

Measurements of MAX-IV girder systems

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Danfysik is currently producing 60 up to 3.3 m long magnet systems consisting of up to 12 multipole magnets integrated into yokes for the bending achromats of the MAX IV 3 GeV storage ring. The integration of many magnetic elements into single yoke structures enables a compact, low emittance storage ring design where the elements are aligned with high precision inside the magnet girders. Testing of these long and compact magnet structures has been a challenge which required development of new test equipment dedicated to this task. I will describe the new Hall bench, and the automatization of the mapping process. I will also introduce the new coil measuring system, which allows for measuring the different magnet elements separately, by using segmented coils.