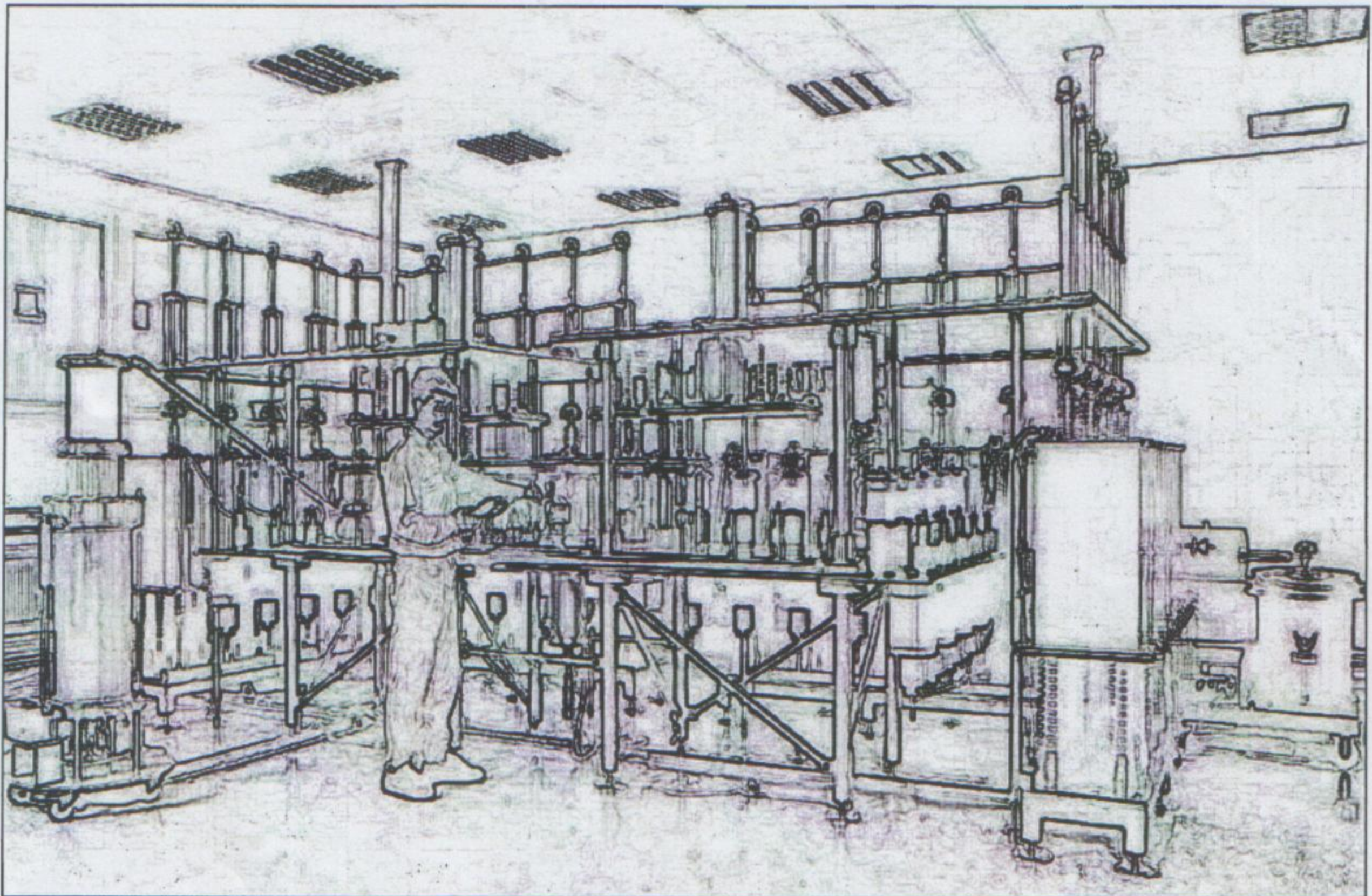


Test report



Report no.: BET/Forend 1-04-08-13

Date of test: 2004-08-11

Test engineer: Dipl.-Ing. M.Benzin

Customer: FOREND ELK.MALZ.VE DIS TIC.A.S.
Perpa Is Merkezi Elektrokent A Blok
Kat 10 No: 1531
Okmeydani / Sisli / Istanbul
Turkey

1. Device under test (DUT)

Name: Lightning Conductor Forend PETEX

Manufacturer: FOREND ELK.MALZ.VE DIS TIC.A.S.
Perpa Is Merkezi Elektrokent A Blok
Kat 10 No: 1531
Okmeydani / Sisli / Istanbul
Turkey

Technical data: Type: E.S.E. Active
Length : 470 mm
Maximum diameter : 170 mm

2. Demand of test

At this very moment there is not an international standard to test active lightning protection components as known as early streamer emission rods. But the device under test is used as an external lightning component and therefore the impulse current test in accordance to the EN 50164-1 (1999-09) + prA1 (2002-01) § 6.3 "Electrical test" class H is tested.

3. Realisation of test

Three samples of the device under test are stressed with 3 current impulses with the peak value of 100kA. The time interval between the individual shots allows the arrangement to cool down close to ambient temperature. The impulse current is defined by its peak value (100kA $\pm 10\%$), its specific energy (2.5MJ/ Ω $\pm 20\%$) and its duration (≤ 2 ms).

For this test only the impulse current capability of the lightning rod of DUT is tested. The performance of the connector of the DUT is neglected.

