

Proposal of ELQA tests during 11 T series magnet consolidation

Mateusz Bednarek, Jaromir Ludwin,
Tiago Catalão da Rosa

With important input from Felix Rodriguez Mateos and Jan Petřík

1. Tests of new capillary
2. Before cutting
 - HV @660 V
 - TFM @72 V or 140 V, 1 A + acquisition of waveforms
 - Capacitor discharge
3. Open diode container, disconnect diode V-taps, test them at 5 kV vs. the rest grounded (optional)
4. IFS removal (during cutting)
 - Visual inspection
 - HV @660 V + manipulation of wires (top and bottom)
5. Investigation on removed capillary
 - Visual inspection
 - HV each wire to others + GND @3 kV, using ELQA multichannel system in He + manipulation (low current limit)
 - HV each wire to others + GND @5 kV
6. Test of magnet without capillary
 - Repeat point 2
7. New capillary installation
 - Repeat point 2

