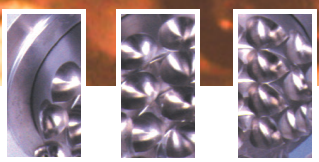
FDM Technology

DISTROMIX B

lab batch mixer range

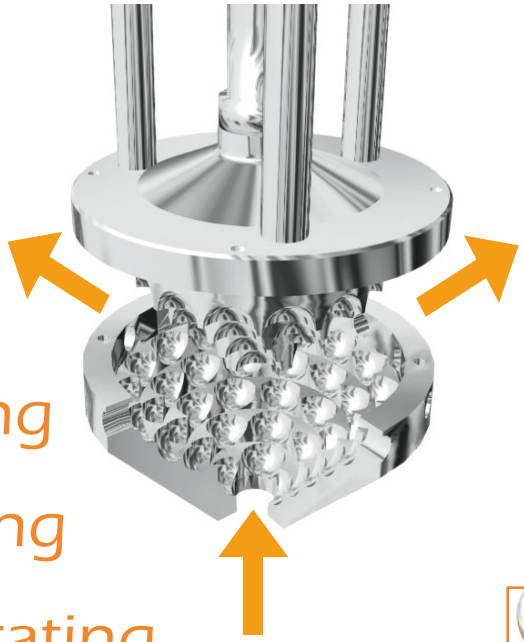


DB25E+DB50E High Shear Lab Mixers

The DB25E and DB50E range of rotor-stator high shear mixers use Maelstrom's patented Fluid Division Mixing (FDM) technology to deliver exceptional levels of performance for laboratory mixing.

The unique rotor and stator geometry develops strong hydraulic shearing actions in the mixing head. These give increased levels of mixing energy and micro-scale blending actions in the fluid, when compared to conventional rotor-stator mixers.

Conveniently integrated with an electric lift column, simple user controls and dual data displays, the DB25E and DB50E provide exceptional performance in a versatile package.



- intense shearing action
- high speed (to 14,400rpm)
- simple controls
- electric lift action
- easiliy cleanable
- interchangeable heads
- versions for abrasives

Dispersing

Homogenising

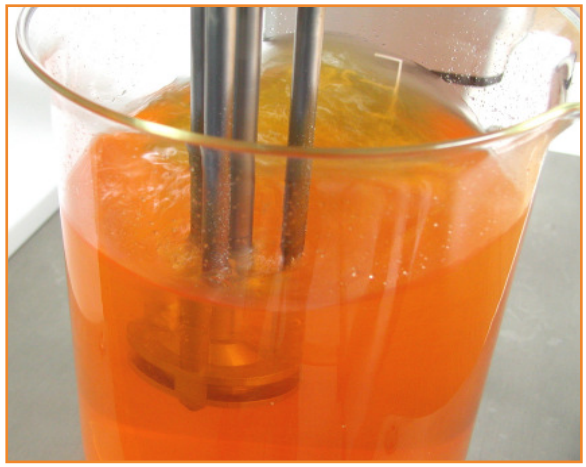
Rapid blending

De-agglomerating

Emulsifying

Reacting

Powder addition



Food **Pharmaceuticals** **Speciality Chemicals** **Paints** **Coatings** **Pigments**

FDM
Technology

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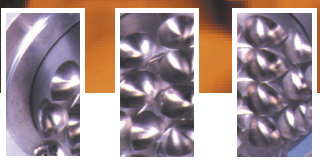
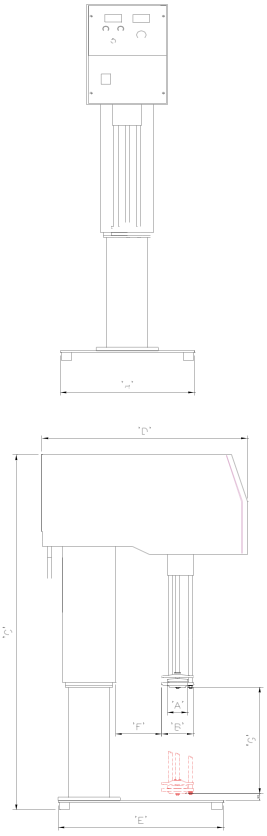


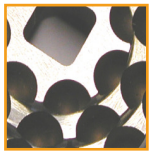


		DB25E	DB50E
Typical Dimensions	mm		
A		25	50
B		41	76
C		810	1000
D		520	500
E x e		400 x 325	400 x 325
F		180	110
G		250	250
Weight	kg (lbs)	36 (80)	45 (100)
Typical maximum mixing volume at low viscosity (e.g. water)	litres	5	10
	gals	1.5	2.5
Typical maximum mixing volume at high viscosity (e.g. thick cream)	litres	2	4
	gals	0.5	1
Viscosity range (approx.)	Pa.s (cP)	0.0001 (0.1) - 30 (30,000)	
Motor power range (standard*)	kW (hp)	0.37(0.5)	0.75(1)
Rotor speed (typical max.)	rpm	14400	6000

*Larger and non-standard motors available on request

Typical Construction Materials

316 stainless



Toolsteel

Zirconia ceramic

DB25E shown fully lowered (above) and fully raised (below)

Details

Mixing head configuration	Standard: 2/3 (2 cavity rows on stator, 3 on rotor) Options: 3/4 and 4/4 heads available
Construction materials	Wetted parts - 300 series stainless steel standard (other materials such as titanium, HASTELLOY® and ceramics are available on request) Bearings - lower polymer bush (FDA-approved material) upper rolling element bearings standard. Note that the standard mixer must NOT be run dry. Base and Housing - stainless steel baseplate, painted steel housing with stainless steel front panel
Controls	- Mains on/off - Start / stop pushbuttons - Electric lift raise/lower switch - Speed & load displays - Speed control potentiometer
Electrical supply	120V or 220-240V, 50/60Hz, single phase supply to controller
Options	Hygienic - to meet the requirements of cGMP and other standards ATEX-compliance – please note that these units will not meet ATEX requirements – a manual lift version should be used instead – please consult Maelstrom for further details.

The physical and performance specifications in this leaflet are not intended for accurate sizing and selection of machines. Please contact Maelstrom APT or its agents directly for a selection appropriate to any particular mixing application.
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