

DATASHEET

CIJECT¹



KEY FEATURES

- Designed for use with RTM, VRTM and Resin Infusion processes.
- Available with mixed ratios to suit polyester/vinylester, epoxy and phenolic systems.
- Purpose built A and B component piston pumps, highly reliable and easy to maintain.
- Advanced seal technology preventing leaks without the need for lubrication.
- Enclosed cabinet with full operator control.
- Unique pivoted pump mounting for easy maintenance access for pump assemblies.
- Automatic mix-head mounted to adjustable boom on the machine.
- 110—240V industrial micro-electrical PLC control with colour touch screen display.
- Unique A and B component monitoring system using pressure sensors.
- Inline A component pickup filter, allowing easy access for maintenance.
- A and B component inlet hoses include a serviceable filter for easy cleaning, essential for reliable operation.

KEY FEATURES (continued)

- Low volume mix-head flush system for simple and quick cleaning.
- Pre-injection vacuum test providing pass or fail feedback prior to injection.
- Solvent level sensor that prevents operation without sufficient solvent levels.
- Adjustable 'Gel' alarm indicating when flushing is required.
- Adjustable 'Stall' alarm indicating when the pumps have stalled.

MACHINE RESIN SYSTEMS

CIJECT 1 versions for use with phenolic materials are available on request.
All versions include a 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 2:1 epoxy systems.	XE-1000-02 + SK
Polyester High Viscosity Version	Suitable for typical polyester and vinylester resin systems. Includes a ball valve mix-head and optimised resin hoses to accommodate higher viscosity resin systems.	XE-1000-01-11-12 + SK
Epoxy High Viscosity Version	Suitable for typical epoxy 2:1 resin systems. Includes a ball valve mix-head and optimised resin hoses to accommodate higher viscosity resin systems.	XE-1000-02-11-12 + 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-15
Fixed B Component Tank	Polyester/Vinylester version only. Rigidly mounted 10 litre tank with a replaceable inline filter, positioned on the rear of the machine cabinet. Provides a gravity feed to the B component pump.	XE-1000-OPT-13

MACHINE ANCILLARIES/RELATED PRODUCTS

Standard Options	Description	Product Number
IBC Connection Kit: A Component	Suitable for typical polyester/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

MACHINE ANCILLARIES/RELATED PRODUCTS (continued)

Standard Options	Description	Product Number
Injection Valve	Connects CIJECT equipment to a typical closed mould, ensuring reliable and clean operation.	XE-0015-01-
Flush Waste Tank	25 litre tank for the secure collection of waste material from your injection valve flush waste line.	XE-0030

TECHNICAL SPECIFICATION

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

Mechanical	
Injection Pressure Setting Range	-1 to +9 bar (gauge)
Pre-Set Injection Volume	0.1 — 1,000 L or continuously
Injection Rate	0.1 — 8 L/min *dependent on material viscosity
Material Viscosity Range	Up to 5,000 cPs *for material viscosity above this contact Composite Integration
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 (gauge)
Machine Parameters	Programmable injection quantities and speeds
Program Storage	20 pre-settable programs

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

TECHNICAL SPECIFICATION (continued)

Power Requirements	
Electrical Supply	110 — 230V 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 Material Temperature	50°C
Operating Temperature	0 — 45°C
Storage Temperature	0 — 60°C
Humidity	20 — 75% non-condensing
Noise Output	< 70 dB