

INSERTION DEVICES

MAGNET TECHNOLOGIES



Insertion Devices

Bilfinger Noell offers both permanent magnetic (PMU) and superconducting (SCU) undulators as built to print or tailored to customer needs.

Our superconducting undulators show reliable and outstanding performance under user operation. It has been developed in collaboration with KIT and several systems were successfully tested in the KARA synchrotron ring.

Advantages of superconducting undulators:

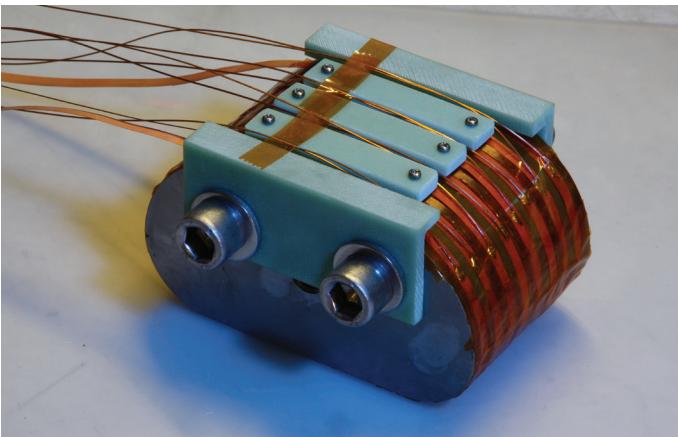
- higher field on axis
- radiation hardness
- variable gap

Bilfinger Noell has also a wide experience in manufacturing prototypes and series of permanent magnetic undulators e. g. for the PETRA III and XFEL customer design.





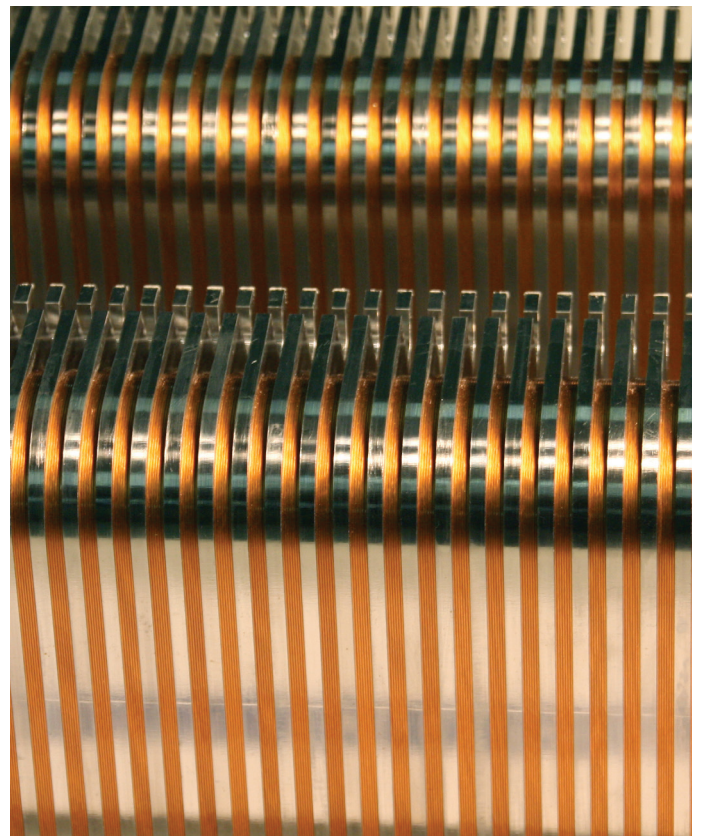
Superconducting Undulator SCU 20



HTS Undulator Prototype



Petra III PMU Fabrication



SCU15 coils

Engineering & Technologies

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References

- Superconducting Undulators for KARA at KIT
- Permanent magnetic Undulators for XFEL
- Permanent magnetic Undulators for FLASH and PETRA