Seoul 06085  
Korea  
P: +82 (0) 2 3449 2200  
F: +82 (0) 2 3449 2229