

## TECHNOLOGICAL OFFER - CELLS

### ANGULAR ORIENTABLE SAMPLE PARKING FOR A STM PLATES

**ALBA Engineering Division has developed a simple sample parking with the possibility to transfer, orient and store samples in a different directions or angles. The design is composed by the sample parking and the acting tool.**

The ALBA synchrotron managed by the Consortium for the Construction, Equipping and Exploitation of the Synchrotron Light Source (CELLS) is aiming at contributing to improve the industry competitiveness by offering the technological solutions developed in-house. The present device is basically a sample parking (in this case 8 sample STM plates) for transference or distribution inside vacuum systems with the possibility to be oriented at a certain angle (30° in this case). This is important to optimize the space needed in a preparation sample systems, because it opens the possibility to transfer a big number of samples in a different angles, not at orthogonal directions as usual, meaning a reduction of the cost of the whole system. Taking into account the size, it is a very compact element, only 116mm, to move and orient 8 samples. And it fits inside a DN40CF flange (38mm inner diameter). Regarding acting or manipulation, it is needed a simple linear manipulator with a rotation, no extra rotation or second axis is needed. It can be a common UHV magnetic or mechanic manipulator (very extended and cheap item). The device is fully scalable and customizable, angle of orientation (up to 90°), number of samples and type of sample can be adjusted. In addition, the assembly is UHV compatible due to the design and materials. It is designed to be use at a distribution and preparation chambers working at a UHV regime.



**CELLS (ALBA Synchrotron) is the owner of the present invention and is offering it to the technological industries for its commercialization. Those companies interested, please, do not hesitate to contact the ALBA Industrial Liaison Office in the below email:**

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| <b>Patent Status</b> | Spanish patent  |
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