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## Treatment of the residual particles after foil stripping for the CSNS-II

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During the injection process, after the foil stripping, the remaining particles are  $H^-$ ,  $H^0$ ,  $p$  and  $e^-$ . The injection system must promise that most of the  $H^-$  particles are stripped to protons and enter the RCS. Although the residual particles  $H^-$ ,  $H^0$  and  $e^-$  are relatively small, they can cause beam instability and large beam losses if left untreated. In this paper, for the CSNS-II, the treatment of the residual particles after foil stripping will be studied in detail. The little  $H^0$  particles, stripped by the secondary stripping foil, enter the beam dump. The very small amount of un-stripped  $H^-$  particles are deflected by the magnet BCH3 and enter another beam dump. The stripped electrons will be collected by an electron catcher.

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