



Continuous Casting

Autocaster™ Recipe-Controlled Continuous Casting System

Automate the production of polymer matrix for cast polymer manufacturing

Replacing labor-intensive manual mixing with the Autocaster RC (recipe-controlled) continuous casting system provides immediate and tangible financial benefits for the engineered composite/cast polymer manufacturer - including **reduced resin cost, increased productivity, and improved quality.**

For many years, Gruber has provided the highest quality, durable continuous casting machines and other automated manufacturing equipment for cast polymer and other composites manufacturing applications. The Autocaster™ RC incorporates these technical innovations into a system that will begin providing an immediate return on your investment.

Description:

The base Autocaster™ Recipe Controlled system includes two filler metering systems, one resin metering system, one catalyst metering system, one base-color metering system and a two color contrast injector system. Additional raw material systems can be supplied as needed. The base system offers these features:

- Up to 60 lbs/minute matrix production
- Recipe based matrix control with on-the-fly adjustments for resin %, catalyst % and matrix output
- Totalizer for all raw materials (except contrast color)
- Precision gear pumps for resin, catalyst and base-color
- Accurate, solid-core filler metering augers with integrated anti-bridging devices
- Integrated resin heating system
- Adjustable flow contrast color injectors
- High efficiency mixer
- Hardened steel machined mixing auger and barrel
- Modular base-color systems with removable base-color pump
- Inverter controlled motors for all raw materials (except contrast color)

Options:

- Ground hoppers and controls for bulk bag or manual hopper filling
- Automatic casting table (ACT) 3-direction or 2 direction
- Filler Flow System for difficult to meter fillers
- Upgrade to Autocaster Ultra Control Package
- Remote Access Software/System (requires Ultra Control Package)



Shown with two Base Colors

Yearly Cost Saving Calculator*

The following chart shows the annual cost savings potential by using heated resin in automated production.

		YEARLY COST SAVINGS			
		Resin Percentage Change			
		-2%	-3%	-4%	-5%
Average Pounds Matrix Produced Daily	6,000	\$21,840	\$32,760	\$43,680	\$54,600
	8,000	\$29,120	\$43,680	\$58,240	\$72,800
	10,000	\$36,400	\$54,600	\$72,800	\$91,000
	15,000	\$54,600	\$81,900	\$109,200	\$136,500
	20,000	\$72,800	\$145,600	\$145,600	\$182,000

* This model assumes resin cost of \$0.75 per pound, filler cost of \$0.05 per pound and 260 shop days per year

Autocaster™ Recipe-Controlled Continuous Casting System Product Bulletin *(continued)*

Specifications:

MATRIX OUTPUT

- Up to 60 pounds/minute

MIXING SYSTEM

- Hardened steel barrel and auger
- High efficiency mixer

MOTORS

- 230 Volt AC TEFC or optional explosion proof
- Mixing unit - 5 HP
- Raw material feed units - 3/4 HP
- Thermal pump unit - 1/8 HP

FILLER SYSTEM

- Inverter controlled adjustable output 5 to 50 lbs/min. for CaCO₃
- Metering auger
- Maximum particle size 2mm
- Hopper capacity 4 cu. ft.
- Integrated anti-bridging device

RESIN SYSTEM

- Maximum 2500 centipoise promoted polyester resin
- Overpressure sensor and bypass
- Inverter controlled adjustable output 1.5 to 15 lbs/min.
- Integrated recirculating thermal fluid based heat exchanger with 12kW heater
- Gravity feed resin input

CATALYST SYSTEM

- Precision gear pump
- Overpressure sensor
- Recirculating system with dual electronic flow sensors & visual display
- Inverter controlled adjustable output 10 to 100 grams/min.
- Storage capacity of 5 gallons

BASE-COLOR SYSTEM

- Precision gear pump
- Uses liquid paste pigments up to 5000 centipoise
- Inverter controlled adjustable output 0.1 to 1.0 lbs/min.
- 7.5 gallon storage tank

CONTRAST COLOR SYSTEM

- Use liquid paste pigments up to 5000 centipoise
- 0.0 to 999.9 second pause and pulse settings
- Feeds from paste suppliers shipping container
- Injectors incorporate flow control knob

CLEANING SYSTEM

- Dual cleaning system – internal and recirculating.
- Air purge included
- Internal cleaner 5 gallon storage; Recirculating cleaner 15 gallon storage

CONTROL SYSTEM

- 64 recipe presets with on-the-fly adjustments for resin, catalyst & output
- Control panel mounted on adjustable arm
- Integrated rate display and totalizers
- Optional office monitoring and Optional matrix totalizer available
- Printer port

ELECTRICAL SYSTEM

- 230 Volt, 3 Phase, 50/60 Hz, 80 amps max.
- 24V DC control circuit

AIR SUPPLY

- 90 psi, 20 CFM

DIMENSIONS

- 54" wide x 80" deep x 112" high

NET WEIGHT

- 3500 lb

Order Information

150100RC Autocaster™ RC (Recipe Controlled) continuous casting system

AutoCaster RC Configuration Options include:

150102 Autocaster™ add hopper
150103NMT Add base color no drive
150103 Add base color with drive
150105 Matrix Batch Meter for RC
150106 Remote operator Panel RC
150107 Add one extra vein unit
150108 High output option (up to 80 lbs/min output rate)
160296 Y Type strainer filter
150104 Add 2 Independent Vein
111571 2" Resin transfer hose
0832100 Polypro ball valve 1.5 FP

Equipment Requirements:

All Models should be hard-wired to an appropriate circuit by a qualified electrician to meet your local electrical codes. Additional controls may be necessary to meet your local regulations. Any additional requirements needed to deem this equipment operational will be obtained by buyer at buyers expense.

Related Products

Gruber manufactures a wide array of material handling equipment, including:

Ground Hoppers - convey and meter fillers for automated manufacturing

Bulk Bag Handling System Components - including Bulk Bag Suspenders, Bulk Bag Gantrys, Roller Conveyors and other material handling equipment.



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