

DATASHEET

CIJECT¹



KEY FEATURES

- Available with mixed ratios to suit polyester/vinylester, epoxy and phenolic systems.
- Designed for use with RTM, VRTM and Resin Infusion processes.
- Purpose designed A and B component piston pumps. Highly reliable and easy to maintain.
- Advanced seal technology preventing leaks without the need for lubrication.
- Unique pivoted pump mounting for easy maintenance access for pumps assemblies.
- Fully enclosed cabinet with full operator control.
- 110 - 240V industrial micro-electric PLC control with colour touch-screen operator display.
- Automatic mix-head mounted on adjustable boom.
- Unique A and B component monitoring system.
- Pre-injection vacuum test providing pass or fail feedback prior to injection.
- B component system with a return isolation valve, providing additional security.
- Solvent level sensor that detects insufficient levels for operation.
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KEY FEATURES (continued)

- Alarm monitored 'Gel Timer' indicating when flushing is required.
- Low volume, non-pressurised mix-head flush system for simple and quick cleaning.
- B component and solvent tanks.
- Inline A component filter for cleaning without removing the pick-up hose from material.
- B component filtration which also allows cleaning.

MACHINE RESIN SYSTEMS

CIJECT 1 versions for use with phenolic materials available on request.

All versions include corresponding spares kit.

Standard Options	Description	Product Number
Polyester Version	Suitable for typical polyester and vinylester resin systems.	XE-1000-01 + SK
Epoxy Version	Suitable for typical epoxy 2:1 resin systems.	XE-1000-02 + SK
Polyester High Viscosity Version	Suitable for typical polyester and vinylester resin systems. Includes a ball-valve injection mix-head and optimised resin hoses to accommodate higher viscosity resin systems.	XE-1000-01-06-07 + SK
Epoxy High Viscosity Version	Suitable for typical epoxy 2:1 resin systems. Includes a ball-valve injection mix-head and optimised resin hoses to accommodate higher viscosity resin systems.	XE-1000-02-06-07 + SK

MACHINE UPGRADES

Standard Options	Description	Product Number
Drum Trolley	Stainless steel drum trolley to hold material barrels up to 200 litres.	XE-1000-OPT-08
Fixed B Component Tank	Polyester/Vinylester version only. - Rigidly mounted 10 litre B Component tanks (positioned on rear of machine cabinet). - Includes replaceable in-line filter. - Provides gravity feed to B Component pump.	XE-1000-OPT-13

MACHINE ANCILLARIES/RELATED PRODUCTS

Related Products	Description	Product Number
IBC Connection Kit: A Component	Suitable for typical polyester and vinylester resin systems.	XA-1094
IBC Connection Kit: B Component	Suitable for typical epoxy 2:1 resin systems.	XA-1094-01
Barrel Heater	240V flexible jacket to heat 200 litre material barrels to a maximum of 80 °C.	XA-1097
Injection Valve	Connects CIJECT equipment to a typical closed mould, ensuring reliable and clean operation. See datasheet for more information. Includes spares kit. - include a brief description.	XE-0015-01-
Flush Waste Tank	25 litre tank. - include brief description.	XE-0030

TECHNICAL SPECIFICATION

General	
Product Dimensions	L: 1.27 (1.5 m including drum trolley) x W: 0.65 x H: 0.85 m
Product Weight	100 kg
Maximum Shipping Weight	125 kg
Nominal Service	1 calendar year
Design Life	10 years

Mechanical	
Injection Pressure Setting Range	-1 to +9 bar (G)
Pre-set Injection Volume	0.1 - 1000 L or continuously
Injection Rate	0.1 - 8 L/min *dependent on material viscosity
Material Viscosity Range	Up to 5000 cPs *for material viscosity above 5000 cPs contact CI
Ratio Ranges	Polyester: 100% : 0.5% to 100% : 4% / Epoxy: 100% : 12.5% to 100% : 50%

Control	
Pressure	PID controlled pressure control
Pressure Sensor Type	-1 to +19 bar (G)
Machine Parameters	Programmable injection quantities and speeds
Program Storage	20 pre-settable programs

TECHNICAL SPECIFICATION (continued)

Safety & Monitoring	
B Component Monitoring	Detects low pressure
Stall Alarm	Adjustable audible alarm
Gel Alarm	Adjustable alarm to alert when flushing is required

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

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