

Yoke type surface demagnetizer MM JE

MAURER
Classic+



CFT[®] *Constant-Field-Technology*[®]

AFDT *Automatic-Field-Decline-Technology*



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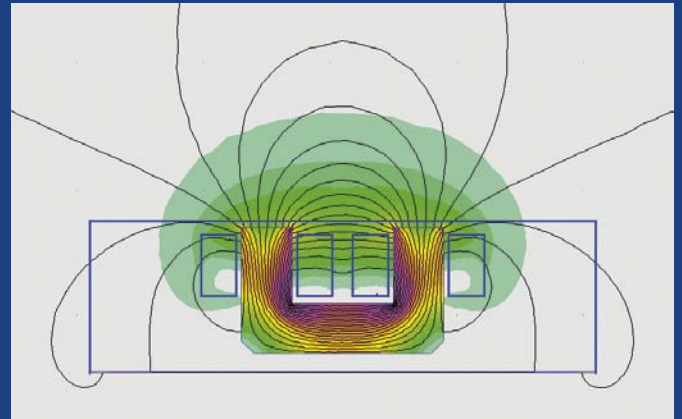
MAURER[®]
MAGNETIC AG

MAURER Classic + Demagnetizers with automatic field decline function

Yoke demagnetizers MM JE165 / 266 / 300 are surface type demagnetizers developed by Maurer Magnetic AG. They can be used either manually or integrated in automated processes. They are powered by mains frequency.

The demagnetizer MM JE produces a stray field over the middle of the top panel. The operating area of the stray field of a yoke demagnetizer is more voluminous as for example the field produced by a plate demagnetizer.

Magnetism of ferromagnetic parts can be removed up to a penetration depth of about 10 mm. Therefore yoke surface type demagnetizers are well-suited for demagnetizing tools or flat parts.



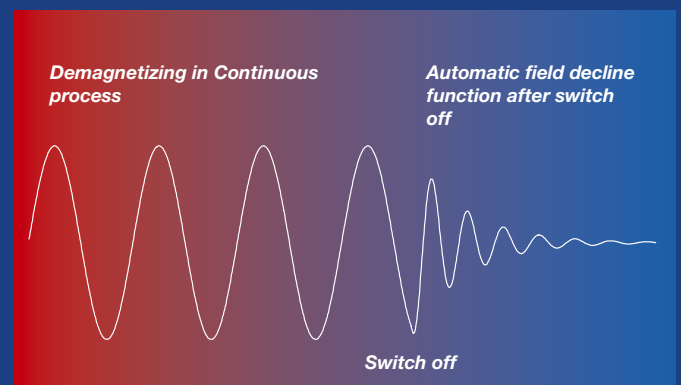
Simulation of the magnetic field produced by the yoke demagnetizer MM JE.

Automatic Field Decline Technology, AFDT Innovation for surface type demagnetizers

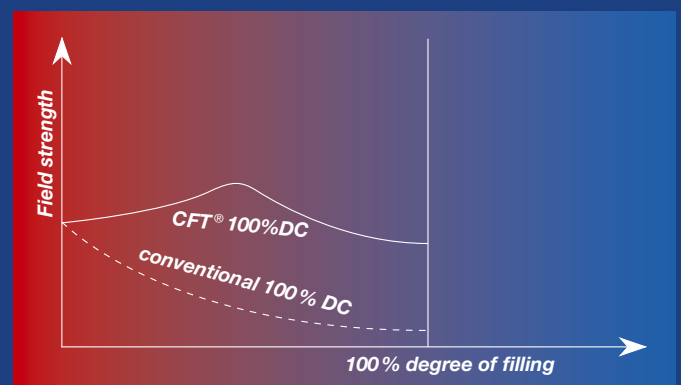
For the new product series MM JE, Maurer Magnetic AG developed the innovative «Automatic Field Decline Technology» function (Patent pending).

When the device gets switched off, the alternating magnetic field will not be switched off immediately (in worst case at the highest point of an amplitude). AFDT continuously reduces the magnetic field by decreasing amplitudes. This function delivers the following benefits to our customers:

- **No magnetization of the parts when switching off the device.**
- **Possibility to demagnetize the parts by field decline function without moving them over the surface: just place the part in the middle of the top plate and press the pulse button.**
- **When using the field decline function, no outflow zone is needed after passing the operating area.**
- **Secure process in manual operation. No magnetization of the part when the demagnetizer is switched off, before the part is removed from the magnetic field.**



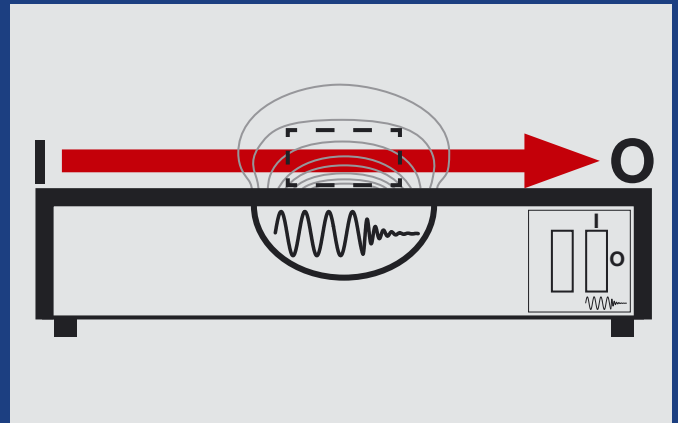
AFDT: after switch off, the demagnetizer MM JE does continuously reduce the magnetic field by decreasing amplitudes.



The yoke type surface demagnetizer MM JE does use the Maurer Magnetic AG developed Constant-Field-Technology CFT®. CFT® keeps the magnetic field on a constant high level, independently to the volume of the part on the surface of the demagnetizer.

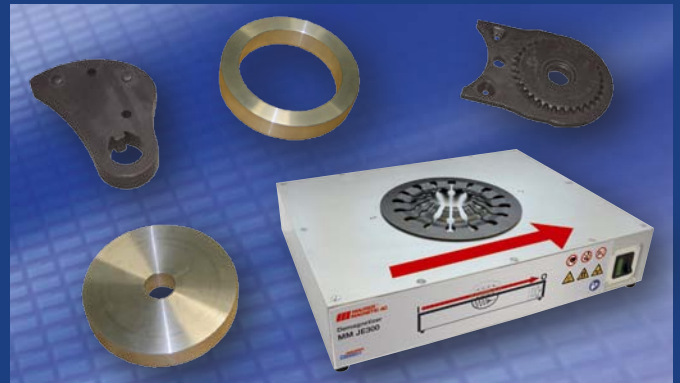
Operation and range of application

In manual operation slide the part you want to demagnetize directly with a slow and continuous movement over the surface of the demagnetizer. The alternating field reaches its maximum at the center of the plate. Alternatively the parts can be demagnetized by using the field decline function. Put the part in the middle of the top panel and press the pulse button. The alternating decreasing field will demagnetize the part automatically.



How to get the best results

1. Move the part slowly and continuously from point I to O over the surface.
2. Reverse the part and demagnetize it a second time by sliding the other side over the surface of the demagnetizer.
3. If the part has hard magnetic spots on the surface, turn the part surface forwards the demagnetizer's surface while demagnetizing.
4. Parts with thickness of more than 10 mm need to be demagnetized from both sides or better from all sides.
5. It's possible to use two yoke demagnetizers, either directly one after the other or as a double yoke (consult the manual for more details).
6. The field decreases if there is a distance between the parts and the surface of the magnetizer. This needs to be considered if the yoke demagnetizer is used to demagnetize parts on a conveyor belt.



Examples

Various flat parts get demagnetized by the yoke type surface demagnetizer.

MM JE165



Example of a pulse demagnetization by using the AFDT function.

1. Place the part in the middle of the top surface.
2. Press the pulse button.

MM JE266



Bigger parts need to be turned and the other side has to be demagnetized as well.

1. Switch on the demagnetizer.
2. Slide the part slowly and continuously over the surface as indicated on the device.
3. Turn the part and slide the other side of the part over the surface of the demagnetizer.

MM JE300



All demagnetizers of the JE series have an interface and can be integrated in automated processes.

Type	MM JE165	MM JE266	MM JE300
Dimensions WxHxD	250 x 165 x 75 mm	280 x 266 x 75 mm	400 x 300 x 75 mm
Working width	165 mm	266 mm	300 mm
Maximum field, peak ¹	50 kA/m	50 kA/m	50 kA/m
Range of operation / duty cycle	0°–40° C, 100%	0°–40° C, 100%	0°–40° C, 100%
Power consumption	28 W	39 W	41 W
Power supply	200...240 VAC / 50 Hz / 3A 110...120 VAC / 60 Hz / 3A	200...240 VAC / 50 Hz / 3A 110...120 VAC / 60 Hz / 3A	200...240 VAC / 50 Hz / 3A 110...120 VAC / 60 Hz / 3A
Weight	9 kg	14 kg	19 kg
Protection class IP	42	42	42
Manual operation	•	•	•
Remote-controlled ²	•	•	•
Protection against overheating – Integrated temperature switch – Temperature switch contact can be tapped over a standard M8 sensor socket	•	•	•

¹ Divide by 1.41 to obtain RMS value

² Switch of the power supply

- Standard
- CE compliant
- Time to fully decline the field after switch off ~200ms
- Fastest clock rate when using the field decline function: 1 pulse / s

MM JE165



MM JE266



MM JE300



Magnetizing & Demagnetizing Technology



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