# **DYNAMIX DCLV**

#### DOUBLE SHAFT MOBILE VESSEL DISSOLVER

**DYNAMIX DCLV** mobile vessel Dissolvers are machines for medium and high viscosity products dispersion and mixing, engineered and manufactured to work in difficult industrial conditions. Equipped with a double shaft, with a high-speed dispersion shaft and a mixing shaft with scraping blades, which can also be configured 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 50,000 Cp up to 1,000,000 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

#### High-speed dispersion shaft with:

- Shaft support with high performance ball bearings
- AISI 304 stainless steel high-speed dispersion shaft
- Main engine coaxial to the high-speed dispersion shaft
- AISI 304 stainless steel Cowles type toothed impeller

#### Mixing shaft with:

- Shaft support with high performance ball bearings
- AISI 304 stainless steel mixing shaft
- Gear motor directly coupled to the mixing shaft
- AISI 304 stainless steel butterfly impeller
- Three scraping blades applied to the butterfly impeller by a AISI 304 stainless steel structure
- Flat lid for dust and 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 vessel is blocked
  - Double Centering Arm, characterized by fork opening of the arms with automatic centering of the vessel 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 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 interface 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	Double shaft	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			
SV-G Model	X		X		

### **ACCESSORIES**

- 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 switch
- Servo-ventilated engine for main engine forced cooling
- Product temperature sensor integrated into the mixing shaft
- Working cycle timer
- Butterfly and ball valves for raw materials loading
- Reinforced tank with cavities for cooling and external insulation for heating
- Reinforced extruder-ready tank
- Integrated weighing platform system through base with 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	,	g shaft power Hp	Dispers engine Kw	ing shaft power Hp		lifting power Hp	Vacuun engine Kw	n pump power* Hp	Vacuum pump payload*	Mixing shaft speed (rpm)	Dispersing shaft speed (rpm)	Cowles impeller diameter (mm)	Butterfly impeller diameter (mm)	Maximum indicative useful volume (lt)*
DCLV 30	22	20	7,5	10	1,5	2	2	2,7	63	0-300	0-1900	180-200	600	350
DCLV 40	22	30	7,5	10	1,5	2	2	2,7	63	0-280	0-1900	180-200	900	350
DCLV 50	22	30	15	20	1,5	2	2	2,7	63	0-230	0-1800	200-220	900	400
DCLV 60	30	40	15	20	2,2	3	2	2,7	63	0-200	0-1800	220-250	1000	570
DCLV 75	37	50	18,5	25	2,2	3	2	2,7	63	0-190	0-1700	250-270	1150	570
DCLV 100	55	75	18,5	25	4	5,5	2	2,7	63	0-180	0-1700	270-300	1200	950
DCLV 125	75	100	18,5	25	4	5,5	2,7	3,6	63	0-160	0-1700	320-350	1250	1050
DCLV 150	75	100	37	50	4	5,5	2,7	3,6	63	0-150	0-1200	350-380	1300	1150
DCLV 175	90	125	37	50	4	5,5	5,5	7,4	63	0-140	0-1200	380-400	1400	1250
DCLV 225	110	150	55	75	4	5,5	5,5	7,4	63	0-130	0-1200	430-450	1500	1450

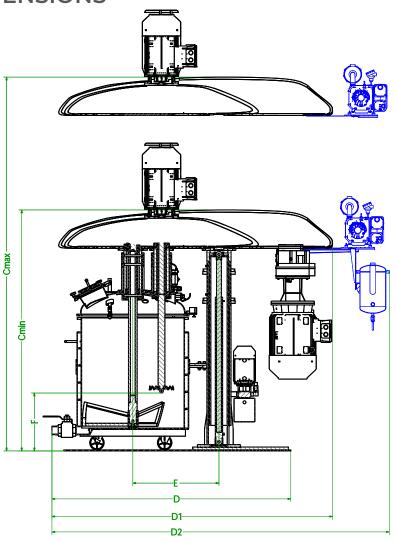
<sup>\*</sup> applicable only to SV versions

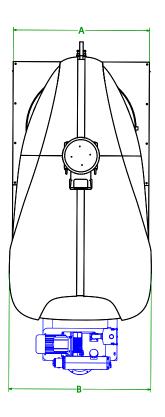
DATA ARE PROVIDED FOR INDICATIVE PURPOSES ONLY











Model	Machine dimensions (mm)											
	Α	В	Cmin - Cmax	D	D1	D2*	E	F				
DCLV 30	1200	1550	3700 - 5000	2850	2850	3450	950	350				
DCLV 40	1200	1550	3700 - 5000	2850	2850	3450	950	350				
DCLV 50	1400	1550	3700 - 5000	2850	2850	3450	950	350				
DCLV 60	1400	1550	3700 - 5000	2850	2850	3450	950	350				
DCLV 75	1500	1550	3700 - 5000	2850	2850	3450	950	400				
DCLV 100	1500	1550	3800 - 5100	2850	2850	3450	950	400				
DCLV 125	1700	1000	4200 - 5500	3100	3100	3700	1150	500				
DCLV 150	1700	1000	4200 - 5500	3500	3500	4100	1150	500				
DCLV 175	1700	1000	4200 - 5500	3500	3500	4100	1150	500				
DCLV 225	1700	1000	4200 - 5500	3500	3500	4100	1150	500				

<sup>\*</sup> applicable only to SV versions

# **APPLICATIONS**

Paints, thick coatings, sealants, adhesives, plasters, putties

