



MARA

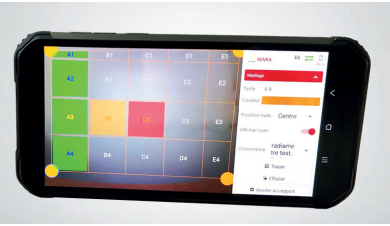
Mesh with Augmented Reality Assistance



MARA box including an HD camera and a laser rangefinder



Installation of the MARA box on a tripod



The definition of a mesh is done using the MARA application installed on the control unit

Scope

MARA is a tool designed to define regular meshes that are necessary to map large surfaces:

- MARA allows to prepare a mesh easily, rapidly and automatically prior to radiological investigations
- The information are entered on the control unit (smartphone) and they are used to generate an intervention report directly on leaving the worksite
- MARA serves as a replacement for conventional intrusive mesh solutions

Visualization of information collected in situ:

- Communication between the MARA box and the smartphone is wireless and uses Wi-Fi technology
- Augmented reality (AR) allows to view the mesh directly on the control unit

Traceability of information:

- Information acquired in situ are automatically saved on the smartphone
- These data can also be written on NFC chips to be fixed on each cell of the mesh
- The reading/writing of this information is done using the smartphone connected to a NFC reader

Advantages

- **EASIER TO INSTALL**
Can be installed on the worksite in less than 2 minutes
- **ADAPTABILITY**
Thanks to an intuitive interface, operators can easily handle the tool
- **SAFETY / ALARA**
Less troublesome meshing phase and optimization of time spent in irradiated zone
- **QUALITY**
Réduction of HOF (Human Organizational Factors) by entering your measurement values on the MARA application

Key data

- **Box dimensions:**
 - L = 9.0 cm, w = 8.5 cm, H = 10.5 cm
 - Weight = 250 g
- **Mesh accuracy:** from 5 to 10%
- **The size of the mesh can be configured to meet your needs**
- **Generation of configurable intervention reports (addition of notes, sketches, comments)**
- **The MARA pack consists of:**
 - 1 control unit
 - 1 box containing a laser rangefinder, a camera and a Wi-Fi module

Make the meshing phase easier and quicker to complete, while ensuring full traceability of your radiological measurements

Our services

Orano DS offers:

- **Comprehensive service for the construction of input data**
- **Intervention on your worksites or in your facilities to carry out radiological mapping on your behalf**
- **The quick installation of MARA, its simple use and the experience of our operators allow the supply of radiological maps in a short time, compatible with your activities**



Deployment of MARA in the field: definition of a regular mesh on a wall



Watch our presentation video for MARA

Our references

Implementation of MARA as part of radiological investigations carried out on different nuclear sites in France and abroad.

- **Orano Tricastin:**
Investigation of P06 walls
- **Orano Malvési:**
Investigation of the metallothermic building
- **CEA Marcoule:**
Investigation of both P and Q pools
- **NDA - West Cumbria:**
Mapping of workshop #4 on the LLWR (Low Level Waste Repository) site



Partner:



Contact us to know more about MARA and all its capabilities

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