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"Manufacturing of the first SIS100 full size-model"

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Abstract:

Babcock Noell (Würzburg, Germany) recently completed successfully the production of a straight full-size-model of a SIS-100 dipole magnet. This contribution will report on the progress during the design-phase performed together with GSI, the manufacturing and the assembly-processes. Special emphasis will be given on the new or special techniques adopted to fulfill the stringent requirements, which such a type of magnet demands for. The new tooling systems and machines which had to be developed and brought into operation for this prototype will be discussed. Finally a set of lessons learned and an outlook on a possible series production will be discussed.