

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Once the tools have been retracted, the raw materials and fluids are filled in from above through openings that can be sealed dust-tight.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

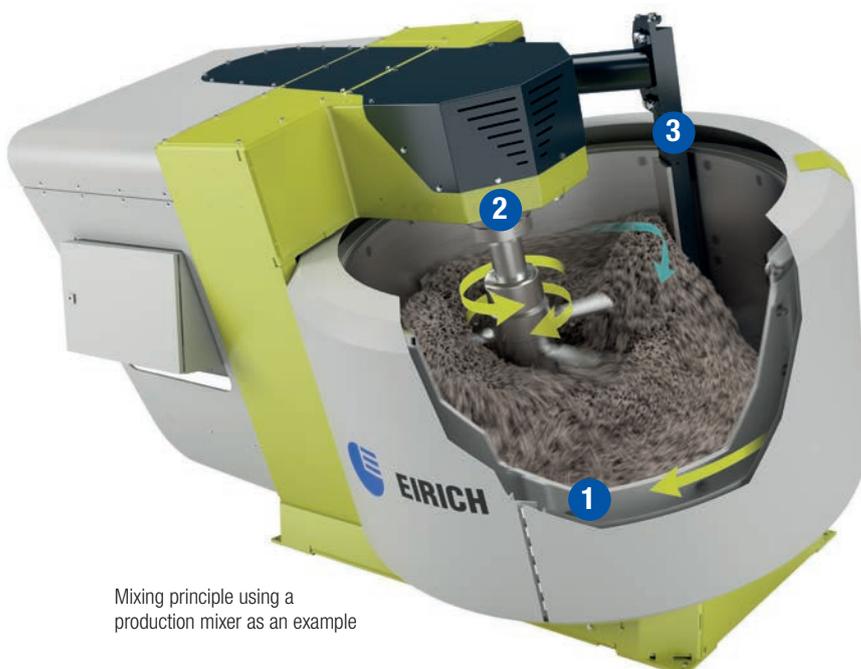
Mixing pan: Pole-changing helical-worm geared motor with 2 speed steps

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 using a production mixer as an example

Mixing system

The special EIRICH mixing system comprises just 3 components. The way in which these components are used can be varied in a particularly flexible fashion when designing the mixing processes.

1. The **rotating mixing pan**, which delivers the mixture into the area of the mixing tools.
2. **One mixing tool** arranged eccentrically. The direction of rotation and the speed of the mixing tool can be **optimally adapted** to the different applications.
3. The **bottom/wall scraper**, providing **additional agitation** action. It prevents caking on the wall and bottom of the pan and **facilitates discharge** when the mixing cycle is complete.

With the most modern control technology

Features of the basic equipment

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

Mixing tool variants

- Pin-type rotor
- Micro-granulation rotor
- Various wear protection variants on request

Additional options

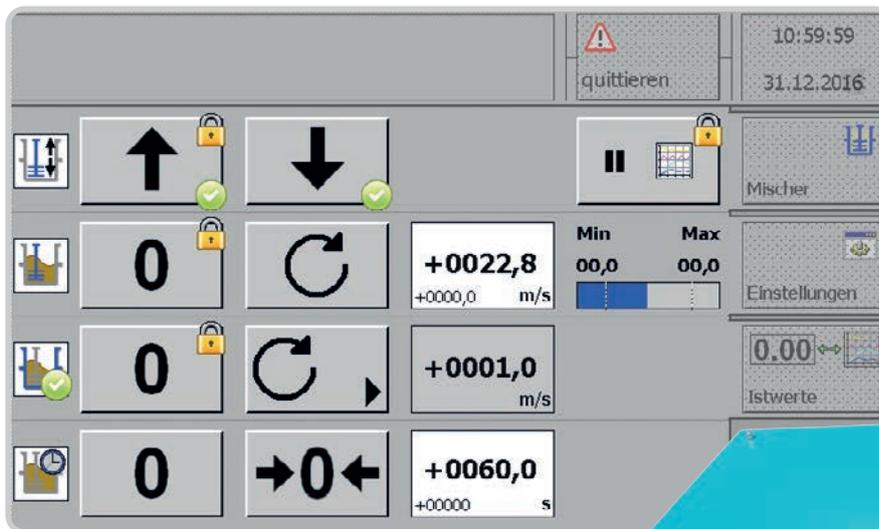
- Control system: Premium Touch Control (features see page 5)
- Temperature measurement on the wall scraper (PT100)
- Interchangeable edge of the wall scraper optionally made of PTFE, polyamide or tungsten carbide (basic equipment: Ampco)
- Mixing pan made of polyamide
- Cooling by double jacket
- Support 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" 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 interface for external measured value recordings
- *as far as option "Temperature measurement" is chosen



Premium Touch Control

(Optional)

- Rugged, 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 work-flows 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

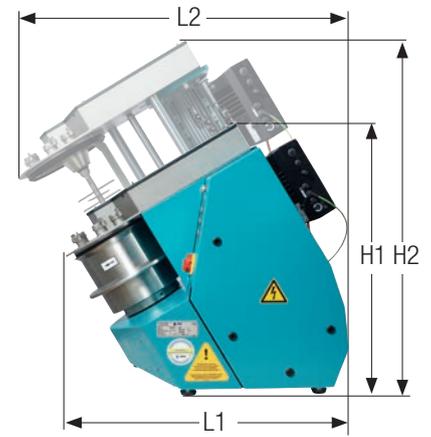
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Technical data for your planning

		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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