

## MARK XV Precision Powder Feeder — Standard features and Specifications

The MARK XV Precision Powder Feeder is a volumetric powder feeder designed to feed fine, powdered media with unparalleled consistency and reliability. It is a robust and reliable feeder that incorporates a Feed Screw, Vibratory Drive and two secondary Cyclonic mixing chambers to achieve unmatched performance. The use of a feed screw has long been the standard for feeding different types of materials because of its' positive feeding nature. Unlike fluidized bed and wheel feeders, It provides a constant, repeatable delivery of media that is not adversely affected by pressure variations, distance of feed, direction or gravity. Utilization of a vibratory drive to impart variable vibration to the powder hopper assures a semi-fluid state whereby the powder is continually mixing and blending within the powder canister. This unique action prevents the material from segregating due to particle size and density. Lastly, as the powder exits the feeder it passes through a Cyclone Mixer that further mixes the powder and assures a full distribution throughout the gas stream, fully optimizing and conditioning the powder/gas mixture as it is delivered to the point of deposition.



- Closed-loop feed screw RPM control
- Digital, programmable RPM controller
- Variable amplitude vibratory drive
- Two stage powder/gas mixing
- Instantaneous powder start/stop
- Semi-automatic canister clean-out
- Carrier gas flow meter
- System pressure gage
- Carrier gas bypass circuit
- Dual voltage 115/230 VAC selectable
- Audible low gas alarm
- Elapsed process timer

<b>FEED CHARACTERISTICS</b>	
Particle size range	5-150 micron (4)
Feed rate range	1-1900 grams/min (4)
Typical repeatability	(+/-) 0.5% or better
<b>PHYSICAL</b>	
Dimensions	18" W x 18" D x 23" H
Gross weight	90 lbs
Shipping weight	150 lbs
Canister capacity (1)	245 cubic inch (standard)
<b>ELECTRICAL</b>	
Power	115/230 VAC, 50/60 Hz 5A (2)
AC supply cord	3 wire grounded, 10 Ft
Remote cord	115 VAC on/off, 15 Ft
<b>CARRIER GAS</b>	
Allowable gas	Any inert gas (N <sub>2</sub> , Ar, He)
Max operating pressure	150 psi (3)
Flow rate range	1.5 - 43.0 SCFH
Supply & Feed tubing	1/4" OD x 1/8" ID plastic
Connections	1/4" compression

- (1) Larger canister capacities available
- (2) Switch selectable at feeder
- (3) Higher pressures available
- (4) Ranges are typical, not limiting