



FLEXCART™ MELT INJECTION LIQUID METERING SYSTEM

Combined with the PlanetPak™
delivery packaging

FLEXCART™ MELT INJECTION SYSTEM

FlexCart™ Melt Injection (M.I.) units and PlanetPak™ containers are the equipment components of Avient's proprietary liquid metering systems. FlexCart M.I. is the system specifically designed to deliver liquid colorants directly into molten processes at pressures up to 200 bar.

The FlexCart M.I. is designed to meet the needs of extrusion and similar continuous processes requiring additive and colorant delivery directly into a molten polymer stream.

PlanetPak containers are recommended for Avient liquid colors and additives.

OPTIONAL EQUIPMENT

As with the larger FlexCart units, FlexCart M.I. can be configured with a wide range of optional equipment. This includes controllers, pumps, cavity transfer mixer and packaging options.

Accessories choice will depend on what the customer's process requires:

- What is the normal throughput?
- Are data management facilities needed?
- Is gravimetric capability required?
- What is the normal liquid addition rate?
- What size of packaging is normally used?

VALUE BENEFITS OF USING THE FLEXCART SYSTEM

FlexCart & PlanetPak components create a market leading metering technology:

- Robust and reliable system control
- Reliable yield (99%) and sustainable packaging
- Capability of data networking and remote internet support
- Reduced changeover cost with interchangeable cassettes



ATTRIBUTE	FLEXCART M.I.
Footprint (LxW cm)	86 x 80
Controller options	6000
Typical max. throughput (kg/hr)	120
Max. metering rate (cc/s)	1.25
Continuous use	Yes
Transfer pumps	PC
Metering pumps	PC
Interchangeable cassette	Yes

Note: PC = Progressing Cavity Pump
Peri = Peristaltic Pump



PLANETPAK™ CONTAINERS

The FlexCart system is designed to work with the standardized PlanetPak container range of packaging, achieving 99% reliable yield whilst at the same time achieving a sustainable packaging format in terms of full recyclability.

The range of sizes suitable for the Melt Injection unit are the larger end of the PlanetPak range—25L and 15L containers

The basis of a PlanetPak container is a robust polyethylene liner with a proprietary collapsing design, encompassed by a cardboard outer shell. The polyethylene liner has a non-drip valve outlet that connects seamlessly to the FlexCart metering system and the outer shell is designed to fit onto the FlexCart carriage.



EQUIPMENT OPTIONS

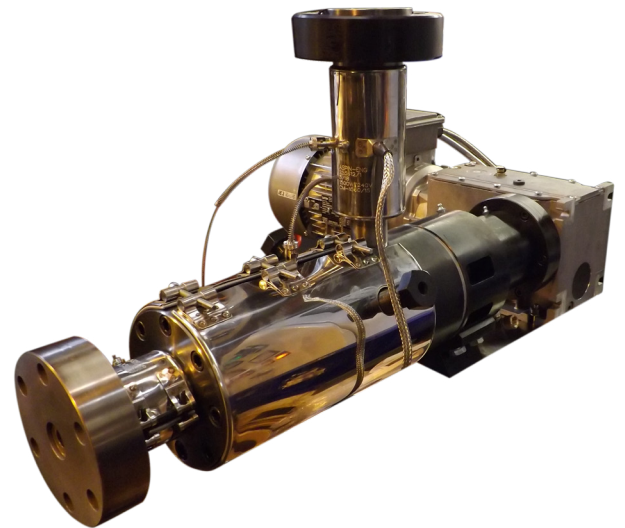
The table opposite provides some guidance on the choice of optional components.

The range of progressive cavity pump rates attainable can be used to determine the correct size of pump.

To operate in an extrusion process, the mixing capabilities may need to be enhanced and the FlexCart M.I. can be combined with a Cavity Transfer Mixer (CTM). (See image)

OPTION VS. ATTRIBUTE	PC PUMP	CMG 6000
Metering throughput	High	-
Volumetric/gravimetric	V	V/G
Data export/network	-	Yes
Touch screen	-	Yes
Multiple log-in levels	-	Yes
Multiple log-in levels	-	No

PC PUMP MIN (g/min)	0.07	0.2	0.63	1.9	3.7
PC PUMP MAX (g/min)	18	56	174	520	1040



Avient can provide support and assistance on every aspect of liquid color and additive processing. Our teams are available through your local commercial contact, directly at +1.844.4AVIENT, or visit www.avient.com.

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