DESORPTION UNIT FOR PASSIVE TRAP PA3

BAN3 is the laboratory unit dedicated to the desorption of PA3 passive traps before liquid scintillation analysis. Thanks to its optimized operating method, BAN3 offers a desorption efficiency > 99% and prevents cross-contamination from one sample to another. At the end of desorption, PA3 can be directly reused in the field for a new sampling campaign.

The operating principle of BAN3 is to heat the PA3 cartridge, so the water captured by the trap's molecular sieve will desorb the water in its vapor form. This water vapor is then directed, condensed and trapped in liquid form by a cold setup (technology without heat transfer fluid). The entire aeraulic is maintened at an industrial vaccum of 100mBar in order to confine and preserve the tritiated sample in a laboratory glassware.
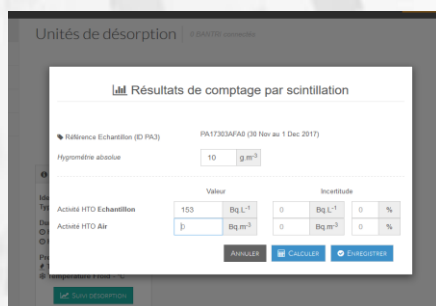
Regeneration of PA3 trap	Reading of field data by NFC
Confined trtiated water	Easy to use by touchscreen
No ghosting effet	Quality / traceability by QUAL3

PERFORMANCES OF DESORPTION

Average desorption time	**90 minutes (adjustable)**
HTO desorption efficiency	**> 99%**
Quantity of water captured	**100 ml max.**
Heating temperature	**450°C max**
Trapping temperature	**-10°C min**
Absolute vaccum	**75 mBar min**

QUALITY REPORT
BAN3 collects the field information recorded in PA3 thanks to its contactless technology, and ensures quality monitoring and traceability of samples during desorption.

QUAL3 centralize and stores all the information to assist the user in the calculation, analysis and monitoring of HTO volume activity of the samples taken by PA3.

3T RANGE
The new solution for monitoring radioactive tritium