

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

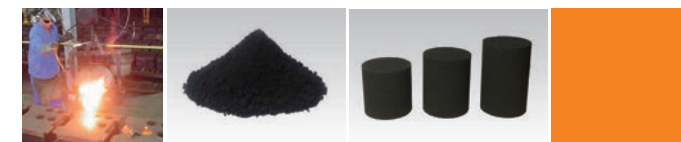
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www.eirich.com

Digital CB Tester AT-S

Advanced
Technology
for
Solutions



AT-S is “Simple Sand Tester”

AT-S?

Control technology of green sand process and sand properties Eirich has developed over many years.
AT-S is automatic Compactability (CB) Measuring Equipment developed with the concept of “Simple and Smart” and combinations of experiences Eirich has built and advanced technologies.

AT-S stands for
Advanced
Technology for
Solutions

Technology

AT-S provides a simple and user-friendly operation with a high reliability by specializing only in CB measurement.
It is adopted with various Advanced Technologies for Solutions.

All Servo Drive
Servomotors are equipped for CB measuring cylinder and sampling cylinder to achieve stable performance and higher accuracy in CB measurement.

Technology for Solutions

- A sand filling sensor is installed on sampling cylinder to prevent CB measurement error caused by insufficient sand volume.
- 2D structure with mechanism elements assembled only on one side of machined main panel. All drives, valves, wiring, and piping are accessible from one side.
- Stable performance of drives is achieved by assembling in pressurizing chamber to prevent contamination of sand and dust.

Simple/Smart
The number of parts is reduced significantly in comparison to conventional model by improving equipment configuration. Equipment size is also downsized by 60%.

Solutions

Applications

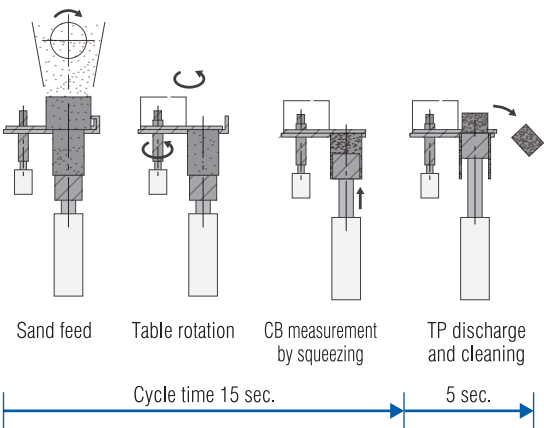
- CB measuring for Eirich Intensive Mixer and other mixers
- CB measuring at sand discharge of mixer
- CB measuring on molding machine

Market

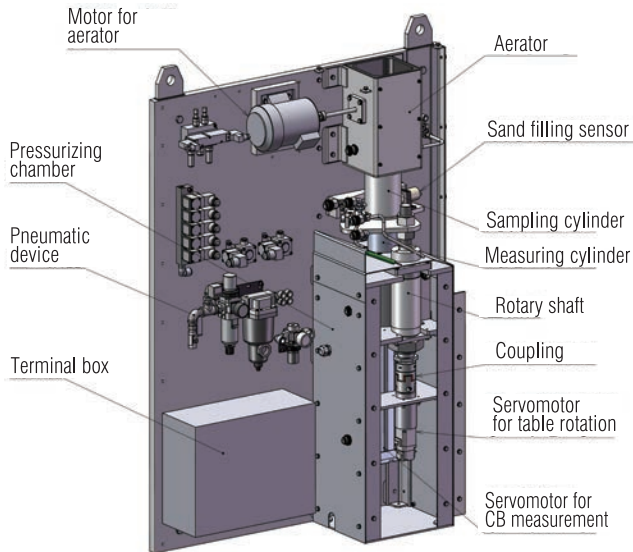
- For customers, planning a new molding line
- For customers, planning a replacement of existing mixer
- For customers, planning automation of existing sand system
- For customers, planning CB measurement on molding machine

Technology

Measuring Process



Mechanisms



AT-S

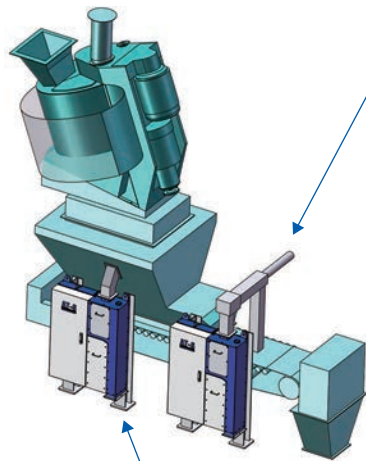


Multiple display functions

CB data and graph in real-time and also in the past are displayed.
CB data is also available as Microsoft Excel data.



Sample layout

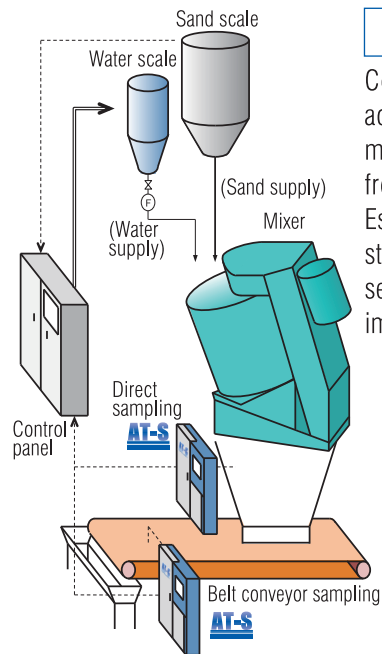


Belt conveyor sampling
Mixing sand will be collected from above conveyor chute. AT-S can be installed in a limited space and can be replaced with existing CB tester. (Installation above molding machine)

Direct sampling

Mixing sand will be collected directly under mixer during sand discharge. Quick feedback of moisture control for the next batch is available.

General system schema

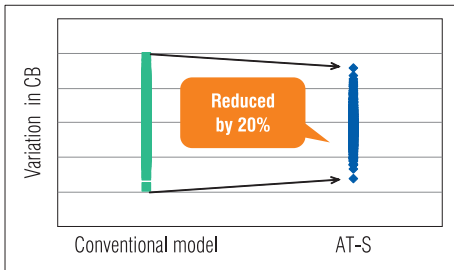


Application

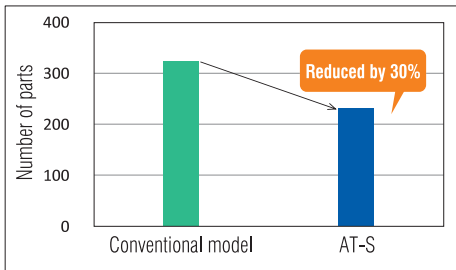
Control system adjusts moisture addition to target CB by evaluating moisture content with CB feedback from AT-S.
Especially with direct sampling, CB stability is remarkably improved by sending feedback for the next batch immediately after mixing.

Comparison with conventional model

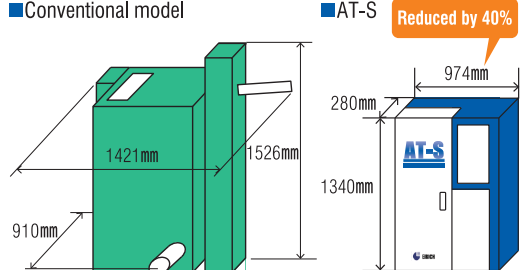
High accuracy and repeatability



Reduction of number of parts



Size



Standard specifications & Options

Standard specifications	AT-S
	• CB measuring unit
	• Aerators
	• Pneumatic unit
	• Installation frame
	Control panel
Options	Sampling equipment
	• Direct sampling
	• Belt conveyor sampling
	Sample breaker
	Remote monitor
	Internet connection