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The NDCX-II Engineering Design

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The Neutralized Drift Compression Experiment (NDCX-II) is a unique user facility for ion-beam-driven High Energy Density Physics (HEDP) and Heavy Ion Fusion (HIF) research located at Lawrence Berkeley National Laboratory (LBNL). The construction phase was completed in March 2012 and the commissioning phase has started with tests of the injector and the first 11 cells of the accelerator. A significant amount of engineering was required to meet the performance parameters required for a wide range of HEDP experiments and simultaneously exploit the hardware available from a decommissioned accelerator. The technical challenges and design of this induction accelerator are described.

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