

EIRICH Laboratory Mixer Type EL5/10 *Profi Plus*

for highest demands in research,
development and production



Mixing



Granulating



Coating



Kneading



Dispersing

EIRICH Laboratory Mixer EL5/10 *Profi Plus*

Flexible high-performance mixing system for challenging tasks in the fields of research, development and small-scale production

Process materials from dry to plastic and pasty can be processed.

Applications

The multi-functional mixing system can be used for many different applications, e.g. for mixing, granulating, coating, kneading, dispersing, dissolving, defibering and many more.

Industrial scale-up of test results is possible.

Feeding

Once the tools have been retracted, the raw materials and fluids are filled in from above through openings that can be sealed dust-tight.

Emptying

First of all, the mixing tools are moved out conveniently with electric motors. Then the mixing pan can simply be taken off for emptying.

Drives / motors

Mixing pan: Pole-changing helical-worm geared motor with 2 speed steps

Mixing tool: Two basic speed ranges can be set up via V-belts. Within these ranges, the speed can be infinitely varied in both directions of rotation thanks to the integrated frequency converter.

Power connection: CEE three-phase plug 400V / 16A

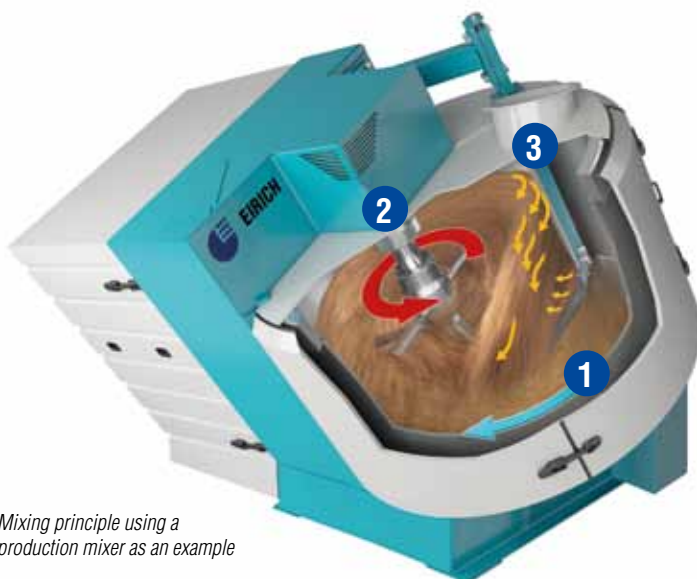
Service and cleaning

All bearings are maintenance-free and greased for service life. All parts that come into contact with the process material are made of stainless steel as standard and are easy to clean.

Mixing principle

A **rotating and tilted mixing pan (1)** with an eccentrically arranged **mixing tool (2)** produces optimum mixing results in the shortest possible time. In the process, **the fixed scraper on the wall (3)** performs the cleaning of the mixing pan wall and promotes the movement of the process material.

Thanks to the different geometries of the interchangeable mixing tools and the option of varying their speed within wide limits, the system setup can be perfectly adjusted to meet the needs of completely different tasks and consistencies.



Mixing principle using a production mixer as an example

With the most modern control technology

Features of the basic equipment

- Mixing pan: INOX
- Mixing tool: Star-type rotor
EL5 Profi: modular layout, made of stainless steel
EL10 Profi: single-unit layout, with armoring
- Control system: Eco Control (features see page 4)
- Process material temperature: 180°C max.

Mixing tool variants

- Pin-type rotor instead of star-type rotor
- EL5 Profi: Wear protection via armoring for pin-type rotor or star-type rotor
- Micro-granulation rotor with tungsten carbide wear protection

Additional options

- Control system: Premium Touch Control (features see page 5)
- Temperature measurement on the wall scraper (PT100)
- Interchangeable edge of the wall scraper optionally made of PTFE, polyamide (max. 80°C) or tungsten carbide (basic equipment: Ampco)
- Support for mixer inclination of 0° for fluids or fluidizing materials
- Roller table with mixer tilt adjustment as a flexible base frame
- Funnel for the addition of liquids, with adapter, made of stainless steel
- Heater (hot air), incl. temperature measurement on the wall scraper (PT100)
- Instruction and training at the EIRICH Test Center in Hardheim

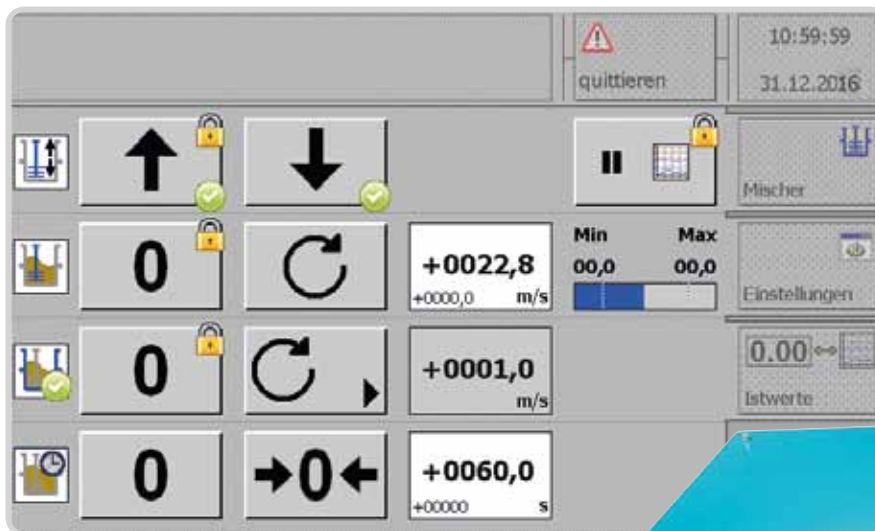


Basic Touch Control

(Basic equipment)

- Compact control system, completely with operator panel integrated in the machine frame
- Easy to read operator panel with high-resolution 7" TFT display and membrane-protected mineral glass panel for high operational reliability
- User-friendly touch-screen interface for setting the operating parameters and displaying current machine data and information such as the tool speed, motor power, torque and temperature*
- Display of time-limited online trends in measurement diagrams
- Integrated stopwatch with deactivation function
- USB 2.0 interface for external measured value recordings

*as far as option "Temperature measurement" is chosen



Premium Touch Control

(Optional)

- Rugged, laser-engraved stainless steel keys integrated in the machine frame
- Large 15.6" wide screen monitor in an aluminium housing with protection against dust and splash water
- Available with tilt-adjustable monitor holder for table-top use next to the machine or as a console version
- User-friendly **multi-touch-screen interface** for convenient preparation, performance and logging of the mixing processes
- User-defined compilation of automatic workflows with the available individual steps of raw material feed, sampling, mixing on the basis of time/temperature*/torque or energy
- Integrated measured value recording with a variety of setting options
- Batch-specific archiving of the process data and display of predefined, printable reports
- Data export to USB media or network sharing in PDF, JPG or Text file format
- Available interfaces: 1 x USB, 1 x Ethernet
- Operating system: Windows 7

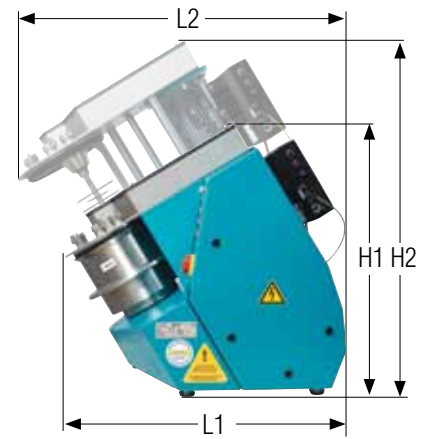
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Technical data for your planning

		EL5	EL10	Profi Plus
Dimensions and weights				
Machine	H1/H2	mm	920/1.220	
	L1/L2	mm	960/1.150	
	Width	mm	630	
	Weight	kg	ca. 260	
Mixing pan	Diameter	mm	235	314
	Capacity*	Liters	3 - 5	8 -10
		kg	max. 8	max. 12
Performance data				
Mixing pan	Drive (2-stage speed)	kW	0,55 / 0,88	
Mixing tool	Drive	kW	up to 5,2	
	Circumferential speed	m/s	0,7 - 29	0,9 - 38



*depending on the product



Industrial Mixing and Fine Grinding Technology

Tradition and innovation since 1863

EIRICH stands worldwide for a comprehensive range of products and services in the field of preparation technology. Its particular focus is on mixing and fine grinding technology, with know-how developed over 150 years of close cooperation with industrial users, universities and research institutions.

Pursuing a corporate philosophy of operating internationally and thereby ensuring close proximity to every customer, the EIRICH Group has secured its place in all the key economic regions of the world.

The focus is on innovative technology for machinery and systems engineering designed to offer solutions for high-standard preparation tasks from a single source.

Applications and process technology with own test centers, a high vertical range of production and comprehensive after-sales service provide the ideal basis for the development of modern and economical processes for a multitude of industries.

**Building materials – Ceramics – Glass – Carbon paste – Battery paste
Friction linings – Metallurgy – Foundries – Environmental protection**

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