

TECHNICAL DESCRIPTION

Package Mobile Chain Inspection Unit

"Not divisible" Edition

Chain inspection device to check lifting and slinging chains by MPI method in accordance with DIN 685, Part 5, Abs. 4.3.1 and UVV 18.4, § 26 Abs 3

Mobile chain testing device for testing chains

consisting of:

- Mobile test trolley with 4 durec-tyre equipment-wheels, 2 as fixed roller blocks, 2 as turnable rollers including fixing brake.
- Round testing trough, made from stainless steel with inclined bottom.
Dimensions :
Diameter: approx. 350 mm
Height approx. 850 mm
The testing through is screwed to the ground plate of the test trolley.
- Placed grating from stainless steel for depositing chain-suspensions,
- Ring shower, consisting of 4 pcs. spray nozzles, dislocated about 90°, and a hand-operated valve to regulate the quantity of the test solution.
- High performance pump for oil- and water soluble-test solution, which is mounted on the leak of the trough
- Tap for emptying the testing trough.
- Test solution lay-by to disperse the test solution which is on the bottom of the tank.
- Magnetization coil as high current-bandaging around the upper area of the trough, with dinse-plug for the direct connection to the Portaflux 1000.
- Treble socket-fillet, mounted on the underside of the working plate, used for plug-in the test solution-pump, the Portaflux 1000 and the UV-hand lamp.
- Colour of the mobile test trolley RAL 7021

Used power pack :

Portable Crack Detector Unit „Portaflux 1000“

Consisting of

- robust basic and front frame, with folded steel sheet, lacquered
- sheet-metal hood, lacquered
- with handle for transport

B) Electrical design

- built-in high-current transformer, and measuring transformer
- analogue measuring instrument in front panel
- electronic regulator, microprocessor controlled for the high current
- 2 bayonet-sockets for the connection of the high current coil,
- socket for foot switch
- power supply connection cable, length = 3m, with shockproof-plug.

4. Technical data acc. DIN EN ISO 9934:

- test current : A.C.
- test current, r.m.s. : 1000 Amps
- peak : 1400 Amps
- test current regulation : stepless, electronic
- open circuit voltage : 3,1 V
- duty cycle, relatively : 30%
- absolutely : 6 sec. on - 14 sec. off

Dimensions and weights:

- length : 290 mm
- width : 260 mm
- height : 200 mm
- weight : 20 kg (approx.)

5. Technical data acc. VDE:

- Mains connection : 230 V, single-phase
- Frequency : 50 cycles
- Power consumption : 3,2 kVA (approx.)

Included:

Demagnetization

- **Demagnetization, automatically in 0,8 sec.**
- **Preselection by selector switch**

Included

Constant Current Control

The testing current will be adjusted slowly up automatically to the selected value, independent from the external resistor.

The flux-control works until the maximal Testing Current Value of the unit.

Foot-switch,

With connection cable, 3 m long and plug

10 x FLUX-concentrate KD 440/1,

535 nm, particle size 3 µm, fluorescent colour yellow-green,

with rust-inhibitor, wetting-agent and antifoamer,

free from halogens, chlorides, nitrite and silicone.

not subject to a declaration obligation in the sense of the current EC regulation

1 bottle = 1 litre for approx. 40 litre water

Ref.-No.: 1900221-2

Total Package-Ref.-No. 1600157-4

Optionally we quote:

Certificate

Recalibration certificate for EM 5

Including sketch of unit with the relevant measuring points by B_{eff} .

Ref. No.: 1800207-4

UV-hand lamp UVL-50 complete with power LEDs

Consisting of:

- Including reflector, cooling system and wall power supply (Connection cable 1,8 m) and eyebolt
- Intensity approx. 4100 $\mu\text{W}/\text{cm}$ (Distance 400 mm)
- Illumination area: \varnothing 210 mm (Distance 400 mm)
- White light rate ≤ 10 lux
- Wave length 365 nm (Range of tolerance ≤ 1 %)
- Power supply: 100-240 V, 50/60 cycles
- Risk class 2 (accord. EM 6)
- Low power consumption

The UV-handlamp is according to the standards and regulations DIN-EN ISO 9934, DIN-EN ISO 3452, DIN-EN ISO 3059, and so qualified for the use with magnetic particle inspection and penetrant testing

For The UVL 50-LED we are pleased to quote you the following:

Certificate

for the measurement of the UV-light in accordance to EM 6

with a specified value of the effective strength of radiation E_{eff}

Ref.-No.: 1800211-4

Test-Set „Measuring - Testing - Checking“

in a portable carrying case, with the following contents:

Field strength meter „KD 400“ with probe.

- to measure D.C. and A.C. magnetic fields,
- Interface : RS232 serial
- measuring range : 0 - 400 A/cm
- measuring range for residual magnetism : 0 – 40 A/cm
- measuring unit, reversible : A/cm, Milli-Tesla, Gauß, Oerstedt
- indication : LCD display 3 ½ digits
- accuracy : +/- 2 % from measured value
- power supply : 9 V battery (ICE 6 LF 22) or power supply unit
- measuring time with one battery : approx. 60 hours
- dimensions : 150 x 80 x 30 mm
- weight : 0,3 kg incl. one probe
- tangential field probe : 1,5 mm thick
- carrying case for „KD 400“ : made from plastic with two clamps

Ref.-No.: 1400130-4

Calibration standard for „KD 400“, 100 A/cm
Ref.-No.: 1400129-4

- 1 UV-intensity meter „J 221“

to check the radiation intensity of UV-A-lamps
with detachable sensor, can also be used with adapter-cables, 0,5 m long;

with two measuring ranges

- measuring range A : 0 - 1200 $\mu\text{W}/\text{cm}^2$

- measuring range B : 0 - 6000 $\mu\text{W}/\text{cm}^2$

with filter with circular aperture, the following measuring in both measuring ranges
are possible:

- measuring range A : 0 - 6000 $\mu\text{W}/\text{cm}^2$

- measuring range B : 0 - 30000 $\mu\text{W}/\text{cm}^2$

Ref.-No.: 1400100-4

- 1 Testpiece, according to Prof. Berthold,

to determine the magnetic field direction

Ref.-No.: 1400101-4

- 1 Reference Test-Piece Type 1 according to DIN EN ISO 9934-2

- with comparative photo

- with manufacturer certificate

to check the indication visibility of magnetic powder suspensions

Ref.-No.: 1400102-4

- 1 ASTM -centrifuge tube, with stand

to check the new mixed magnetic powder suspension

Ref.-No.: 1400103-4

- 1 Residual field meter „Magnetoscope“

for the simple measurement of magnetic field,

only practicable for comparison measurements

Ref.-No.: 1400104-4

- Digital illuminance meter “Digital-Lux”

- Luxmeter with integrated sensor

- 5-digit LCD screen

- Silicon photodiode sensor

- Auto. zero setting programm

- with lens protector

- with carrying case and instruction manual

- with 9 V – Alkaline battery

Technical Data

Measuring range: Auto ranging up to 40.000 Lux

Resolution: 0,01 Lux in the smallest range

Ref.-No.: 1400106-4

Ref.-No. of the Test-Set:

1400133-4

**** All a fore-mentioned items can be delivered separately!**

Calibration certificate for "KD 400"

Ref.-No.: 1800204-4

Calibration certificate for "J221"

Ref.-No.: 1800200-4

Calibration certificate for Digital-Lux

Ref.-No.: 1800205-4

1 detailed working instruction in English language

complete with:

- wiring diagrams and part lists
- pneumatic diagrams and part lists