

ANEMONE

Recovery and sampling tool

Head Body



ANEMONE sampling tool head positions



ANEMONE sampling tool installed on a pole

ANEMONE has been designed to grip any solid element, whether for sampling purposes or more generally for recovery and removal:

- It consists of a rigid body and an interchangeable flexible head equipped with tentacles to grip and trap any type of object or material
- The gripping action is provided by retraction of the anemone head
- The anemone is controlled by pneumatic or electric power

An universal tool:

- Allows for the recovery of various objects (i.e., shape, size, density, material), in different environments (e.g., air or water) and on different surfaces (e.g., sand, sludge, rubble)
- Can be used remotely:
 - on a pole equipped with a joint for tool orientation
 - on a remotely controlled arm
- Resistant to cuts, tears and irradiation
- Designed by 3D printing: replicable and adaptable
- Dimensions and characteristics adaptable to needs

Advantages

- **PERFORMANCE**
Possible to perform operations in challenging, irradiating and underwater environments
- **SUBMERSIBLE**
Usable in immersion down to a depth of 20 m
- **EASE OF USE**
User-friendly tool and powered by either compressed air or electricity
- **VERSATILITY**
One tool for several objects or materials
- **SAFETY / RADIATION PROTECTION**
Limited dose exposure through rapid and remote implementation

Key data

Standard setting:

- **Diameter of the anemone:** 95 mm (pneumatic) / 110 mm (electric)
- **Length:** 550/430mm (deployed/retracted)
- **Weight:** 1.9 kg (pneumatic) / 2.7 kg (electric)

Payload:

- Recovery of items ranging from a few centimeters to several tens of centimeters
- Handling capacity of approximately 10 kg

Pole characteristics:

- **Length:** 2 to 20 m
- **Type :** with connectable sections
- Equipped with a remotely controlled ball joint allowing the orientation of the tool

An universal sampling tool developed by Orano DS for solid elements

Fields of applications

- Remote recovery of objects in areas that are difficult to access and/or irradiating (e.g., pool, bottom of vessels, equipment in operation, shielded cells, etc.)
- Taking and recovery of samples for analysis and characterization (e.g., corium samples in the Fukushima-Daiichi damaged reactors)



Screws



Sample holder



Bottles



Tools



Gloves



Shread sleeves



ANEMONE is patent-protected

Our references

Orano DS - la Hague

- ANEMONE has been used in the tank #41 at the silo 115 to meet Orano la Hague needs. 9 graphite samples were selected and taken from solid waste coming from both the processed UNGG fuels from the UP2-400 plant and the containers full of shells from the AT1 workshop.



Watch our presentation video for ANEMONE



Contact us to discover the range of possible solutions with ANEMONE

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