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Construction and testing of the tracking drift chambers for the SHMS spectrometer in Jefferson Lab Hall C¹ DEBADITYA BISWAS, Hampton University — The super high momentum spectrometer (SHMS) is being constructed as a crucial part standard equipment for the planned physics program in Jefferson lab experimental Hall C as the part of the energy doubling the available beam energy to 12 GeV. The SHMS will be used to track scattered particles after the beam collides with a fixed target to determine to determine the energy and the scattering angles at the collision vertex. The Hampton University group was responsible for the design, construction, and testing of the main tracking drift chambers for the SHMS detector package. The basic working principles, design considerations, construction, and testing of the chambers will be discussed.

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