

KYNESIS

HIGH-TECH IN-LINE DISPERSER

KYNESIS is an high-tech dispersing equipment. As continuous in-line disperser working on rotor-stator principle, Kynesis is suitable in a large range of applications and revamping of existing processes. It offers an easy integration either in process for homogeneous distribution of solid particles in liquid (dispersion) either liquid in liquid (emulsions). The wide range of rotors and stators allow to manage a large variety of products of different viscosities and densities and the wide range of motors is able to satisfy every production need up to 200kW. Kynesis has been developed during the last decade to evolve 50 years Comec experience in traditional dispersers to competitive needs of today's industry.



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
- High flexibility and versatility to cover a wide range of products and viscosities thanks to different possible configurations in a single machine
- Impressive dust absorption speed
- 40% to 70% energy saving compared to a traditional rotor-dynamic pump
- Immediate dispersion during powder induction
- Easy cleaning of the dispersing chamber with reduced deadtime between different batches
- Up to 90% cleaning agent reduction compared to a traditional disperser

TECHNICAL FEATURES

- Low volume mixing chamber for the dispersion and mixing of powders and liquids at high output speed
- Unit for wetting and dispersing powders
- Wide range of rotors and stators in AISI 316 stainless steel to manage products characterized by different viscosities, densities and fineness of dispersion
- Vacuum suction for rapid dust absorption
- Automatic valve, resistant to section above the mixing chamber to avoid wetting the powder inlet tubes
- Electronic speed regulation by inverter
- Components in AISI 304 stainless steel
- Components in contact with the product in AISI 316 stainless steel
- Self-lubricated mechanical seal
- Surface treatments for high wear resistance inside the process chamber
- Temperature sensor
- Pressure sensor
- Flow sensor

Powder induction rate (kg/min)				
Type of powder	132 kW	45 kW	22 kW	7,5 kW
Calcium Carbonate	450-650	340-490	310-450	10-15
Titanium	350-600	260-450	240-400	8-16
Aluminum Silicate	250-400	190-300	175-270	7-10
Fillers, Extenders, Talc	300-500	225-375	210-340	4-9
Light Pigments, Kaolin	120-300	90-225	80-200	4-9
Bentone	20-80	15-60	14-55	3-5
Silica, Aerosil	10-40	7-30	6-28	1-2

