

Contracts Awarded for Production of NSLS-II Storage Ring Magnets

November 9 2009, by Ferdinand Willeke

(PhysOrg.com) -- All seven contracts for the production of the NSLS-II storage ring magnets have now been awarded -- a significant milestone for the project. The magnets -- 750 in total -- will be made by vendors in the United States, Russia, China, Europe, and New Zealand.

On October 26, the last of seven contracts for the production of the NSLS-II storage ring magnets were awarded - a significant milestone for the project.

Storage ring magnets are demanding in field quality, which is quite difficult to achieve in quadrupole and sextupole magnets - the specialized types of magnets required for the storage ring. This is because a large fraction of the integrated field stems from the ends of these short magnets. To overcome this challenge, magnet prototypes were built in industry during the last year and were thoroughly tested. This confirmed that several vendors can meet the tight NSLS-II specifications.

The 240 quadrupole magnets have been split into two packages and will be built by vendors in the United States and in Russia. The 270 sextupole magnets will be built in Europe and China. The 180 combined-function dipole corrector magnets will be built by a vendor in the United States, and the 60 dipole magnets and some special large-aperture quadrupole and sextupole magnets will be built in New Zealand.

Having the production responsibilities distributed among these five

different vendors will help minimize technical and schedule issues because the expertise, capability, and capacity of each of the vendors was carefully matched with the needs of each of the production lines. Magnet production will last about 18 months. Through April 2010, the vendors will produce manufacturing drawings, buy materials, and build first article magnets. Full production will start in early summer 2010 and is expected to be completed by the end of September 2011.

Provided by Brookhaven National Laboratory ([news](#) : [web](#))

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