

DYNAMIX DC

HIGH-SPEED SINGLE SHAFT MOBILE VESSEL DISSOLVER

DYNAMIX DC mobile vessel Dissolvers are machines for low and medium viscosity products dispersion, engineered and manufactured to work in difficult industrial conditions. Equipped with a high-speed single shaft, also configurable with scraper and in vacuum version, they can meet every production need thanks to a wide range of engines up to 110 kW. This allows to manage products with viscosities from 1,000 Cp up to 300,000 Cp and batches up to 3,000 lt.



ADVANTAGES

- Innovative technology enabling INDUSTRY 4.0 that optimizes business processes in terms of management time, costs and quality
- Continuous process control thanks to internal PLC
- Total integration with the production flow and the company ERP
- Efficient recipe management, high product repeatability and reduction of production waste
- Minimization of breakdowns and unwanted downtime by predictive maintenance indicators
- Remote assistance for immediate customer support
- Special design allowing for an easy maintenance of the transmission system

TECHNICAL FEATURES

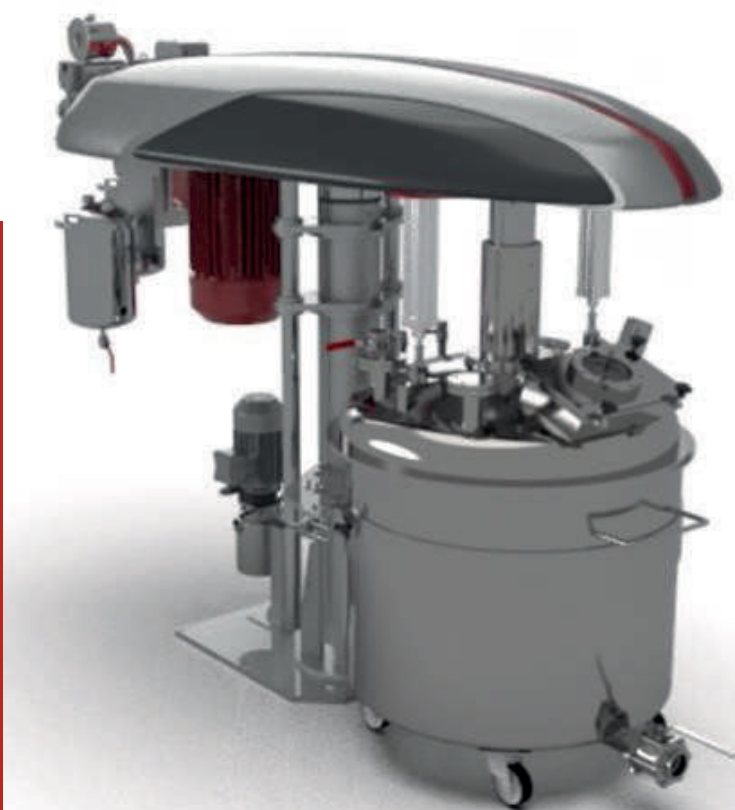
- Thick carbon steel supporting structure with anti-vibration reinforcements
- Rectified and chromed steel telescopic head holder column
- High thickness sheet metal head with anti-torsion reinforcements and pulley protection casings
- Shaft transmission system by belts and pulleys
- Hydraulic lifting system managed by heavy duty hydraulic power pack
- Shaft support with high performance ball bearings
- AISI 304 stainless steel high-speed dispersion shaft
- AISI 304 stainless steel Cowles or Turbo type toothed impeller
- Flat lid for dust or vapor-tight processing or rounded lid for vacuum processing
- Different dust and liquid supply systems integrated in the lid
- Tank fixing system:
 - **Fast Clamping**, characterized by easy entering of the vessel, fast locking and high resistance to lateral loads. Manual locking clamps with safety micro-contact for machine start only when the tank is blocked
 - **Adjustable Belt**, characterized by a support with adjustable saddles and tensioning ratchet. Possibility of fixing vessels with different diameters
 - **Double Centering Arm**, characterized by fork opening of the arms with automatic centering of the tank under the dispersion impeller, while the support saddles facilitate the correct positioning of the vessel. The worm screw with increased thread guarantees an easy opening and closing of the locking system. High resistance to lateral loads. Possibility of fixing tanks with different diameters. Possibility of motorizing the opening and closing of the locking system
- Electronic speed variation with inverter
- On-site control panel
- ATEX version

INDUSTRY 4.0 READY

- Internal PLC
- Intuitive touch HMI for the operator
- Ethernet connections

INDUSTRY 4.0 OPTIONAL

- Wi-Fi operator control panel
- Router for remote assistance
- Latest generation MISURA software
 - Preventive maintenance indicators
 - OEE (Overall Equipment Effectiveness) indicators
 - Panel with digital pointers
 - Software interface with customer ERP



CONFIGURATION

Model	Single shaft	Single shaft with motorized internal scraper RI	Flat lid F for dust and vapor with impeller gliding G	Rounded lid SV for vacuum with impeller gliding G
F-G Model	X		X	
RI-G Model		X	X	
SV-G Model	X			X
RI-SV-G Model		X		X

ACCESSORIES

- Motorized internal scraper (RI) with opposite movement compared to the dispersion impeller, which can keep the tank wall constantly clean, conveying the product to the central area even during the disareation
- Condenser, vacuum pump and safety clamps for vacuum version (SV) machines
- Lifting column with external fairing
- Manual or automatic up and down system to lift and lower the impeller during mixing (G)
- Safety pressure micro-switch
- Level sensor (Encoder)
- Servo-ventilated engine for main engine forced cooling
- Product temperature sensor placed on the lid or integrated into the shaft
- Foam sensor
- Working cycle timer
- Butterfly and ball valves for raw materials loading
- Cup impeller for high viscosity and density products with quartz and sand
- Reinforced Tank with cavities for cooling and external insulation for heating
- Reinforced extruder-ready tank
- Truncated cone-shaped tank with reduced capacity
- Integrated weighing platform system through base with four load cells
- Washing system (only in case of a rounded lid with lid-tank locking clamps):
 - with rotating washing heads fixed on the lid
 - with motorized immersion lance and rotating washing head

TECHNICAL DATA

Model	Main engine power		Head lifting engine power		Scraper engine power*		Vacuum pump engine power**		Vacuum pump payload**	Dispersing shaft speed (rpm)	Scraper shaft speed (rpm)*	Impeller diameter (mm)	Maximum indicative useful volume (lt)***
	Kw	Hp	Kw	Hp	Kw	Hp	Kw	Hp					
DC 10	7,5	10	1,5	2	1,1	1,5	1,4	2	45	350-1700	11	180-200	170
DC 15	11	15	1,5	2	1,1	1,5	1,4	2	45	350-1700	11	200-220	230
DC 20	15	20	1,5	2	1,5	2	1,4	2	45	350-1500	11	220-250	310
DC 25	18,5	25	1,5	2	1,5	2	1,4	2	45	350-1500	11	250-270	470
DC 30	22	30	1,5	2	1,5	2	2	2,7	45	350-1500	11	270-300	625
DC 40	30	40	1,5	2	1,5	2	2	2,7	45	350-1500	11	320-350	850
DC 50	37	50	2,2	3	2,2	3	2	2,7	63	350-1500	10	350-380	1000
DC 60	45	60	2,2	3	2,2	3	2	2,7	63	350-1500	10	380-400	1200
DC 75	55	75	2,2	3	2,2	3	2	2,7	63	350-1500	10	430-450	1500
DC 100	75	100	2,2	3	4	5,5	2,7	3,6	63	350-1500	8	450-500	2000
DC 125	90	125	3	4	4	5,5	2,7	3,6	63	250-1100	8	500-520	2500
DC 150	110	150	4	5,5	4	5,5	5,5	7,4	63	250-1100	8	520-570	3000

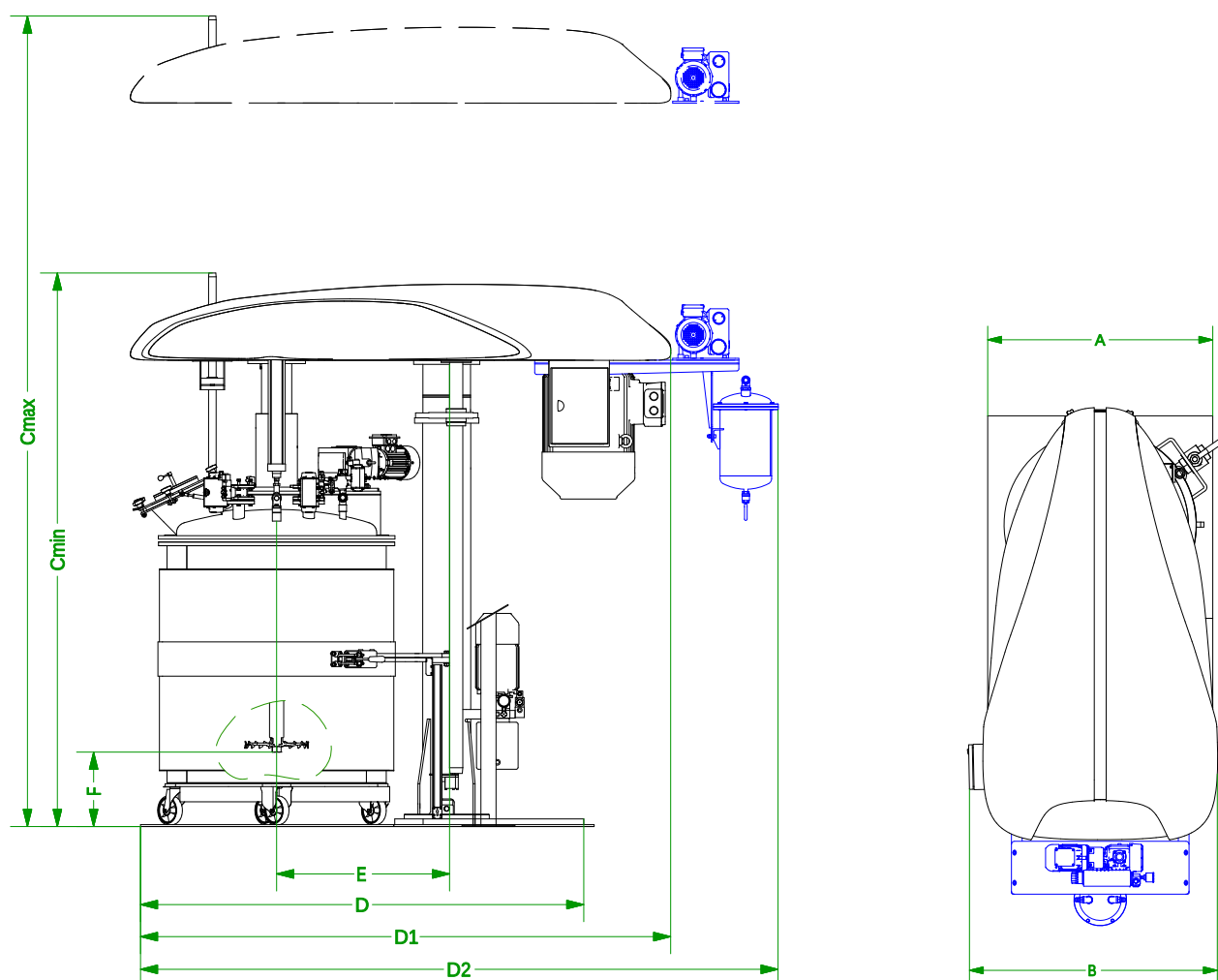
* applicable only to RI versions

DATA ARE PROVIDED FOR INDICATIVE PURPOSES ONLY

** applicable only to SV versions

*** data refers to optimal dispersions of good quality water-based paints and enamels (max. viscosity 6000 cPs, specific weight 1.5)

DIMENSIONS



Model	Machine dimensions (mm)								Standard tank dimensions (mm)	
	A	B	Cmin - Cmax	D	D1	D2*	E	F	Diameter	Height
DC 10	1500	700	1900 - 2900	2500	2850	3450	650	300	600	750
DC 15	1500	700	1900 - 2900	2500	2850	3450	650	300	700	750
DC 20	1500	700	1900 - 2900	2500	2850	3450	650	300	750	900
DC 25	1500	800	2200 - 3300	2750	2850	3450	650	350	900	900
DC 30	1500	1550	3000 - 4300	2850	2850	3450	950	350	900	1000
DC 40	1500	1550	3000 - 4300	2850	2850	3450	950	350	1100	1100
DC 50	1500	1550	3000 - 4300	2850	2850	3450	950	350	1100	1250
DC 60	1500	1550	3000 - 4300	2850	2850	3450	950	350	1300	1100
DC 75	1500	1550	3000 - 4300	2850	2850	3450	950	400	1350	1250
DC 100	1500	1550	3100 - 4400	3100	3100	3700	1150	400	-	-
DC 125	1700	1550	3200 - 4500	3500	3500	4100	1150	500	-	-
DC 150	1700	1550	3200 - 4500	3500	3500	4100	1150	500	-	-

* applicable only to SV versions

APPLICATIONS

Paints, water-based paints, thick coatings, glues, putties, sealants, cosmetic products, epoxy products, inks, can coatings, adhesives, plastic materials