

Formula 1

Multi-Ingredient, Single-Formula Dispenser



Revolutionizing the Industrial Dispense Industry

Formula 1 is a Multi-Ingredient, Single-Formula Dispenser. In some applications, a dispenser only needs to continuously repeat the same formula. While this type of dispenser can have many ingredients, a single formula usually requires no more than 10 ingredients. The **Formula 1** dispenser can handle up to 10 ingredients and comes with a simple to use Operator Control panel. Common applications for this type of dispenser are Toll Blending and Chemical Batch Production.

The Standard of *Accurate Speed*

Some dispensers are accurate and some dispense large volumes quickly. Speed, though, usually compromises accuracy. Not so with the Formula 1, which competes with all other equipment in terms of speed, but also greatly exceeds their accuracy. This speed with accuracy performance is revolutionizing the dispense industry.

Blend On Demand

The Formula 1 can save you time and money by dispensing the formula needed, quickly and accurately, on a just-in-time basis.



Any Materials

Whether your blend components are aggressive solvents, aqueous solutions, highly viscous materials or any other challenging media...the Formula 1 can handle them.

Any Size Batch

If you need a few ounces in a small container or 50 gallons in a drum, or 300 gallons in a tote....no problem for the Formula 1.

Multi-Mode Dispense Capabilities

The Formula 1 can run batches in *Volumetric* simultaneous dispense (all ingredients dispensed at the same time), *Gravimetric* mode (ingredients dispensed one at a time), and *Priority* mode (dispensing a material in order of its "priority" setting in a batch). The Formula 1 can also *Ratio* up to 10 ingredients simultaneously.



Industrial Strength

We provide dispense systems for distribution. This is not retail or point-of-sale equipment; these are robust, reliable, fast, and accurate dispensers for industrial uses. Whether you process solvent-based or aqueous solutions, or a wide range of viscosities, our equipment can handle it.

Clean

All structural and surface materials are stainless steel. The wing tops are perimeter welded, leak-proof stainless steel design for easy clean up of spills and the prevention of cross contamination of materials.



Recirculation and Agitation

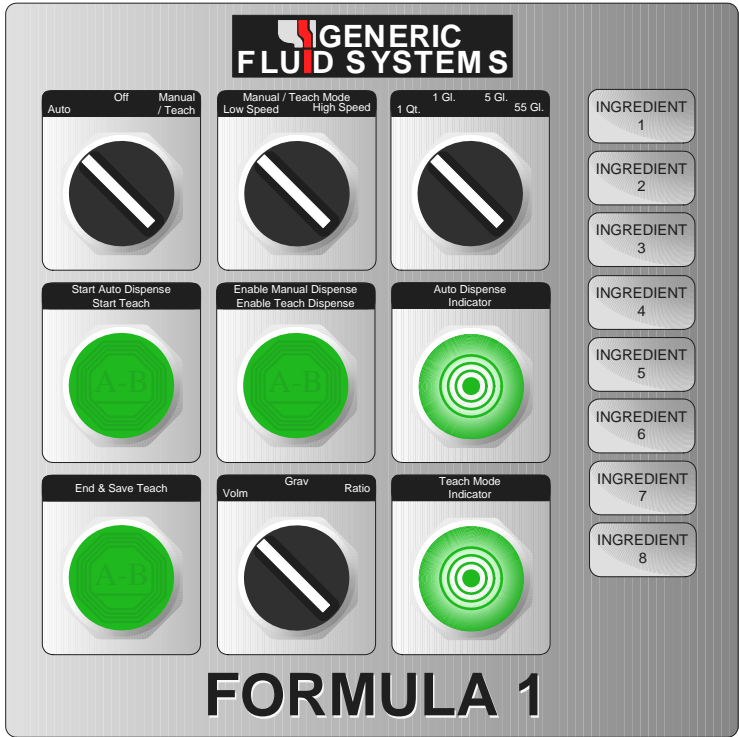
Automated, configurable fluid recirculation keeps materials "fresh" and prevents solids from settling. Optional mechanical agitation is available for supplied canisters.

Minimum Floor Space

Considering the large volume and speed that the Formula 1 can dispense, its 200-square-foot minimum floor space (for a typical eight-circuit unit) optimizes your floor space usage compared to competitors' machines.

Ease of Use

The Formula 1 does not require a PC. A simple Operator Panel controls all manual and automatic functions of the dispenser.



Operator Panel (8 Ingredient Dispenser)



Eight Ingredient Formula 1

Specifications

Dispense size range5 Switch selectable container sizes
 Dispense speed: 1 gallon (typical formula)20 seconds
 Dispense repeatable minimum shot size1/10 gram

Fluid Requirements

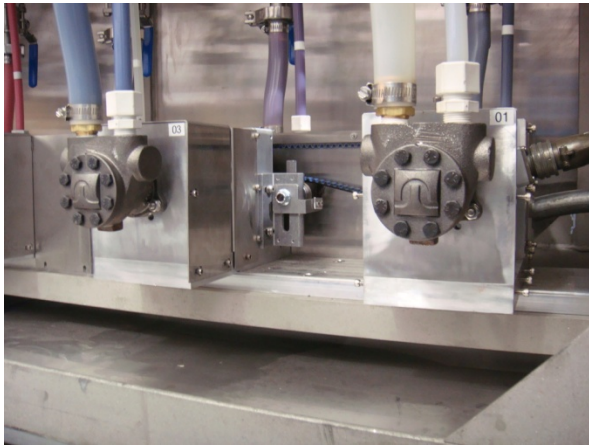
Viscosity range for supply materials.....0 cp - 7,000 cp
 Materials supportedsolvent borne or aqueous

Machine Design Specs

Supply of materials (internal)3 gallon or 6 gallon canisters
 Supply of materials (external)unlimited via Remote Bulk Supply
 Fluid circuit capacity1 to 60 circuits (can be configured with 128)
 Operating environmentfrom unclassified up to Class 1/ Division 1
 Machine composition materialsStainless Steel
 Footprint (8 circuit machine)approximately 200 sq ft
 Weight (8 circuit machine empty).....approximately 1850 lb

Utility Specs

Electric.....480 - 560 V 3phase
 Pneumatic.....120 psi @ 2 cfm



Pump Train Assembly



Optional Canister Wings (covers removed)

Standard Features

- PLC-based industrial controls platform. Robust and reliable.
- Hardwired Operator Control Panel.
- All stainless steel construction. No PC needed.
- All covers removable without tools; stainless steel appliance-style sheet metal cover panels.
- Integrated laboratory-grade certified scale.
- Designed with easy access and plenty of room for maintenance.
- Dispense head opening can accommodate cans as small as one quart.
- Proprietary high speed, bubble-tight dispense valves.
- Class 1/Division 1. No purged components.

Options

- Bulk or remote feed systems direct to Formula 1.
- Canister wing assemblies containing 3- or 6-gallon ingredient storage.
- Active Mixer assembly with cip nozzle (for Ratio Dispense Method).
- Integrated secondary floor scale for certification of drum-based dispenses.
- Conveyors shuttle can shakers.
- Optional data logging to external dispense database.
- Dispense label printer.
- Service contracts.
- Robotic-based handling systems.

Applications

- Chemical blending and custom formulation.
- Toll blending.
- Paint tinting.
- Ink formulation and tinting.
- Textile dyes manufacturing or tinting.
- Adhesive manufacturing.
- Wood stains and varnishes.
- Beverage blending or composition.
- Chemical blending and custom formulation.
- Liquid vitamins and food products.



Pricing Guide

The prices below are provided for estimation purposes. Generic Fluid Systems would provide a firm quotation following an engineering site visit to determine your exact specifications and options needed for a complete Formula 1 system. The table contains two variables: size and environment.

Size

Refers to the number of ingredients you wish to load into the Formula 1. The table provides for three common size selections: 4, 8, and 10. Note that any size of ingredients can be specified, for example 3, 7, etc.

Environment

Refers to NEC Classification for the environment where the Formula 1 will be installed. Typically solvent-based ingredients will require NEC Class1/Division 1 (explosive environment) or NEC Class 1/Division 2 (flammable environment). Aqueous (water based) ingredients will typically be in an unclassified or non-hazardous area.

Typical Formula 1 Price Ranges (Dollars USD)		
Formula 1 Size	Non-Hazardous Environment	Hazardous Environment
4 Ingredients	\$54,000 - \$62,000	\$73,000 - \$85,000
8 Ingredients	\$63,000 - \$76,000	\$89,000 - \$101,000
10 Ingredients	\$72,000 - \$87,000	\$105,000 - \$118,000



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