PREPARATION OF THE FINAL PROJECTS OF THE UPPER PORTS 02, 07, 08 ITER [[1]](#footnote-1)\*)

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The Budker Institute of Nuclear Physics has been carrying out design work on diagnostic equipment for the ITER installation since 2013. The list of equipment under development includes: design and integration of upper diagnostic ports ## 02, 07, 08, equatorial diagnostic port #11 as the main supplier, as well as in the form of a manufacturer and developer of a part of the system in diagnostics: vertical neutron chamber (upper and lower), divertor neutron flux monitor, neutral particle analyzer (in-vessel part).

Over the past year, there have been significant advances in each of the directions. For the equatorial diagnostic port #11, FDR has been closed. For the upper diagnostic ports ##02, 07, 08, PDRs were closed, for the upper port #07, in-vessel FDR was held. For the equatorial port No. 11, boron carbide bricks were produced in full, necessary for the delivery of the port to ITER. Started production of diagnostic protection modules.

On the vertical neutron camera, work is underway to prepare the final design of the upper camera for FDR passing in 2023. A prototype for the neutron flux divertor monitor was made and tested, and design documentation for the manufacture of the primary plasma part of the monitor was prepared. For the NPA, neutron shielding elements for collimator blocks were fabricated.

1. \*) [abstracts of this report in Russian](http://www.fpl.gpi.ru/Zvenigorod/L/E/ru/ID-Ivantsivskiy.docx) [↑](#footnote-ref-1)