



When rotor-stator high shear mixers cannot deliver the performance needed and a high pressure homogeniser is beyond the budget, an ICV40 inline mixer may be the ideal answer.

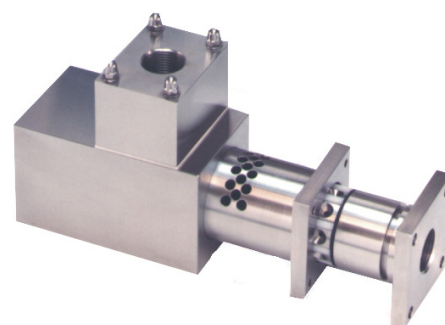
A benchtop machine based on Maelstrom's unique IPM® technology, the ICV40 provides shear, extensional and impact stressing to fluids for efficient mixing energy transfer. This gives

finer droplets and particles with the narrow dispersion range normally associated with high pressure homogenisers. Typical droplet sizes down to 1-2 microns are achievable in oil/water systems without emulsifying agents.

High performance in a laboratory homogeniser usually means compromised flexibility, cleanability and ease of use. An ICV machine, in contrast, can be used just like a positive displacement vane pump, providing pressures of up to 5 bar at the outlet and strong suction at the inlet. Modular design and the ability to deal with soft solids as well as emulsions, make ICV machines the idea lab partner.

Special versions of ICV are available for use in hygienic and hazardous area applications. Please consult Maelstrom for specific information on these options.

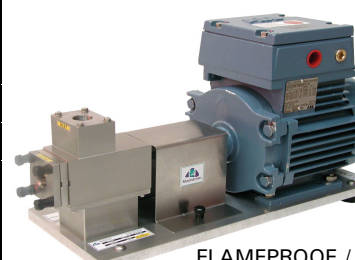
- Emulsifying
- Homogenising
- De-agglomerating
- Stabilising



SPECIFICATIONS

		ICV40
Nominal rotor diameter	mm (inch)	40 (1.6)
Rotor maximum speed (typical)	rpm	1750*
Typical maximum flowrate	litres/hr (gpm)	200 (0.9)
Viscosity range (approx.)	cP (Pa.s)	0.1 (0.0001) to 100000 (100)
Ports		3/4" 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)	35 (77)
Motor power	kW (hp)	1.5 (2)
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

* At 60Hz motor supply frequency.
** Excluding control panel



FLAMEPROOF /
ATEX VERSION

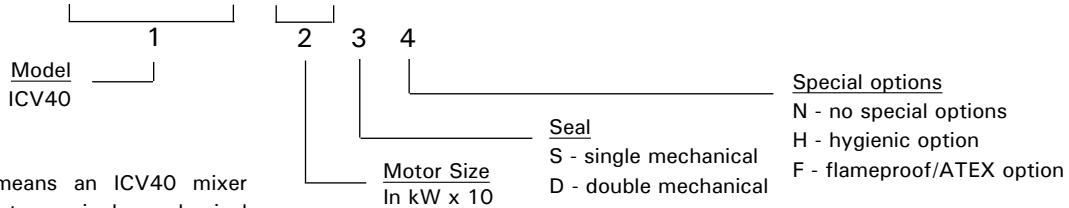


HYGIENIC
VERSION

PART CODES AND ORDERING

ICV40 LABORATORY IPM INLINE MIXER

ICV40-11 _ _



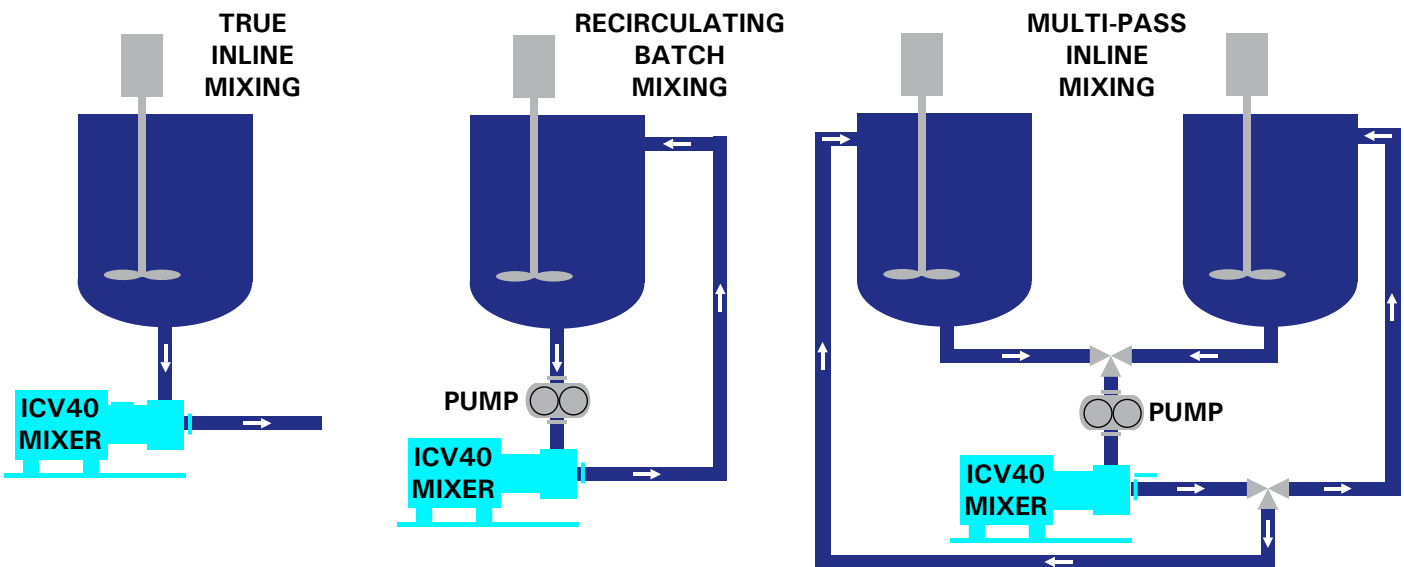
EXAMPLE

ICV40-11SH means an ICV40 mixer with 1.1kW motor, a single mechanical seal and hygienic design option.

CODE POSITION	DETAILS
5	<u>Seal</u> A single mechanical seal (S) is fitted as standard but a double (flushed) mechanical seal (D) can be specified, if required.
6	<u>Special options</u> Machines designed specifically for hygienic (H) and flameproof/ATEX (F) applications.

CODE	SPARES	0.5mm	1.0mm	2.5mm
ICVxxx-ROT	<u>Rotor (Central Element)</u> The rotor carries the nozzles which provide the extensional stressing action of the ICV machine. Rotors with different nozzle diameters are available to suit particular fluid viscosities.			
ICVxxx-VSP	<u>Vane set - PEEK</u> Spare set of 8 vanes in PEEK polymer			
ICVxxx-TBP	<u>Thrust bearings - PEEK</u> Spare set of 2 thrust bearings in PEEK polymer			
ICVxxx-RBP	<u>Radial bearings - PEEK</u> Spare set of 2 radial bearings in PEEK polymer			

RECOMMENDED SYSTEM CONFIGURATIONS



Authorised Distributor:



First Floor, 59-61 High Street West,
Glossop, Derbyshire SK13 8AZ
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