

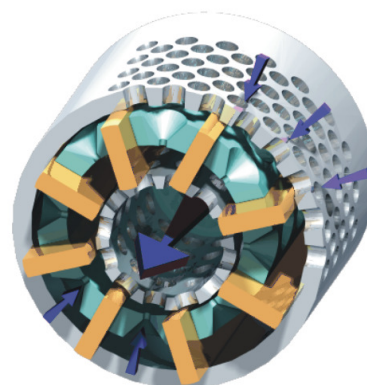
Bridging the gap between high shear rotor-stator mixers and high pressure nozzle homogenisers, ICV mixers provide exceptional mixing performance at a low price point.

High flow rates and efficient mixing energy transfer are key benefits of Maelstrom's proprietary IPM® mixing technology, making ICV machines ideally suited to

a wide range of emulsification and homogenisation tasks. IPM® combines shear, extensional flow and impact stress mechanisms with an integral positive displacement pumping action to ensure that all fluid passing through the mixing head experiences the same levels of stress. This results in finer droplets and particles with a narrower 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.

Simple operation and integrated pumping action make ICV mixers simple to integrate into most production processes and maintenance costs are low due to the user of low-cost polymer wear parts and quick-assembly modular construction. ICV machines are offered with either single or double mechanical seals and a range of options including special hygienic design features for food and pharmaceutical use.

- Emulsifying
- Homogenising
- De-agglomerating¹
- Stabilising



¹ The sliding nature of internal components makes ICV mixers unsuited to the processing of hard or abrasive solids.

MODEL RANGE

		ICV60	ICV100
Nominal rotor diameter	mm	60	100
Typical maximum flowrate (water)	litres/hr	4000	10000
	gals/min	20	45
Viscosity range (approx.)	Pa.s (cP)	0.0001 (0.1) - 100 (100,000)*	
Ports (RJT, Triclamp and ANSI options)	inch	1	2
Weight**	kg	65	300
	lbs	145	660
Motor power range (standard**)	kW	5.5	30
	hp	7.5	45
Rotor speed (typical max.)	rpm	1750	
Approvals / Certification (standard)		CE marking (Europe), UL/ASME components (US) + others	

* For fluids towards that upper end of this viscosity range, the addition of a pump upstream of the mixer is highly recommended.

** Typical for alloy motors. Larger and non-standard motors available on request

*** Achievable using optional frequency inverter drive

Note that although the ICV range will provide good positive displacement vane pumping action for low and medium viscosity fluids, additional upstream pumping is highly recommended to ensure independent control of flowrate and mixing speed for best performance. Care must be taken in specifying pumps that match or exceed the flowrate of the ICV machine to avoid starvation at the ICV inlet.

