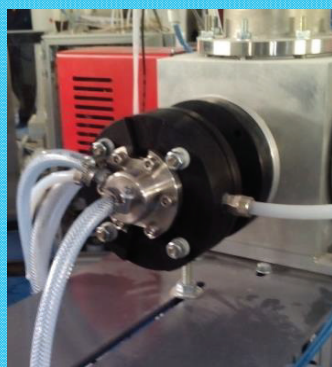


# PREPARATION OF THE WATER TARGET DEVICE EXPERIENCE FOR THE F-18 OPERATING ON THE CYCLOTRON CC-18/9M

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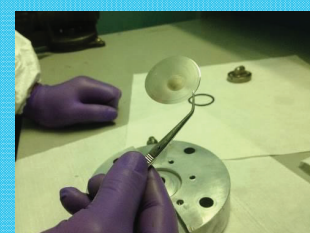
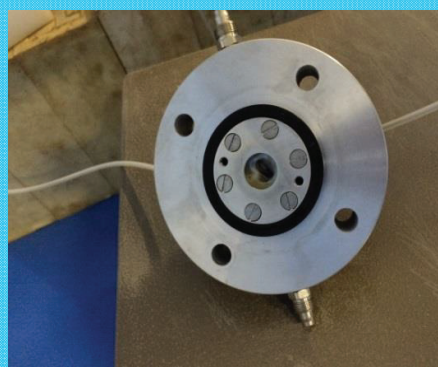
Experience of preparation of the water target device for the F-18 operating is presented in the present article. Processes of vacuum preparation, target coils, seals, a body of a target, deinstallation and installation of the target device are considered. So, by preparation for mounting of vacuum and target coils, as a result of flushing in a hostile environment (potassium permanganate) the material corrupting discloses at a stage of the vacuum target tests is revealed. Subsequently coil flushing was carried out in the deionized water. The derived development researches have revealed a need for refuse a hostile environment by preparation of target devices. Isotope operating results and the subsequent product synthesis based on F-18 showed an almost total impurity absence. The product yield after the module of synthesis constituted at least 60%. Besides, installation works with the target device has shown need of application of quick-detachable connections on the cooling target lines that generally affined with the high induced activity on the work place.



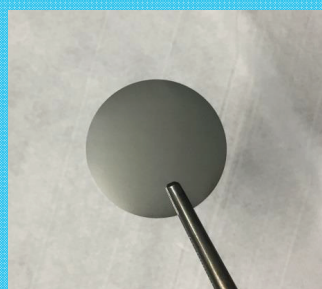
The photo of the water target device



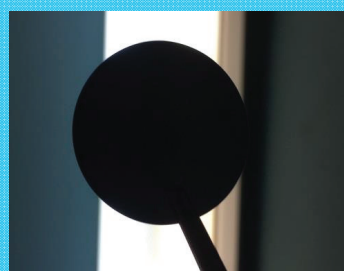
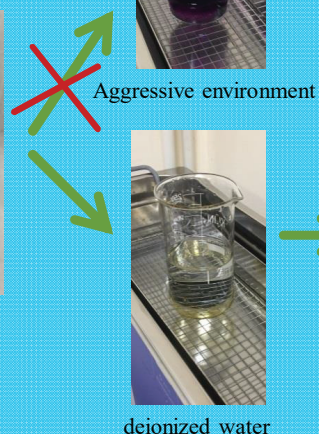
Removing the gas gap and the target body



The process of replacing the foils of water target device



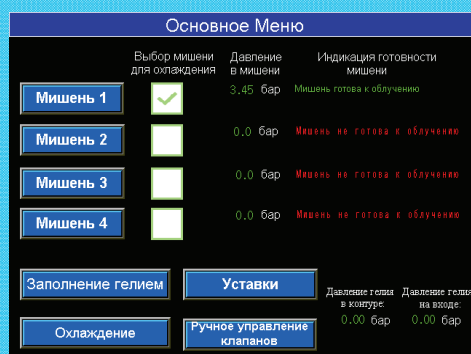
New foil



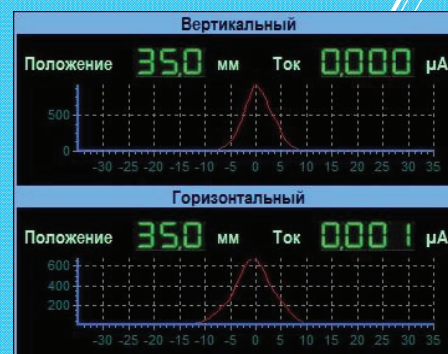
Lighting test of the foil after preparation in deionized water



The water target device with new foils



The interface of the target complex control program



Beam profiles after configure on the water target device