

# Replacement of the HV Resistors inside the 1.7 MV Tandem Accelerator

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After the long process of refurbishing the acceleration tubes, the recovery of the high voltage was long and only partial. Immediately after this process, we were able to reach under stable conditions only 1 MV terminal voltage out of a max of 1.7 MV. Above this voltage, a significant amount of inside-the-tank sparks occurred, proportional with voltage that was attempted. The analysis of all the internal components pointed to the ageing resistors (about 22 years old). Various suppliers of HV resistors were contacted and we decided on one to provide the substitutes. Initially we replaced only a few strings and then the entire Low Energy side in the next step (before the end of the current year) to replace them all.