

MicroRap™ Microprocessor-Based Rapper Control

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For All Types of Rappers

Neundorfer MicroRap rapper controls deliver more programming flexibility and more reliability than any other rapper control, featuring:

- Flexible, completely user-programmable controls through POS to match specific process needs
- Higher reliability through short-circuit protection
- Reduced opacity spiking from rapping optimization



The Neundorfer MicroRap™ is a flexible and completely user-programmable control system for all types of rappers. In conjunction with our supervisory Precipitator Optimization System (POS), the MicroRap becomes an even more powerful tool to control rapping and reduce opacity.

With the MicroRap, each rapper is assigned its own programmable output. In addition, the operator designates rapping groups and assigns each rapper its own unique operating characteristics.

Optimizing Your Rapping Sequence

Rapping re-entrainment can contribute more than 30% of base line opacity. As a result, optimizing the rapping sequence is very important to maintaining low opacity. The MicroRap is a helpful tool in this critical process.



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MicroRap Programming and Monitoring Features

MicroRap can store up to six rapping programs in non-volatile memory. These programs can be selected at the local cabinet or remotely, via the POS, for maximum convenience. What's more, the POS allows for a practically unlimited number of programs to be stored, limited only by available disk space.

The MicroRap/POS combination also provides the means to simultaneously monitor rapping and instantaneous opacity. This powerful feature graphically displays rapping-induced opacity spikes, enabling the user to correlate them to the specific rapper that caused them and take the steps necessary to adjust the rapping program. Another useful POS feature is the ability to automatically suspend and/or resume the rapping program, given a special process condition.

The MicroRap design uses a Eurocard rack which contains the power supply, CPU card and AC and/or DC output cards. It also contains the Power Off Rapping cards (if applicable). All components are assembled, prewired, and tested at Neundorfer's facility in Willoughby, Ohio.

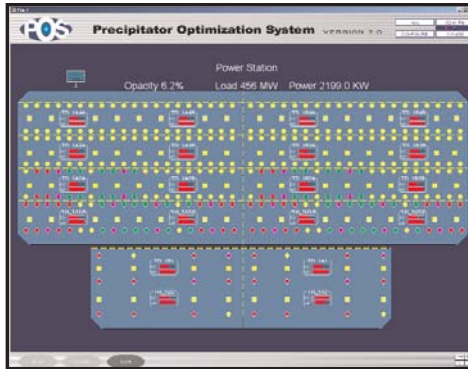
Simplicity—A Neundorfer Design Philosophy

Neundorfer designs and programs microprocessors to automate functions, simplify set-up and operation, and improve reliability so that you can economically maximize precipitator performance with minimal operator intervention.

Our Team is Your Backup

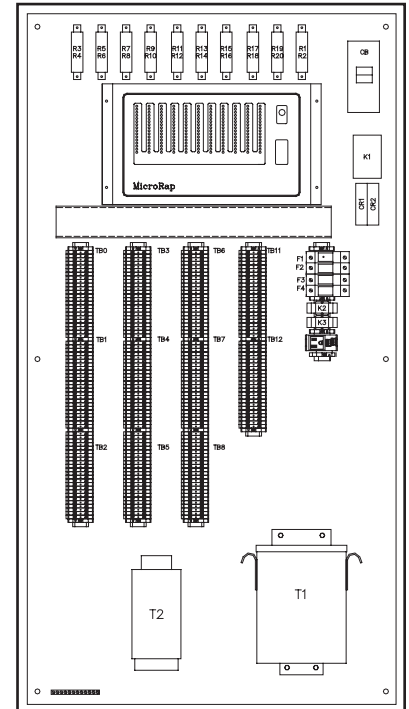
Neundorfer engineers and technicians are ready to support your needs when and where needed. You can also save time and money by using our remote monitoring services, to quickly solve a problem, or determine that a site visit is required.

We also offer a wide range of training topics, as well as users' group meetings for exchanging information and sharing individual experiences.



The POS provides remote monitoring and displays, including rapping status. The MicroRap and POS work together as a powerful tool to control rapping and reduce opacity.

Standard MicroRap panel layout



Specifications

- Memory: Non-volatile
- Programs (local): 6
- Output controlled by one processor: 250
- Communications: RS-485 multi-drop network
- Supplied with a new NEMA 4 windowed cabinet, or can be retrofitted to an existing cabinet
- Requires only a power connection and field wiring to pre-wired terminal blocks
- Output: 120 VDC, 240 VDC, 120 VAC, 240 VAC
- Operating Temperature Range: -20°C to 80°C

Operates electric rappers, electric vibrators, pneumatic rappers, sonic horns and motor-driven rapping systems.



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