

Field Quality of the Final-focus Superconducting Magnets for KEKB Interaction Region,
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KEK - In an interaction region of KEKB B-Factory, there place two superconducting quadrupoles, two superconducting solenoids and six corrector coils in two cryostats. The two cryostats are inserted into the detector solenoid, and field measurements are performed under the same condition of the actual accelerator operation. The field qualities of the magnets are measured by a 800 mm long harmonic coil, a 50 mm long harmonic coil and a hall probe. By the 800 mm long coil, the integral field qualities and the produced field strength of the magnets are measured. The field profiles along the magnets are measured by the 50 mm long harmonic coil, and the effects of the iron of the detector on the field qualities are discussed. With the results of the harmonic coils, the alignment of the magnet system with respect to the detector solenoid field is examined. The solenoid field distribution along the magnet are measured by the hall probe. The results will be reported in this paper.