

For consistent, repeatable mixing results in the laboratory, the DC50 inline high shear mixer is hard to beat. Using high performance FDM high shear technology in a simple, convenient benchtop format, many common laboratory mixing tasks can be performed with the minimum of effort.

Whilst batch mixers are very familiar and convenient for small vessels, ensuring that all of the mixture has seen the same stress history and that the process can be reliably scaled up to production levels demands inline mixing.

Simple, quick-release pipe couplings and excellent flushing/cleaning performance are critical to ease of use in the lab. Combined with a powerful and flexible electric motor and controller and discrete fluid injection port, the DC50 offers all of these features and many more, making it simply the easiest and most flexible inline high shear mixer to use in the lab environment.

Special versions of DC50 are available for hazardous environments and dedicated hygienic food and pharmaceutical applications.

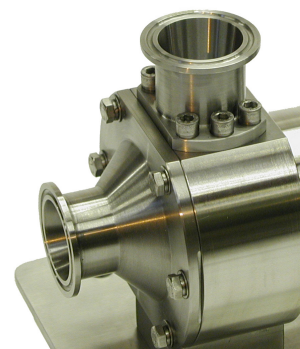
- Dispersing
- Homogenising
- Rapid blending
- De-agglomerating
- Emulsifying
- Reacting
- Diluting



SPECIFICATIONS

		DC50
Nominal rotor diameter	mm (inch)	50 (2)
Rotor maximum speed (typical)	rpm	6000*
Typical maximum flowrate	litres/hr (gpm)	800 (3.5)
Viscosity range (approx.)	cP (Pa.s)	0.1 (0.0001) to 30000 (30)
Ports		1" diameter inlet and outlet RJT, Triclamp, threaded and ANSI options
Materials of construction		316 stainless steel wetted parts with stainless steel baseplate and aluminium bearing housing
Seal		Single component mechanical seal with carbon/ceramic faces and Viton o-rings (EPDM option)
Control & Instrumentation (optional)		Power ON/OFF, Mixer START/STOP, speed control pot., LCD control panel, optional PC link
Weight**	kg (lbs)	30 (66)
Motor power	kW (hp)	1.1 (1.5)
Electrical (typical values)		Motor only: 3 phase 240Vac, 50/60Hz, Optional controller: 1 phase, 240Vac, 50/60Hz
Approvals / Certification (standard)		CE marking (Europe), UL/ASME components (US) + others

* Using optional frequency inverter/speed controller at 100Hz.
** Excluding control panel




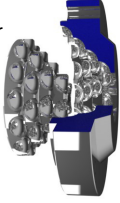
PART CODES AND ORDERING

DC50
LABORATORY FDM INLINE MIXER

DC50- - - - -

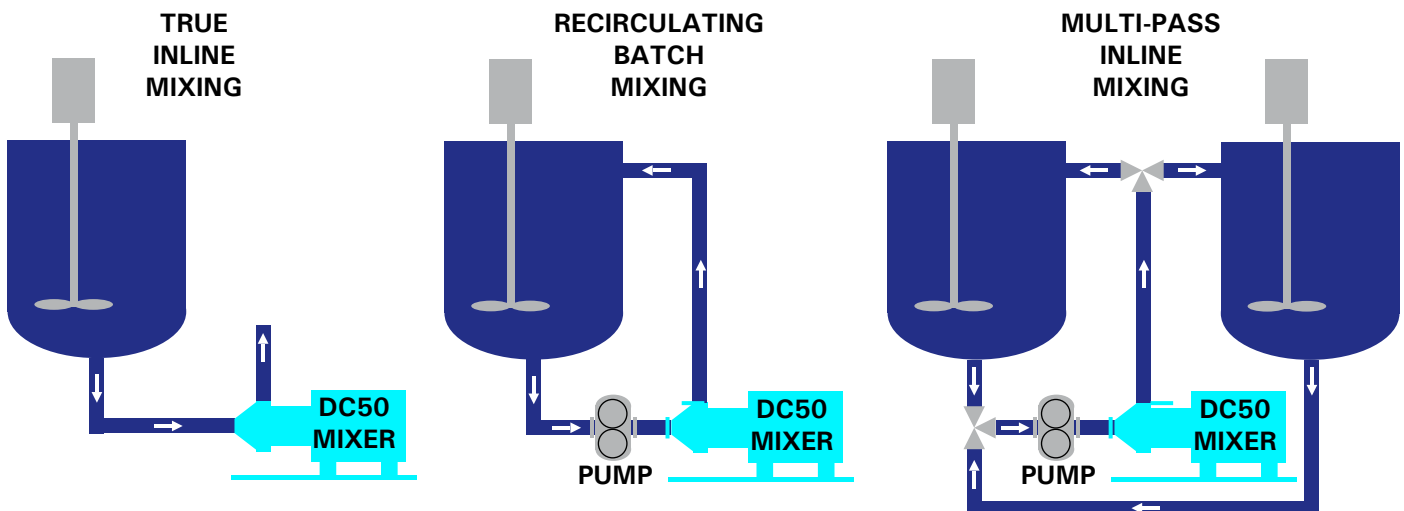
1	2	3	4	5	
Model DC50		Cavity rows -2-3 -4-4	Motor Size In kW x 10	Seal S - single mechanical D - double mechanical	Special options N - no special options H - hygienic option F - flameproof/ATEX option

DC50-4-4-11SH means a DC50 mixer with 4 cavity rows on the rotor and stator, 1.1kW motor, a single mechanical seal and hygienic design option.

CODE POSITION	DETAILS		
2	<p>Cavity rows The number of rows of mixing cavities on the stator and the rotor. A 2-3 configuration gives lower stress than the standard 4-4 option for materials that are more sensitive to shear.</p>	<p>2 row stator 3 row rotor</p> 	<p>4 row stator 4 row rotor</p> 
4	<p>Seal A single mechanical seal (S) is fitted as standard but a double (flushed) mechanical seal (D) can be specified, if required.</p>		
5	<p>Special options Machines designed specifically for hygienic (H) and flameproof/ATEX (F) applications.</p>		

Note that although the DC50 will provide some centrifugal pumping action for low viscosity fluids, additional upstream pumping is highly recommended to ensure independent control of flowrate and mixing speed for best performance.

RECOMMENDED SYSTEM CONFIGURATIONS



First Floor, 59-61 High Street West,
Glossop, Derbyshire SK13 8AZ
England
Tel > +44 (0)1457 867777
Fax > +44 (0)1457 862207
email > sales@maelstrom-apt.com
web > www.maelstrom-apt.com

Authorised Distributor:

