

## CHALLENGES

Waste from the dismantling of nuclear facilities or from storage drums containing radioactive materials are subject to rigorous counting. This is even more important when they contain Special Nuclear Materials like plutonium. Therefore, stakeholders in charge of managing this type of waste must **implement simple and safe solutions to control the quantity of materials** under their responsibility.

## SOLUTION

**n-CHECK** is a solution based on neutron counting. It can quantify plutonium even if the density of materials surrounding the radioactive substance is significant, like the matrix of a waste container.

- An adjustable measurement cavity volume up to 200 liters
- Coincidence and multiplicity counting modes, for measurements independent of the chemical form of plutonium, and additional data about its isotopes
- Detachable neutron shields made of cadmium or borated materials to reduce the background noise

## BENEFITS

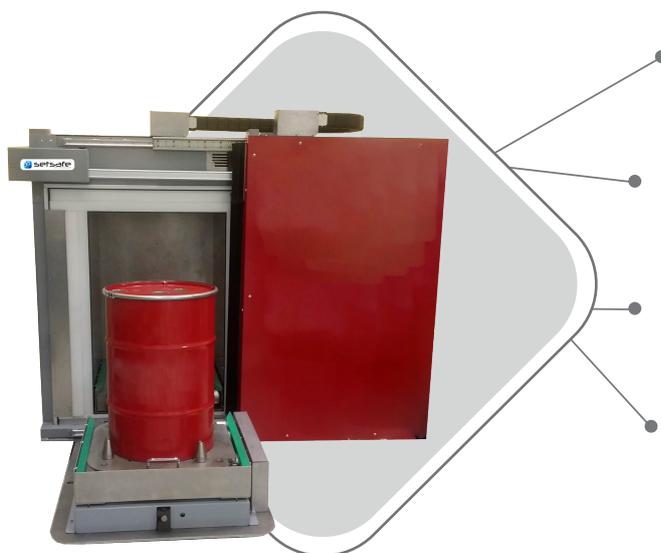
### Simplicity and safety

- Non-destructive control
- Simple loading and unloading thanks to the use of a semi-automatic conveyor

### Rigorous control

- Reliable measurement even in the presence of intense emitters like fission ( $^{137}\text{Cs}$ ) or activation ( $^{60}\text{Co}$ ) products
- Can be combined with gamma spectrometry to obtain information about other radionuclides
- Can be combined with calorimetry in the case of highly hydrogenated matrices (concrete, bitumen)

## n-CHECK



### TURNKEY CHARACTERIZATION STATION

With the level of sophistication to suit your needs

### QUANTITATIVE AND NON-DESTRUCTIVE MEASUREMENTS

Ideal when gamma emissions are hidden by more intense emitters

### RESULTS BARELY IMPACTED BY SURROUNDING MATERIALS

Especially by metallic and non-hydrogenated matrices

### SOFTWARE AND AUTOMATION OPTIONS

For simple and safe use