Szintillator Based Halo-Detector for Beam Position Control, P. FORCK, P. HEEG, A. PETERS, P. STREHL, Gesellschaft für Schwerionenforschung (GSI), DARMSTADT, Germany - For the tumour therapy project, using the heavy ion beam facility at GSI Darmstadt, the requirement with respect to the focal properties is high. In particular the cross section and the position of the beam has to be controlled precisely. A nearly non-destructive on-line method is developed using a halo-counter. Four plastic szintillators on stepping motor driven feed-through are mounted in each direction perpendicular to the beam. Only about 1% of the beam is counted and stopped in a stainless steel block. First measurements show the sensitivity with respect to any beam movement. The count rate can be a few times 10^4 particles per second and therefore any fluctuation of the position or cross section can be detected within a sampling time of 10 ms. An interlock signal can be extracted for a fast blocking of the ion beam.