Gravimetric feeder for the price of a volumetric model

Eliminate waste of colorants and additives with this compact loss-in-weight feeder that precisely measures the amount of additive that is fed directly into the machine throat.

4 Standard Modes of Operation
Cyclical, continuous, extrusion following and rate (vol/hr).-ST models utilize a contact closure signal from the injection machine while the extrusion following mode depends on a 0-10 VDC proportional signal from the extruder drive. Add -V after -ST if the injection press use a voltage signal from the control panel. (See NOTE on page 4).

Reduces Input Error
The easiest setup procedure in the industry: enter let-down ratio and either shot weight or lb./hr. output and press start. Feeder automatically adjusts to screw re-
covery time and extruder output.

Fine Metering Resolution
100 rpm Stepper Motor advances at 200 increments per revolution. In combination with digital control, the 200-step rotation achieves fine metering resolution of ±.2%.

Automatic Re-calibration
Ensures Continuous Accuracy
Automatic adjustments guarantee that feed rate is held to within ± 0.2% of desired let-down ratio.

Dual Load Cells
Balanced load readings improve accuracy.

Torque-limiting Drive Coupling
Protects drive motor in case of jammed auger.

Easy-to-Use Microprocessor Controller Saves Time
User-friendly controller has intuitive setup procedure.

USB Port
Allows data download, data printout and software update capability.

Detailed Material Usage Documentation
Microprocessor control allows data collection via G2 networking software, or MLAN protocol via Ethernet.

Eliminates Downtime Associated with Color Change
Feeder automatically re-calibrates to new color, so no additional setup required. Spare hoppers available for faster color changes.
The MGF proven loss-in-weight technology automatically calibrates itself, totally eliminating manual catch-and-weigh calibration procedures and even more common and erroneous guessing of metering rates.

- No tools required for assembly or removal of load cell assembly, hopper and metering device.
- The throat adapter fits readily on most processing machine throats and easily supports nearly any main material supply hopper.

**Dual Load Cells**

Hopper is mounted on two load cells to prevent distorted readings from cantilevered loads in the hopper.

**No Tools Required**

Load cell assembly slips easily into place. The metering device is locked in place by two clips and can be quickly removed.

**Fast Clean-out and Replacement**

Aluminum hopper with brushed exterior holds up to 25 lb. (11 kg) of material. Easy removal and replacement of supply hopper allows fast material change. Spare supply hoppers and hopper extensions are available.
Easy To Use Microprocessor Controller

- Large, user-friendly keypads for easy input
- Backlit LCD display
- Can be mounted remotely with optional extension cables
- Password protection

Easy Set-up

Choose the mode of operation for your process: **CYCLE** for injection OR **CONTINUOUS, EXTRUSION FOLLOWING** or **RATE** for extrusion applications

Enter let-down ratio “LDR” and either shot size “SHOT/WT.” or extruder output “LBS./HOUR”

Press “RUN”

As material is metered into the feed throat, the dual load cells under the loss-in-weight hopper detect material usage.

Loss-in-weight data is gathered by the controller and monitored continuously.

Password Protection
Easy Initial Calibration
Adjustable low-weight alarm for supply hopper
Loader Weight Settings
### Specifications:

Dimensions in inches and (mm)

- Throat adapter has blind flanges for custom drilling

#### Model Numbers

- **MGF-ST-4**
- **MGF-ST-8**

#### Auger Diameter

- **MGF-ST-4**: 1/2” (12.7mm)
- **MGF-ST-8**: 1” (25.4mm)

#### Extrusion

<table>
<thead>
<tr>
<th></th>
<th>lb./hr. (kg/hr*)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum</strong></td>
<td>40.0 (18)</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>0.2 (0.08)</td>
</tr>
</tbody>
</table>

#### Injection

<table>
<thead>
<tr>
<th></th>
<th>lb./hr. (kg/hr*)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum</strong></td>
<td>13.0 (6.0)</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>0.125 (.005)</td>
</tr>
</tbody>
</table>

* Based on material density: 55 lb./ft.³ (900 kg/m³)

**AGL Venturi Loader (optional)**

Exclusive, cost effective loading solution, ensures dosing accuracy of ± 0.1% of set point. Loader is automatically activated by MGF controller.

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