LACALHENE 🞘



Training Catalogue

Nuclear Range

Summary

It is vital to minimize potential risks when handling contaminated and/or radioactive material, staff security being the major concern.



Remote Manipulation Remote Manipulation - Initiation Remote Manipulation - Training Remote Manipulator MA11.80 Maintenance Training - Level 1 Maintenance Training - Level 2 Remote Manipulator MT120 **p.4** Basic Maintenance Training Maintenance Training - Level 1 Maintenance Training - Level 2 Remote Manipulator MT200 Basic Maintenance Training Maintenance Training - Level 1 Maintenance Training - Level 2 Remote Manipulator MT200 TAO p.6 User Training - Basic Motion Module Maintenance Training - Level 1 Command & Control Maintenance Training - Basic Command & Control Maintenance Training - Level 1 Command & Control Maintenance Training - Level 1



Padirac System o p.7 Use Of The Padirac System – Training Course Use Of The Padirac System – Refresher Course Padirac System – Maintenance Training Padirac Cask Maintenance Training With Helium Leak Test



Good to know:

In addition to the above training courses, we also provide training on all our equipment: ejecting devices, DPTE® system AD system, J2L system.

All our training courses can be done on site as long as the end-user provides the training equipment



Remote Manipulation

Initiation





Training Objectives

- Remote manipulators: different types.
- + Use of remote manipulators for simple tasks.
- Terminal change-over.

Staff Concerned

Technicians using remote manipulators for complex tasks in hot cells (machine maintenance, repairs).

Awareness of remote manipulators for staff working on design and engineering projects.

Training





Training Objectives

- Remote manipulators: different types.
- Use of remote manipulators for all types of work inside a cell.
- Terminal change-over.
- Use a remote manipulator with indirect vision.
- Good practice for the operator.
- Good practice for the equipment.

Staff Concerned

Technicians using remote manipulators for tasks in hot cells (machine maintenance, repairs).

Remote Manipulator MA11.80

Maintenance Training Level 1





Training Objectives

- Cable replacement on an MA11.80.
- Carry out tests after maintenance.

Staff Concerned

Technicians and supervisors, who already have basic knowledge, in charge of maintaining a stock of MA11.80 remote manipulators.

Maintenance Training Level 2





Training Objectives

- Cable replacement on an MA11.80.
- Assemble sub-assemblies.
- + Carry out tests after maintenance.

Staff Concerned

Technicians and supervisors, who already have basic knowledge, in charge of maintaining a stock of MA11.80 remote manipulators.

Training Catalogue - Nuclear Range

Remote Manipulator MT120



Maintenance Training Basic





Training Objectives

- Learn how to extract the MT120 remote manipulator from the front and replace it during maintenance.
- Troubleshooting.
- Carry out simple maintenance tasks.
- Know the settings for correct functioning of the remote manipulator.

Staff Concerned

Technicians in charge of first level maintenance.

Maintenance Training Level 1





Training Objectives

- Learn how to extract the MT120 remote manipulator from the front and replace it during maintenance.
- Complete recabling.
- Troubleshooting.
- Tarry out simple maintenance tasks.
- ★ Know the settings for correct functioning of the remote manipulator.

Staff Concerned

Technicians and supervisors in charge of maintenance of a stock of MT120 remote manipulators.

Maintenance Training Level 2





Training Objectives

- Learn how to extract the MT120 remote manipulator from the front and replace it during maintenance.
- Assemble sub-assemblies.
- Complete recabling.
- Troubleshooting.
- Carry out complex maintenance tasks.
- Know the settings for correct functioning of the remote manipulator.

Staff Concerned

Technicians and supervisors in charge of maintenance of a stock of MT120 remote manipulators.

Remote Manipulator MT200

Maintenance Training Basic





Training Objectives

- Learn how to extract the MT200 remote manipulator from the front and install it during maintenance.
- Theck the MT200, replace the tongs, wrist and slave arm.
- Explain the maintenance of the other movements (using manuals).
- Troubleshooting.
- + Answer basic maintenance questions.
- Know the settings for correct functioning of the remote manipulator.

Staff Concerned

Technicians and supervisors in charge of maintenance of a stock of MT200 remote manipulators.

Maintenance Training Level 1





Training Objectives

- Learn how to extract the MT200 remote manipulator from the front and install it during maintenance.
- Check the MT200, replace the tongs, wrist and slave arm.
- Complete cabling of a remote manipulator.
- Troubleshooting.
- Answer basic maintenance questions.
- ★ Know the settings for correct functioning of the remote manipulator.
- Explain the maintenance of the other movements (using manuals).

Staff Concerned

Technicians and supervisors in charge of maintenance of a stock of MT120 remote manipulators.



Maintenance Training Level 2





Training Objectives

- Learn how to extract the MT200 remote manipulator from the front and install it during maintenance.
- Check the MT200, replace the tongs, wrist and slave arm.
- Learn how to cable a remote manipulator.
- Learn how to assemble the various sub-assemblies making up the slave arm, thru-tube and master arm.
- Learn how to replace a booting.
- Troubleshooting.
- Learn how to use the horizontal positioning tool.
- ★ Know the settings for correct functioning of the remote manipulator.

Staff Concorned

Technicians and supervisors in charge of maintenance of a stock of MT200 remote manipulators.

Training Catalogue - Nuclear Range

Remote Manipulator MT200 TAO



User Training **Basic**





Training Objectives

- Presentation of the system.
- Connection, turn on, turn off.
- Boot and reboot functions.
- Operating modes.
- Quick launch.
- Threshold Management.
- Robotized modes and simulations.

Staff Concerned

Users & technicians in charge of maintenance.

Motion Module

Maintenance Training Level 1





Training Objectives

- Presentation of the system.
- + Presentation of the motion module.
- Software management.
- Available toolings & accessories.
- Installation process.
- Preventive maintenance.
- Corrective maintenance.

Staff Concerned

Technicians in charge of maintenance.

Padirac System

User Training







Training Objectives

Learn how to use the PADIRAC system to carry out transfers in the best possible conditions.

Staff Concerned

Technicians and supervisors working on shielded hot cell systems equipped with the PADIRAC system.

User Training **Upgrade**







Training Objectives

- Learn how to use the PADIRAC system to carry out transfers in the best possible conditions.
- + Revision on correct use of the PADIRAC system.
- Place trainees in an incident situation depending on their operating experience.

Staff Concerned

Technicians and supervisors working on shielded hot cell systems equipped with the PADIRAC system.

Command & Control

Maintenance Training Basic





Training Objectives

- Connecting & calibrating.
- → Defects identification & localization.
- Preventive maintenance.
- + First level curative maintenance.

Staff Concerned

Technicians in charge of maintenance.

Command & Control

Maintenance Training Level 1





Training Objectives

- Maintenance in defect modes.
- Uploading of the firmware and parameters.
- ➡ Validation.

Staff Concerned

Technicians in charge of maintenance.

Command & Control

Maintenance Training Level 2





Training Objectives

- Management of passwords.
- ➡ Virtual mechanisms management.
- Robotic parameters set up.
- Deep diagnostic and maintenance.

Staff Concerned

Technicians in charge of maintenance.

Maintenance Training







Training Objectives

- Learn how to service and repair the constituent parts of the PADIRAC system.
- Learn how to make inspection checks after maintenance, before the material is put into use.

Staff Concerned

Technicians and supervisors carrying out maintenance on the PADIRAC system.

Cask Maintenance Training with Helium Leak Test







Training Objectives

- Learn how to service and repair the constituent parts of the PADIRAC system.
- Learn how to make inspection checks after maintenance, before the material is put into use.

Staff Concerned

Technicians and supervisors carrying out maintenance on the PADIRAC system.

Training Catalogue - Nuclear Range



Getinge La Calhène
1 rue du Comté de Donegal
F-41102 Vendôme cedex, France
Tél: +33 (0) 254 734 747
marketing-contact.glc@getinge.com
www.lacalhene.com

La Calhène is an equipment manufacturer specialized in material to protect human beings in a hostile environment, protect a product against the surrounding environment, and protect the environment from hazardous products. Its customer base is half in the nuclear field and half in the pharmaceutical field.

In the nuclear sector La Calhène supplies 4 product lines: remote manipulators, transfer systems (the DPTE® range, standard and special applications), Glove Box ports, and shielded casks for transfer / transport. La Calhène supplies to 5 market segments: nuclear fuel manufacture, spent fuel recycling, radiopharmacy, laboratory / universities / units of research, and dismantling / decommissioning / sanitization.

On the basis of its long experience in the nuclear sector, Getinge La Calhène developed a set of solutions and equipment for the pharmaceutical industry, in particular for isolators and sterile transfer systems (DPTE® and DPTE-BetaBag®).







