

MGF GRAVIMETRIC FEEDER

MGF Series: Throughput capacity up to 120 lb./hr. (55 kg/hr.) for continuous extrusion and 40 lb./hr. (18 kg/hr.) for injection molding.*

* Based on 55 lb./ft.³ bulk density

Gravimetric feeder for the price of a volumetric model

New Higher Throughputs!

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).

- **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 recovery 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 $\pm 0.2\%$.

- **Automatic Re-calibration Ensures Continuous Accuracy**

Automatic adjustments guarantee that feed rate is held to within % 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.



Full function gravimetric feeder for the price of a volumetric model.

BLEND

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.



Hopper easily removed.

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

Alarm light indicates low-load (2-3 lb.) in hopper



Conveniently located On/Off power switch and Run/Stop switch



Easy Set-up

Injection

```
==== SETTINGS ====
CHANGE PASSWORD
>MODE:          CYCLE
UNITS:          US▼
```

```
==== MAIN MENU ====
>SHOT WT      2000 G
LDR           3.00%
===== 1866 =====▼
```

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

Extrusion

```
==== SETTINGS ====
CHANGE PASSWORD
>MODE:          CONTINUOUS
UNITS:          US▼
```

```
==== MAIN MENU ====
>LBS/HOUR     275
LDR           3.00%
===== 1867 =====▼
```

```
ENTER PASSWORD
-----
```

Password Protection

```
==== CALIBRATION ===
>ZERO CALIBRATION
FULL CALIBRATION
```

Easy Initial Calibration

```
==== METERING =====
>MOTOR FACTOR  5.50
ADJUST. TRIP   5%
LOW WEIGHT     0g
```

Adjustable low-weight alarm
for supply hopper

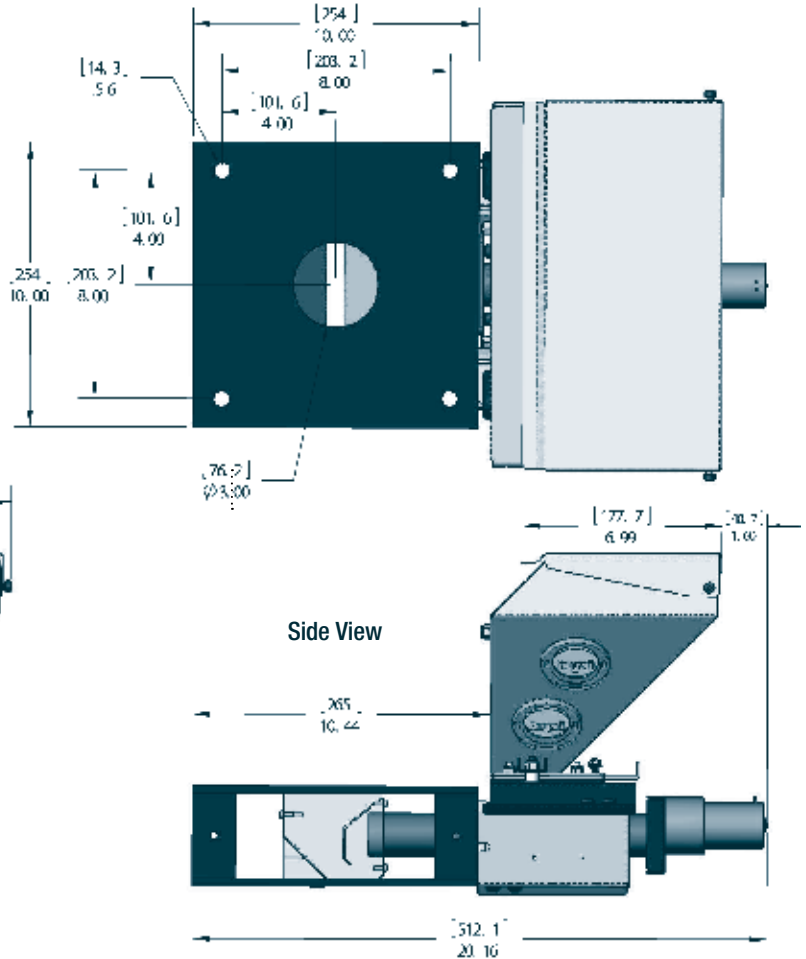
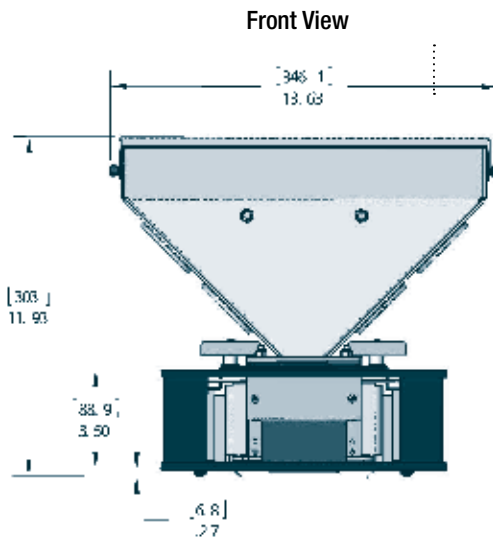
```
==== LOADER =====
>LOADER        ON
LOADER ON      1000g
LOADER OFF     2000g▼
```

Loader Weight Settings

Specifications

Dimensions in inches and (mm)

- Throat adapter has blind flanges for custom drilling



	MGF-4-41	MGF-8-41
Auger Diameter	1/2" (12.7mm)	1" (25.4mm)
Extrusion	lb./hr. (kg/hr*)	
Maximum dispense rate	20 (9)	60 (27)
Minimum dispense rate	1 (0.45)	6 (2.7)
Injection	lb./hr. (kg/hr*)	
Maximum dispense rate	6.8 (3)	20 (9)
Minimum dispense rate	0.3 (0.14)	2 (0.9)

* Based on material density: 55 lb./ft.³ (881 kg/m³)
 Model#: MGF-4-41 / MGF-8-41
 Shipping weight: 44 lb. (20 kg)

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.

