Accelerators of the Central Japan Synchrotron Radiation Facility Project (II)

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Abstract

Construction of Central Japan Synchrotron Radiation Facility has started at Aichi, Japan and the service will start in 2012. The facility is designed to be used not only for basic research, but also for engineering and industry-oriented research and development.

History & Future

1991	Proposal of SR facility at Nagoya Univ.
2007	Inauguration of NUSR
2008	Collaboration with Aichi prefecture, industries and reseach institutions
2009	Budget acquisition
Dec. 2009	Order-agreement for the accels.
April 2010	Groundbreaking ceremony
2010	Building construction (~2011)
2012	
Beginning	Commissioning of accelerators
late	Service starts

Aichi Science & Technology Foundation is responsible for operation and management and NUSR is responsible to run the equipments and support the users technically and scientifically.

Key equipments

- X-ray generation from Superbends
- Full energy booster for Top-up operetion

Superbend (superconducting magnet)

Fig.1. Photo of a Superbend

Cryocooler :
2-stage 4K-GM
(liquid helium free)
Cooling capacity:
1.5 W at 4.2 K
45 W at 50 K

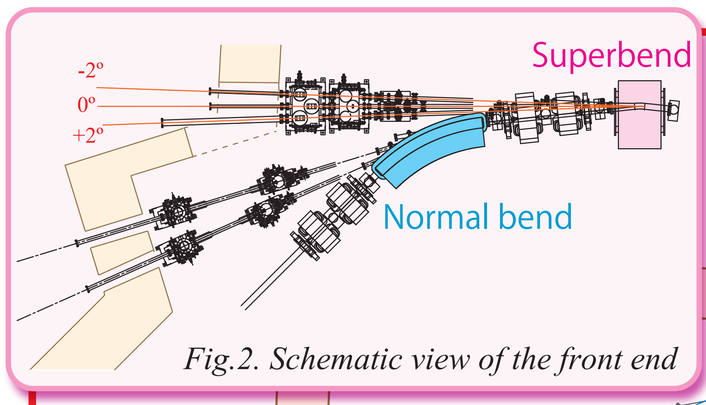
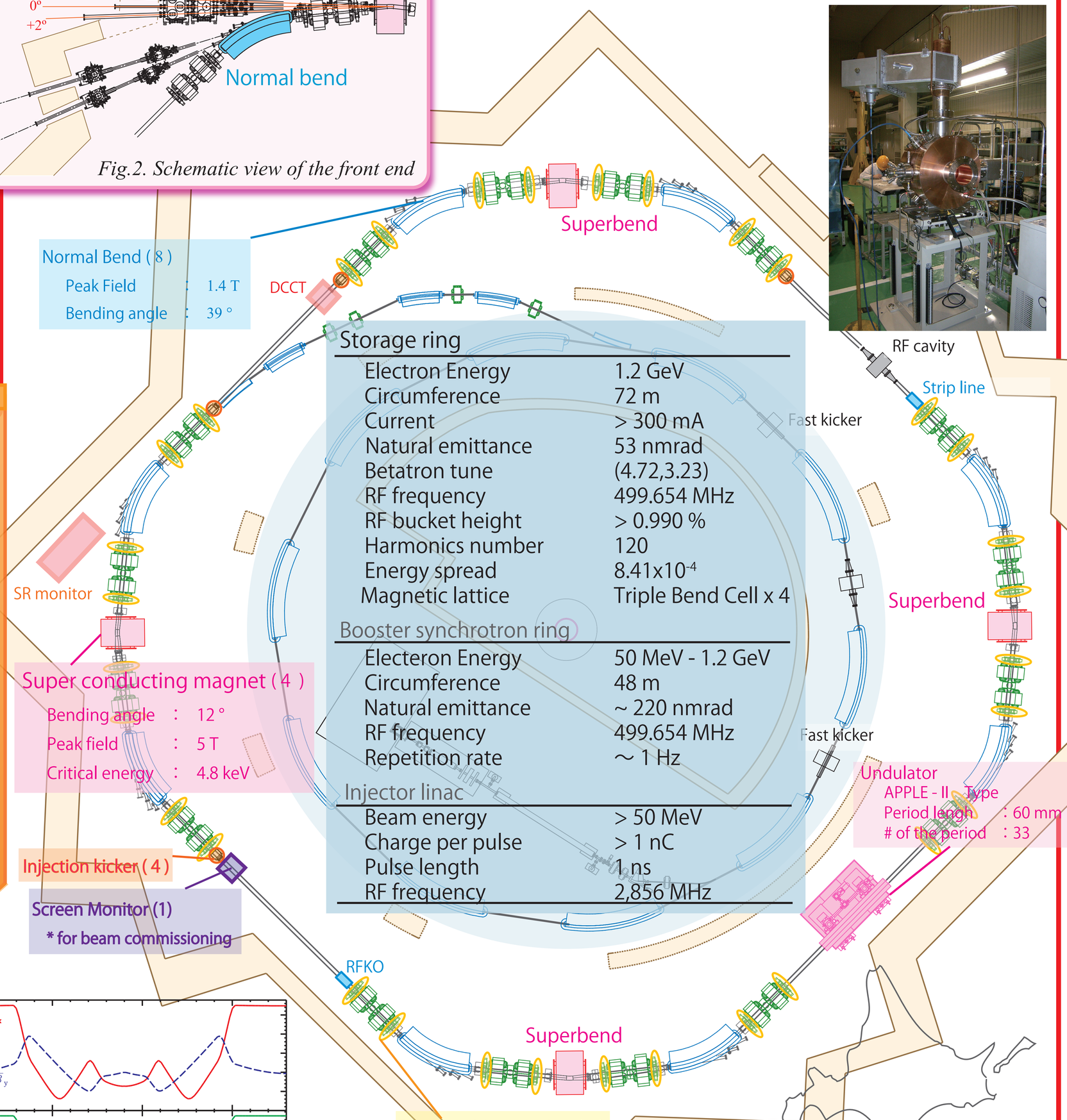


Fig.2. Schematic view of the front end



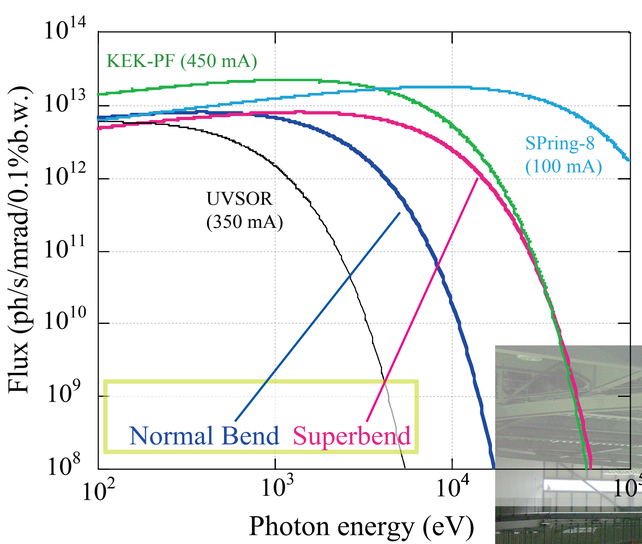


Fig.3. Spectra of photon flux from BMs

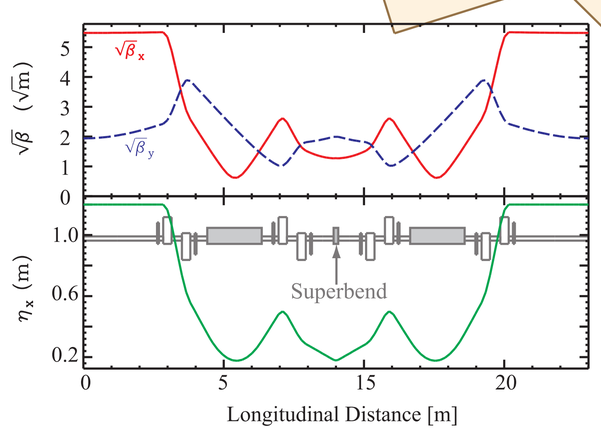
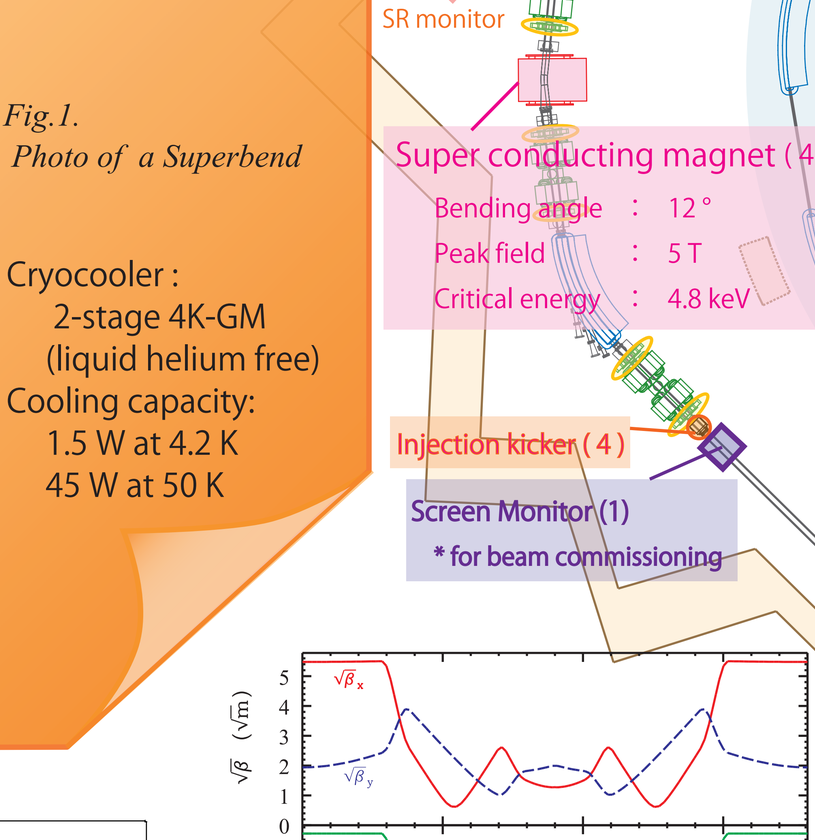


Fig.4. Optical functions of the storage ring



Construction site