

# CJECT<sup>zero</sup>

## Data Sheet



### Cject<sup>®</sup> Zero — RTM/VRTM Injection Machine

The entry level machine in the Cject range with a simple and effective manual control system. The Cject Zero includes accurate electronic pressure control allowing it to be used for both RTM and vacuum processes.



## Key Features

- > Simple and reliable operator control.
- > Purpose designed resin and 316 stainless steel catalyst/hardener piston pumps for high reliability and simple maintenance.
- > Available with mix ratios to suit polyester/vinylester, epoxy and phenolic systems.
- > Manually adjustable injection speed with digital pump count readout.
- > Fixed automatic mix-head.
- > Automated, low volume flushing system.
- > Inline resin and catalyst/hardener filtration.
- > Pre-settable pump counter with auto-stop.
- > Flush alarm which provides timed audible warning after injection.
- > Service interval alarm.
- > Lockable settings.

Specifications	
<b>Material Viscosity Range</b>	Up to 5,000 cPs <b>*for material viscosity above 5,000 cPs please contact Composite Integration</b>
<b>Injection Pressure Setting Range</b>	-0.9—8 bar (G)
<b>Pre-set Injection Volume</b>	0.1—1,000 L or continuously
<b>Injection Rate</b>	0.1—8 L/min <b>*dependent on material viscosity</b>

Ratio Range	
<b>Polyester</b>	0.5—4%
<b>Phenolic</b>	1—8%
<b>Epoxy 2:1</b>	100:12.5—100:50
<b>Epoxy 1:1</b>	100:25—100:100

Process	
<b>RTM</b>	✓
<b>VRTM</b>	✓
<b>Infusion</b>	✓
<b>Material</b>	Epoxy Phenolic Polyester Vinylester



## Control

<b>Pressure</b>	Simple ON/OFF pressure control
<b>Pressure Sensor</b>	-1 to 19 bar (G)
<b>Parameters</b>	Programmable injection quantities and speeds

## Operating Conditions

<b>Noise Output</b>	< 70dB
<b>Humidity</b>	20—75% non-condensing
<b>Storage Temperature</b>	0—60°C
<b>Operating Temperature</b>	0—45°C
<b>Maximum Resin System Temperature</b>	50°C

## Power Requirements

<b>Electrical Supply</b>	110—230V AC, 50/60Hz, 1A
<b>Internal Fuse</b>	3.15A, 20 mm cartridges
<b>Supply Fusing Required</b>	3A (BS1362, IEC 269-3A)
<b>Air Supply Standard</b>	8 bar 600 L/min — dry, non-lubricated
<b>Air Supply Limits</b>	6—8 bar



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### Safety and Monitoring

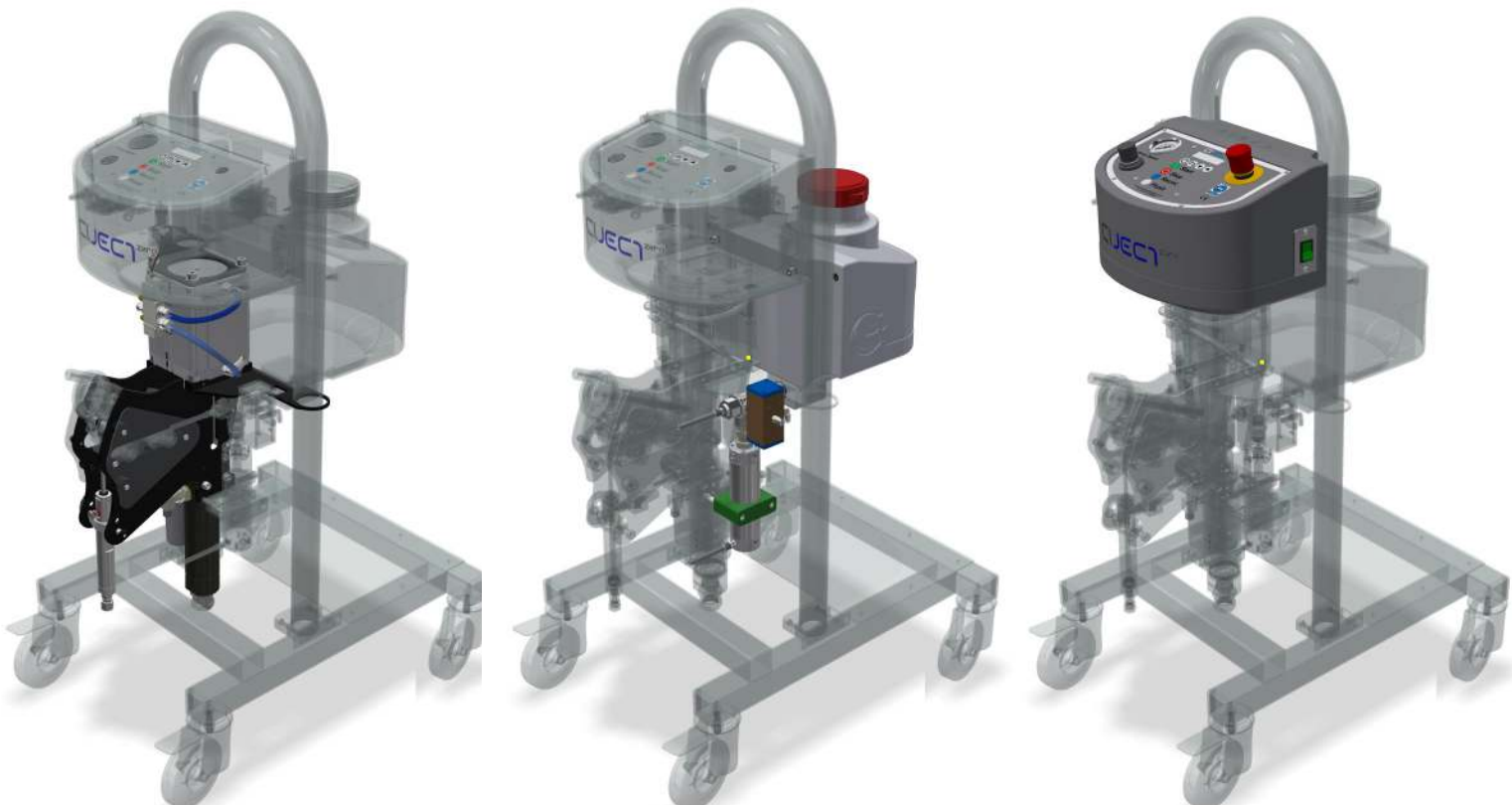
<b>Catalyst Monitoring</b>	Detects low pressure
<b>Stall Alarm</b>	Audible alarm
<b>Gel Alarm</b>	Adjustable alarm to alert when flushing is required

### Dimensions

<b>Height</b>	1220 mm
<b>Width</b>	625 mm
<b>Length</b>	725 mm
<b>Weight</b>	60 kg
<b>Maximum Shipping Weight</b>	100 kg *dependant on options

### Design Life and Servicing

<b>Nominal Service</b>	1 calendar year
<b>Design Life</b>	10 years



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## Information Sheet — Ciject® Zero

### Machine Options

<b>Polyester Version</b>	XE-0000-01
<b>Epoxy Version 2:1</b>	XE-0000-02
<b>Epoxy Version 1:1</b>	XE-0000-03
<b>Phenolic Version</b>	XE-0000-04

### Available Options

<b>High-Flow Mix-Head</b>	06
<b>High-Flow Hose (IBC Type)</b>	07
<b>Drum Trolley</b>	08

### Associated Parts

<b>Automatic Injection Valve</b>	Refer to Injection Valve data sheet for full list of configuration options and part numbers
<b>IBC Connection Kit: Resin Feed</b>	XA-1094
<b>IBC Connection Kit: Epoxy Hardener Feed</b>	XA-1094-01
<b>IBC Heater</b>	XA-1096
<b>Barrel Heater</b>	XA-1097
<b>Material Holding and Degassing Tanks</b>	A range of material processing tanks are available — refer to website for full list of configuration options and part numbers

**To specify a machine configuration use the machine part number followed by the required option numbers separated by a hyphen. e.g.: XE-0000-01 & XE-0000-SK-01 specifies a Ciject Zero polyester version and the appropriate spares kit.**

### Spares Kits

<b>Polyester Option: 0.5—4% (PRE Sept 2021)</b>	XE-0000-SK-01
<b>Epoxy Option: 100:12.5—100:50</b>	XE-0000-SK-02
<b>Epoxy Option: 100:25—100:100</b>	XE-0000-SK-03
<b>Phenolic Option: 1—8%</b>	XE-0000-SK-04
<b>High-Flow Hose Option</b>	XE-0000-SK-05
<b>High-Flow Mix-Head Option</b>	XE-0000-SK-06
<b>Polyester Option: 0.5 — 4% (POST Sept 2021)</b>	XE-0000-SK-07

### Conversion Kits

<b>Polyester to Epoxy 100:50</b>	XE-0000-CK-01
<b>Epoxy 100:50 to Polyester</b>	XE-0000-CK-02
<b>Polyester to Phenolic</b>	XE-0000-CK-03

