# Rod and Pipe Demagnetizing Device MM DN + RE





CFT<sup>®</sup> Constant Field Technology<sup>®</sup>

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### Powerful coils for industrial use

Combining a new technology with a robust design, the Rod and Pipe Demagnetizing Devices MM RE offer a maximum of performance and economy.

The devices are designed for continuous use, being particularly suitable for efficient demagnetization of large quantities of tube or rod material.

Technical innovations allow for a flexible use of these devices. Successful demagnetization of material of various diameters requires neither adjusting process parameters nor any reduction in performance. The system can therefore be operated efficiently with very little initial instruction.

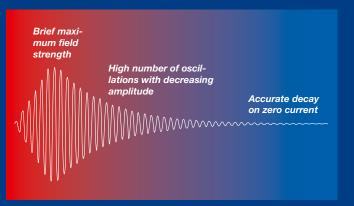
If necessary integration in automated production lines is possible through a control interface provided by default.

### Characteristics

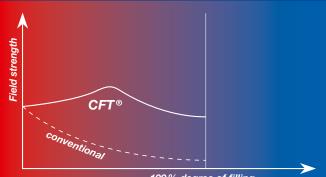
- High throughput
- Demagnetization of solid material
- Ready for remote control and automation

   integrated control interface 24 V I/O
   optional light barrier for activation
- Heavy duty, for shop floor use
- Power factor correction
- High throughput speed due to complete saturation of the magnetic material
- Process controlled by Maurer Degaussing<sup>®</sup> Technology

### Maurer Degaussing<sup>®</sup> Technology



Intensity, number, and precision in the process of decreasing pole reversals, and the choice of the frequency. These elements are optimally set with our demagnetizing devices.



100 % degree of filling

The CFT<sup>®</sup> Constant Field Technology<sup>®</sup> keeps the magnetic field consistently up, regardless of the filling degree of the coil. CFT<sup>®</sup> Patent applied for.



#### **Power module**

The power module includes the power electronics, the interfaces and the control processor of the demagnetizing system. The cables connecting the coil module and the power module are pluggable.

### Power Module MM DN 750...1850

- Optimal, preset demagnetizing frequency
- Demagnetization of parts at fixed position by means of proprietary demagnetizing pulse (patent granted for)
- Easy integration in automated production lines through control interface 24 V I/O
- Interface to light barrier for automatic recognition of material
- Choice of three power levels
- Low power consumption due to power factor correction
- Indicator lamps for easy process monitoring

# For high throughput speed and thick-walled material

The Rod and Pipe Demagnetizing Devices MM RE allow for demagnetizing pipes and thick-walled rods at a throughput speed of up to 3 m/s. An optional air cooling system increases performance by 30 % during continuous operation.

## Demagnetizing with an MM DN+RE offers you:

- Compliance with requirements for residual magnetism
- Easy welding
- No sticking of swarfs
- Improved efficiency of subsequent cleaning processes
- No cohesion of individual rods and pipes after demagnetization
- Avoiding problems on coating processes

### Application

- Demagnetization of semi-finished parts in large quantities
- Demagnetization after magnetic crack inspection (alternating and direct current crack test)
- Demagnetization for large-volume production



Demagnetizing during continuous material flow.



Demagnetizing efficiently while using 50 % to 90 % of the available coil space.



Made specifically for demagnetizing rods, pipes and profiles. At the end of the rod, the demagnetization process ends with decreasing pulse amplitude.



### **Coil Module MM RE**

The coil of the MM RE is mounted in a metal casing which prevents heat build-up and leakage fields. 10-ft. plug-in cables connect the Coil Module MM RE with the Power Module MM DN.

Information available on operating the Coil Module MM RE directly from the mains without the Power Module MM DN.



Coil Module	MM RE50	MM RE110	MM RE220
Dimensions WxHxD	400 x 320 x 300 mm	400 x 320 x 300 mm	540 x 450 x 420 mm
Active opening	50 mm	110 mm	220 mm
Maximum field, peak <sup>1</sup>	68 kA/m	52 kA/m	49 kA/m
Maximum field, with cooling	89 kA/m	68 kA/m	64 kA/m
Duty cycle	S1, 100 %	S1, 100 %	S1, 100 %
Weight	~85 kg	~85 kg	~130 kg
Frequency of demagnetization <sup>2</sup>	preset	preset	preset
Protection class IP	65	65	65
Configuration	bolted	bolted	bolted
Option mains operation	On request	On request	On request
Option air cooling	On request	On request	On request
			Made in Switzerland (E
Power Module	MM DN750	MM DN1100	MM DN1850
Dimensions WxHxD	600 x 600 x 350 mm	600 x 600 x 350 mm	600 x 600 x 350 mm
Connection	3 x 380-480 VAC 50/60 Hz	3 x 380-480 VAC 50/60 Hz	3 x 380-480 VAC 50/60 Hz
Power supply rating	16 A	16 A	20 A
Weight	45 kg	45 kg	50 kg
Protection class IP	41	41	41
Configuration	wall fastening	wall fastening	wall fastening
Optional machine base	machine base red	machine base red	machine base red
Optional light barrier	LE001	LE001	LE001
Optional magnetic field compensation <sup>3</sup>	On request	On request	On request
<sup>1</sup> Divide by 1,41 to obtain RMS value			Made in Switzerland (€

<sup>2</sup> Frequency is given by the Power Module MM DN and is preset, range ~10 Hz...60 Hz. Readjustment of the frequency only by the supplier

<sup>3</sup> To adjust static fields (e.g. terrestrial magnetic field)



#### **MM RE110 MM DN1100**

**MM RE220** 

MM DN1850





#### Magnetizing & Demagnetizing Technology



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