CM20TBF current generator

Tailor-made system

Mobile version

Fixed version

- ❖ 400V three-phase power supply without neutral / 50Hz / 32A (20 kVA)
- ❖ No-load current: 0 - 2500 A / voltage: 0 - 10 Volt
- ❖ Adjustable frequency from 5 to 50 Hz
- ❖ Alternative AC output, optional R1A / R2A
- ❖ Magnetization and degaussing function in automatic mode
- ❖ Current adjustment by potentiometer / digital display
- ❖ Activation by pedal / push button / remote control
- ❖ Weight 350 kg

➔ **Ideal for massive parts testing**

Wide range of compatible accessories

Solenoid / flat coil / flexible cable / central conductor / buttons for current flow

CMPhy – 26 rue Paul Sabatier - 71530 – CRISSEY
www.cmphy.fr – contact@cmphy.fr – 03 85 47 47 20

Fixed workshop version

➔ ***Can be used with any type of existing magnetization system: flat coil, solenoid, key for passing current, etc.***

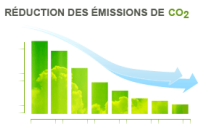
Touch screen - Simple and intuitive handling

- **Generator power adjustment and live current display**
- **Réglage de la fréquence de magnétisation**
- **Adjustment of cycle times (magnetization / demagnetization)**

CMPhy – 26 rue Paul Sabatier - 71530 – CRISSEY
www.cmphy.fr – *contact@cmphy.fr* – 03 85 47 47 20

Advantages of using Very Low Frequency (VLF) magnetic field:

By Very Low Frequency Magnetic Particle Testing (MT) we mean the use of magnetic fields with a frequency <10 Hz. This technology offers significant gains compared to traditional systems working at a frequency of 50 Hz:



- **Decrease power consumption by about a factor of 5** by lowering the output voltage required to supply the magnetization circuits.
- **Better detection of defects in depth,** by the reduction of the skin effect. Defects are detectable up to 3mm deep (depending on size and morphology).
- For the safety of operators in terms of exposure to magnetic fields, the use of very low frequencies **allows complete compliance with the requirements described in European Directive 2013/35 / EU.**
- Testing of painted parts, the use of very low frequency magnetic field (VLF), due to the generation of a magnetic flux interacting with the entire depth extension of the defect, significantly increases the amount of magnetic particles retained on the surface and thus allows **magnetic particle testing on painted parts (e ~ 100 to 500 µm depending on the type of paint). Therefore the probability of detecting the defect is significantly increased.**
- **Degaussing in depth**, the use of the very low frequency makes it possible to demagnetize parts of very high thicknesses (>20mm). For frequencies between 2 and 10 Hz, **the penetration depth of magnetic field lines is higher than 10mm.**

CMPhy – 26 rue Paul Sabatier - 71530 – CRISSEY
www.cmphy.fr – contact@cmphy.fr – 03 85 47 47 20