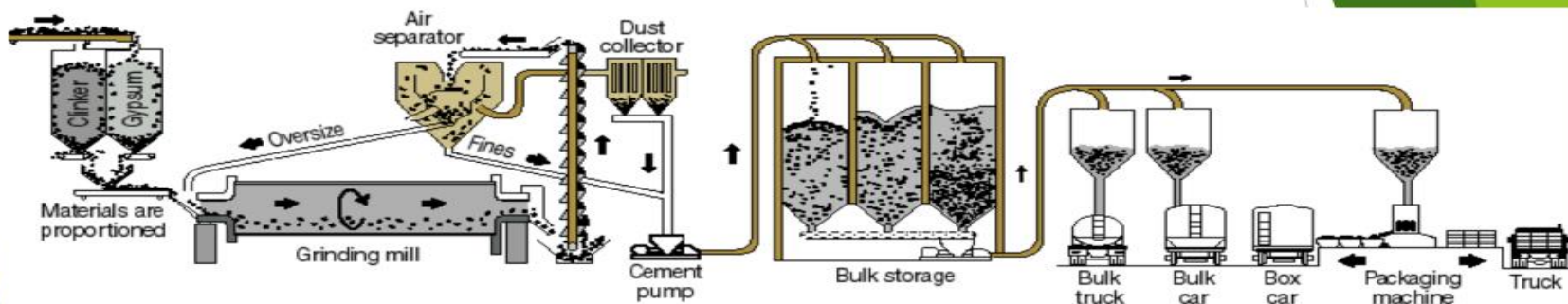




# SIMPLY CEMENT PRODUCTION PHASES





# c e t

Ç İ M E N T O E N E R J İ T A S A R R U F U

Ç İ M E N T O E N E R J İ T A S A R R U F U

- ÇET MAKİNA GIDA ÇİMENTO since 1999.
- **Superior service understanding and quality since 1999**
- Established in Istanbul, our company has been operating under the name of ÇET MAKİNA GIDA ÇİMENTO ENERJİ TASARUF YAPI LTD. ŞTİ, it serves in the cement sector.
- Çet Makina is to meet all the needs and expectations of its customers with capacity increase in production, saving in energy, quality in product and service.
- We provide 24/7 seamless support services to our customers with our professional and expert staff.

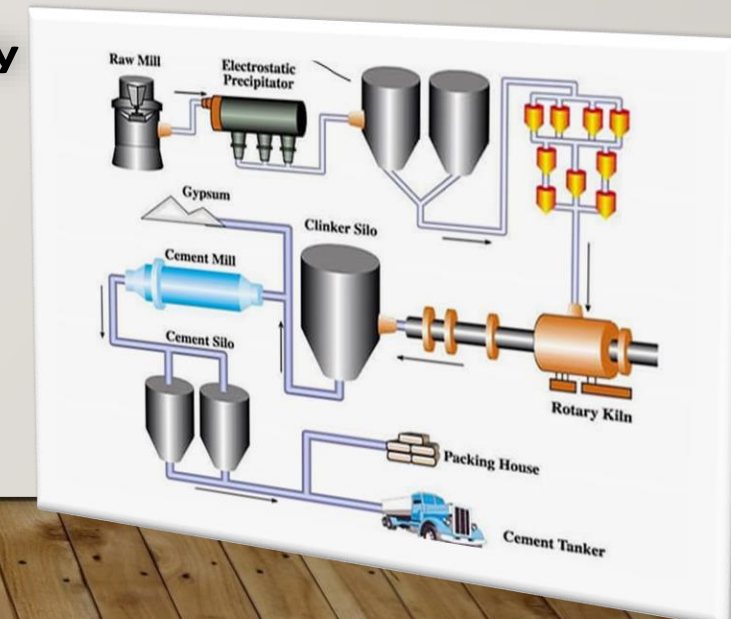


# USE OF ELECTRONEUTRALIZATION TECHNOLOGY IN CEMENT INDUSTRIES



- With the help of the original electro-neutralizer "ECOFOR" it was possible in some cases to reduce this opposition and thus intensify a number of technological processes. Electroneutralization has proven to be a fairly versatile way to improve the processing of inhomogeneous materials. It has been tested to intensify the processes:

- **Sintering and firing of materials**
- **Increased carbon reducing agent activity**
- **Alloy casting**
- **Dry grinding**
- **Descaling in boilers**
- **Rectification**
- **Dust and gas cleaning**
- **Production of optical fiber**
- **Polymer powder coating**





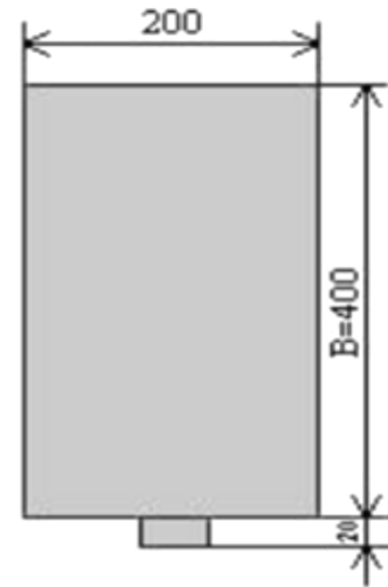
# CHARACTERISTICS OF THE ACTIVE NEUTRALIZER `ECOFOR`



- Active neutralizer - device ECOFOR, second generation, model EF-01-03 is produced according to TU 4218-002-59456824-2007 and in accordance with Russian patents for inventions. It is designed to intensify the processes of dry crushing and grinding.
- The device provides an increase in the productivity of crushers and dry grinding mills by 6 -10%, depending on the material being processed, with a reduction in specific energy consumption by 1,5 – 2kW.
- The voltage of the power supply of the device is 230V, the current frequency is 50 - 60 Hz, the current consumption is not more than 0.5 A
- The mode of operation of the device is long, the mass does not exceed 11.5 kg.
- The performance of the device according to the degree of protection is IP65. However, it is recommended to use an easily removable protective case so as not to bring dust inside the device during service. The device is designed to operate at ambient temperatures from +50 ° C to -40 ° C.

# ECOFOR – ÇET MAKİNA

Device "ECOFOR" model EF-01-03.





- It is structurally, as shown in Figure 2.4., made in the form of a steel wall cabinet. A switch and a power indicator light are installed on the cabinet door, as well as a push-button switch and an indicator light to monitor the serviceability of the line connecting the device to the object.
- The device contains a transformer, a sealed converter, including a pulsating potential generator, a power switch, a push-button switch, LED indicators, safety fuses, a connecting board and a terminal set.
- The device is switched on by a power switch with a simultaneous light indication.



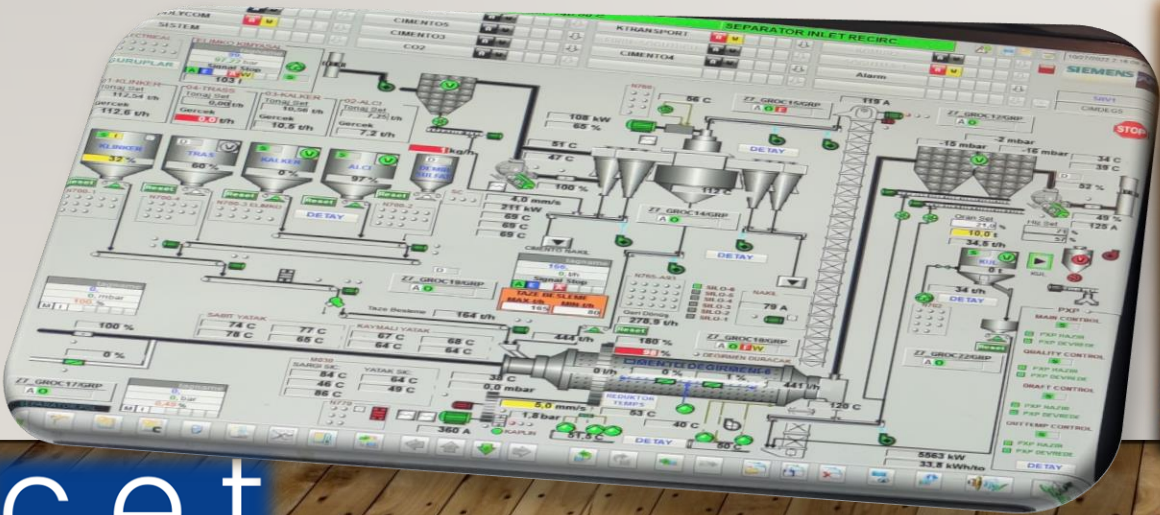


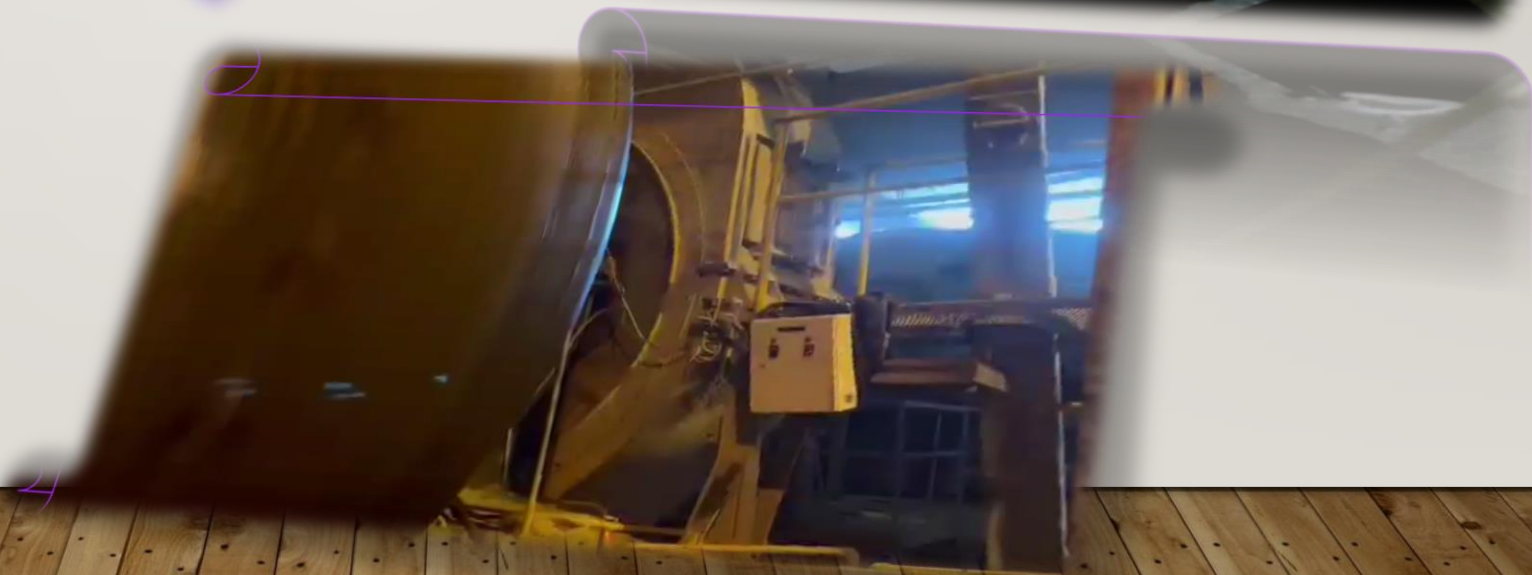
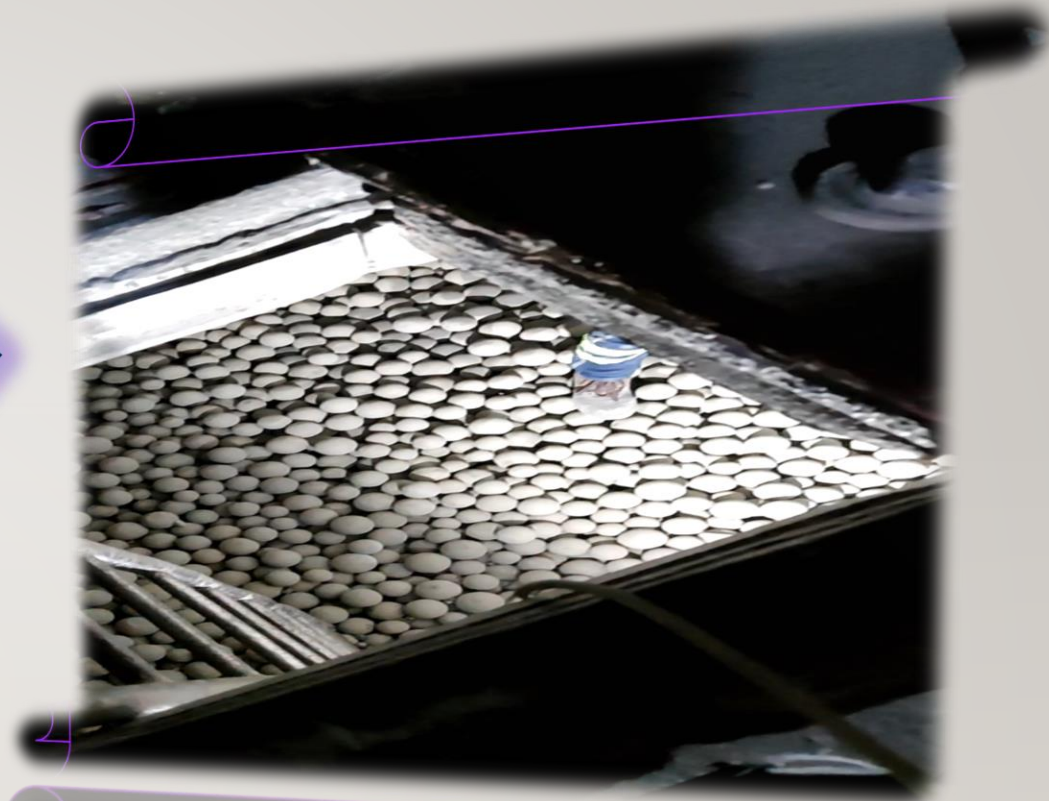
ÇET MAKİNA  
ECOFOR



life period overed

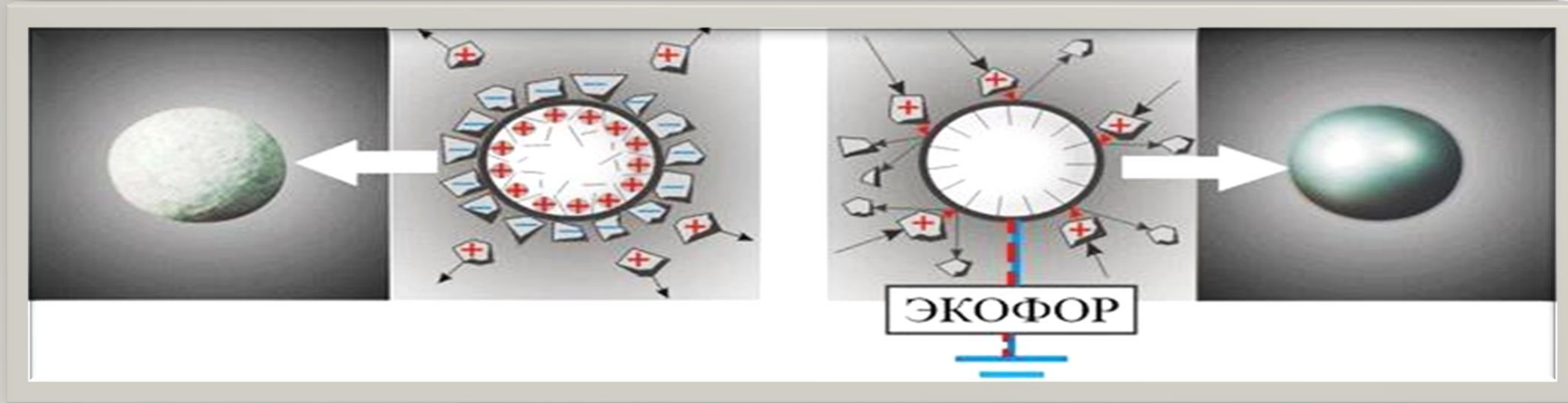
changed to new One







# FUNCTION OF ECOFOR DEVICE



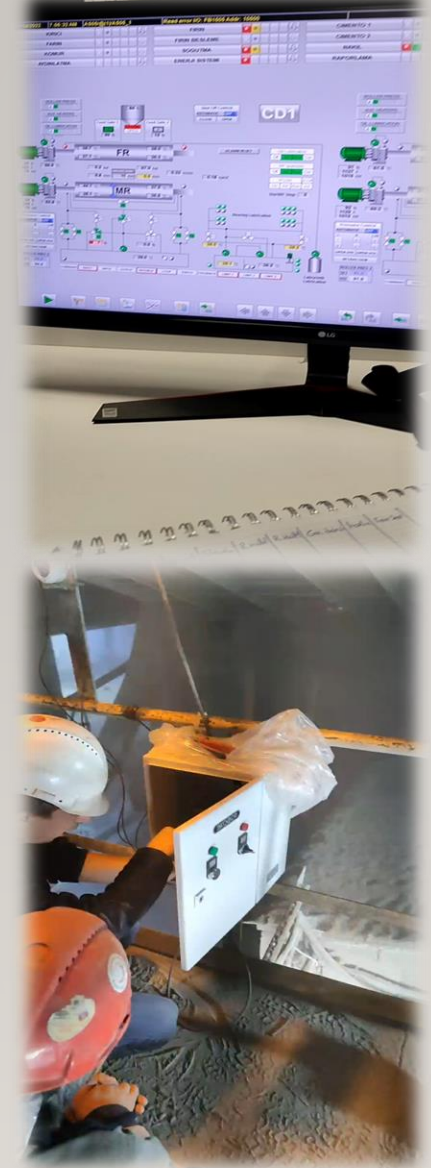
In the production of cement, negatively charged particles of the material stick to the grinding surface, and positively charged ones appear at the exit from the mill. The ECOFOR device is designed for additional neutralization of positive charges during cement grinding. At the same time, it actively uses the surface of grinding bodies, which is available for various kinds of influences. The device gradually transforms the near-surface "wild layer" along a distributed electrical circuit due to the pulsating potential of a small magnitude,

**As shown above the Picture:** Clusters of positively charged dislocations are destroyed. Even the appearance of the surface of grinding bodies improves. It becomes smooth, shiny, looks polished



# Some results after installing the ECOFOR

System	Intensification-grinding fikators	Nominal production, t/h	Increase in production, %	Reduction of energy consumption (approximate) %	Number of "ECOFOR" devices
Open	NO	30-200	6 – 12%	1,5 – 3kWh	One per mill
Open	YES	30-200	6 – 12%	1,5 – 3kWh	One per mill
Closed	NO	<50	6 – 12%	1,5 – 3kWh	One parallel to the mill and separator
Closed	YES	<50	6 – 12%	1,5 – 3kWh	One parallel to the mill and separator
Closed	NO	50-200	6 – 12%	1,5 – 3kWh	Two devices – one per mill, one per separator
Closed	YES	50-200	6 – 12%	1,5 – 3kWh	Two devices – one per mill, one per separator





# ÇET MAKİNA : we offer cement factories



## More Quality

We apply a zero problem policy in products and services.



## Economic Solutions

We offer the most suitable solutions according to our customers' needs.



## 24/7 Support Service

We provide 24/7 support before and after sales.