

FABRICATION OF 11 PERMANENT MAGNET UNDULATORS FOR PETRA III AND FLASH

G. Sikler, W. Gaertner, St. Sattler, BNG, Würzburg;
A. Schöps, M. Tischer, DESY, Hamburg

Abstract

Babcock Noell GmbH manufactured for DESY 11 identical planar permanent magnet-undulators (8 for the PETRA III upgrade and 3 for FLASH). The positioning accuracy and the movement reproducibility of the two girders, defining the magnetic gap of an undulator, are of vital importance for the quality of the synchrotron light. To reach the desired performance a high quality standard was kept during the choice and procurement of the components, during the high precision machining of the parts and during the assembly phase. After the alignment, laser tracker-measurements were made and evaluated for all the 11 systems. Both, the means by which the accuracy and reproducibility were achieved, and the results of the measurements will be presented here.

**CONTRIBUTION NOT
RECEIVED**