

Magnetic particle testing

Mobile dual circuit AC/DC pulse testing unit  
for surface crack detection and  
demagnetization of steel components



MULTIPULS-1003-E2-3

**Magnetization**

Fast, reliable magnetization using AC/DC pulses

**Detection of all crack directions**

Dual electric circuit – alternating magnetization of the parts in two directions

**High current flow magnetization**

Magnetization with AC/DC pulses, applied crosswise to the part

**Non-Contact MT-testing**

Non-contact magnetization of the part with a double coil configuration

**Picture Documentation**

Picture documentation of large MT-test areas possible

**Demagnetization**

Demagnetization using direct AC/DC pulses of declining intensity

**Compact design**

MT-testing device, current, magnetic field and residual field measurement device in one mobile casing on wheels

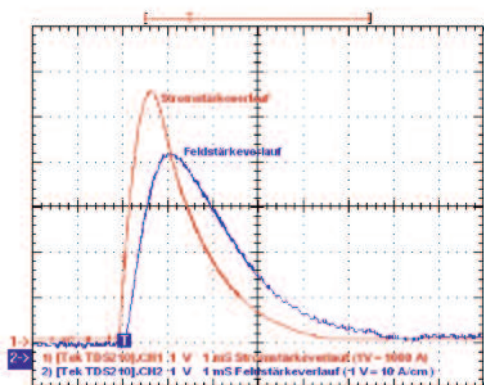
**Combined MT-testing**

Magnetization with current flow and coil

**Integrated UV-LED-Lamp with superimposed flood light**

Uniform UV-lightning in accordance with EN ISO 9934-1 for clear crack indication. Superimposed flood light to sort out false crack indications and an integrated remote control for the AC/DC pulse testing unit.

Mobile dual circuit AC/DC pulse testing unit  
for surface crack detection and  
demagnetization of steel components



Current pulse and field magnetization flow

## Technical data:

(in accordance with  
EN ISO 9934-3 and DGZfP-  
guidelines EM 0)

|                             | MULTIPULS-1003-E2-3                                  |
|-----------------------------|------------------------------------------------------|
| Rated voltage               | 400/440/480* VAC,<br>50/60 Hz, 32 A                  |
| Rated power                 | 7,0 kVA                                              |
| Service cycle               | 70%                                                  |
| Testing current             | 500 A - 30.000 A                                     |
| Field strength              | 20 A/cm - 80 A/cm                                    |
| Pulse frequency             | 1 Hz                                                 |
| Postmagnetization<br>time   | 1 - 99                                               |
| Time for<br>demagnetization | 10 s - 3,5 min                                       |
| Length of testing cable     | 3.0 m (or on request)                                |
| UV-LED-lamp                 | shock protected<br>with superimposed<br>flood light  |
| Testing coils               | available upon request                               |
| Dimensions                  | Width = 670 mm<br>Height = 645 mm<br>Depth = 1000 mm |
| Weight                      | 160 kg                                               |

- Sharp crack indication through AC/DC pulse magnetization
- Clear crack indication already after 3 pulses
- High performance
- Compact design
- Low weight
- Single-hand operation via UV-LED-Lamp with remote control
- Superimposed flood light for determination of false crack indications
- Long service life
- Long service intervals
- Low energy consumption
- Low consumption of test fluid