

For controlled inline mixing and blending of shear-sensitive ingredients, the DCL range of FDM mixers provides the answer.

Using the unique FDM cavity geometry incorporating inter-cavity transfer principles, DCL machines deliver a gentle cutting and folding action to high viscosity fluids in the laminar flow regime. For many high viscosity applications, difficult batch mixing

processes can be replaced by a DCL machine operating downstream of a pump or extruder. Low viscosity ingredients can be dosed directly into the mixing head at multiple points using injectors, making the DCL ideal for adding colours, treatment agents and other additives to a high viscosity stream.

Rugged design, very low pressure drop and a wide range of options make DCL machines easy to partner with existing equipment and easy to tailor for a specific application. The mixing head is also very cleanable - an important consideration if jacketed heating options are chosen and bake-on is a possibility or if adhesives are being processed.

Special options for hygiene and CIP operation are available for food and pharmaceutical applications and flameproof versions can be provided for hazardous areas.

- Delicate blending
- Shear-sensitive mixing
- Texturing
- Structuring
- Reacting
- Diluting



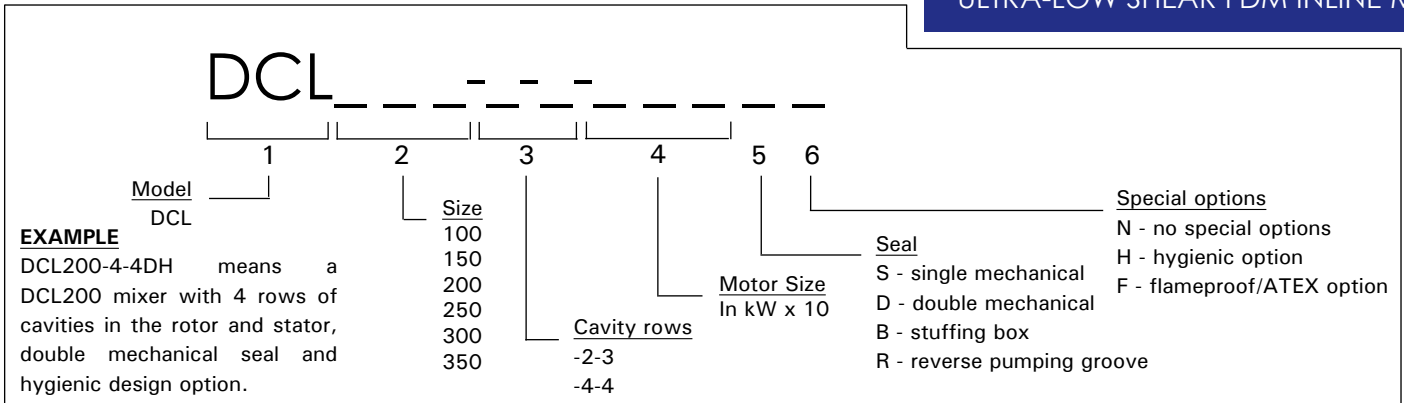
MODEL RANGE


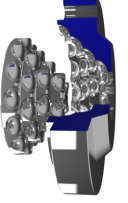
	DCL100	DCL150	DCL200	DCL250	DCL300	DCL350
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Nominal rotor diameter	mm	100	150	200	250	300	350
Typical maximum flowrate (paste)	litres/hr	9000	20000	36000	55000	75000	100000
	gals/min	40	90	160	240	330	440
Typical maximum flowrate (rubber)	litres/hr	900	2000	3600	5500	7500	10000
	gals/min	4	9	16	24	33	44
Viscosity range (approx.)	Pa.s (cP)	1 (1000) - 100,000 (10 ⁸)*					
Ports (RJT, Triclam and ANSI options)	inch	1	1.5	1.5	2	2.5	3
Weight**	kg	75	130	270	550	750	960
	lbs	165	290	600	1200	1650	2100
Motor power range (paste)	kW	1.5	3	5.5	11	18.5	30
	hp	2	4	7.5	15	25	40
Motor power range (rubber)	kW	15	30	45	75	150	250
	hp	20	40	60	100	200	330
Rotor speed (typical max.)	rpm	1000				200	
Approvals / Certification (standard)		CE marking (Europe), UL/ASME components (US) + others					

* For fluids towards that upper end of this viscosity range, substantially stronger components and higher power drives are used.

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

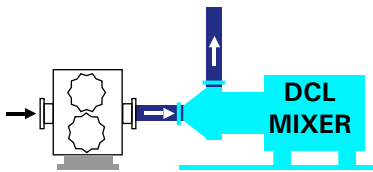


CODE POSITION	DETAILS
3	<p>Cavity rows The number of rows of mixing cavities on the stator and the rotor. A 2-3 configuration gives lower stress than the standard 4-4 option, for materials that are more sensitive to shear and which may require very light processing. The 4-4 option is standard.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>2 row stator 3 row rotor</p>  </div> <div style="text-align: center;"> <p>4 row stator 4 row rotor</p>  </div> </div>
5	<p>Seal A single mechanical seal (S) is fitted as standard but a double (flushed) mechanical seal (D), stuffing box with gland packing (B) or reverse pumping groove (R) can be specified, if required. The choice of seal depends on how the mixer is used and the lubricating/cooling properties of the process fluid.</p>
6	<p>Special options Machines designed specifically for hygienic (H) and flameproof/ATEX (F) applications.</p>

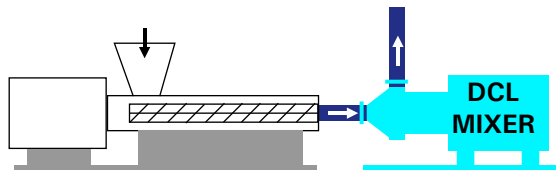
Note that as the DCL range is designed to provide a pure low shear mixing action and cannot be assumed to provide any pumped pressure. An upstream pump suited to the viscosity of the process fluid is required in all cases.

RECOMMENDED SYSTEM CONFIGURATIONS

GEAR PUMP FED DCL (PASTES)



EXTRUDER FED DCL (PLASTICS)



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