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## Superconducting magnet development for the FAIR accelerator complex

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Accelerators and Fragment Separators feeding experimental detectors of large scale scientific instruments, require magnets for the guiding their ion beams. The FAIR accelerator complex requires superconducting magnets for two machines: for SIS100 to achieve the requested high currents and SuperFRS for its large acceptance. In this contribution we summarize the most essential design aspects of the magnets for the targeted machines and the challenges in the magnet design next to the production status of the different magnets and their cryomodules. For SIS100 the first 3 m long series dipole (maximum field 1.9 T, ramp rate 4 T/s) has been built. We present its first test results obtained next to an outlook on further procurements.

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