

Irradiator Technology H-315

Session 8c

Entry Procedures

- Dosimeter requirement:
 - Operator:
 - TLD, OSD
 - Other (visitor)
 - DRD
 - Record name & reading
 - Group of visitors:
 - 2 DRD's per group
 - Record name & reading

COBALT-60 IRRADIATOR WARNING

**Do not enter radiation room
without an authorized operator**

Emergency Instructions:

a) **If you are in the maze area or radiation room** and the radiation monitor alarm sounds (loud klaxon) or a source movement bell rings, **pull the safety cable on the wall and leave immediately**, closing the personnel access door behind you.

– OR –

b) **If you are in the control area** and the radiation monitor alarm sounds (loud klaxon) or a source movement bell rings, **push the red emergency stop button** on the control console.

For emergency service contact:



nordion

447 March Road
Ottawa, Ontario, Canada K2K 1X8
Phone: (613) 592-2790 Fax: (613) 592-6937

Post in prominent position close to personnel access door

WARNING

1. **Any attempt to modify** the approved mechanical/ electrical/or hydraulic/pneumatic power systems of this facility **may prove hazardous to personnel** as well as cause extensive damage to the machine.
2. **Failure to perform the safety checks and preventive maintenance** program, as described in the Operator's Manual, may cause the machine to become **hazardous to personnel or result in extensive damage** to the machine.
3. **Any** electrical, mechanical, or hydraulic/pneumatic power **alterations** to this machine, or the displacement, replacement, or adjustment of any of the radiological or other critical components contained in the machine (as installed and accepted), **must have the written approval of MDS Nordion**, in order to comply with the conditions of the owner's and/or operator's license.

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Post in prominent position close to control console

WARNING

The following precautions must be followed to avoid personal injury

1. Note that equipment **remains powered** (even during fault conditions) **and can start automatically at any time.**
2. **Never enter the path** of any movable component.
3. Follow proper lockout procedures **at all times.**

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Operating Instructions

To Start:

1. Turn machine keyswitch to ON (reset any faults if necessary).
2. Check that all lights indicate normal conditions.
3. Check for proper timer settings.
4. Make complete entry in log book.
5. Ensure radiation monitor is functioning as expected.
6. Perform proper Radiation Room Entry Procedure.
7. Inspect for normal conditions within radiation room.
8. "Set" the start-up keyswitch.
9. Leave the radiation room, closing the safety gate and door behind you.
10. Check that the MACHINE READY indicator is green on the screen.
11. Turn source keyswitch to ENABLE.

To Stop:

1. Turn source keyswitch to OFF.
2. Remove key.
3. Check radiation level indicator for normal reading.

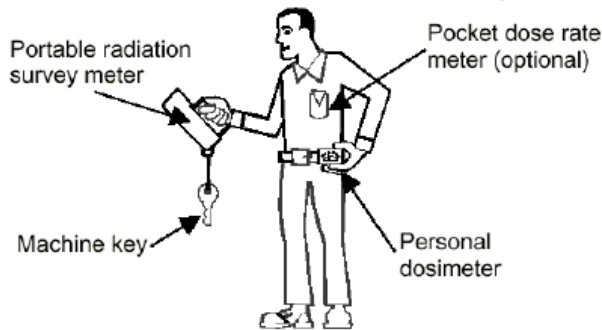
In an Emergency **press control console stop button**
or **pull the emergency stop cable**

Post in prominent position close to control console

Radiation Room Entry Procedure

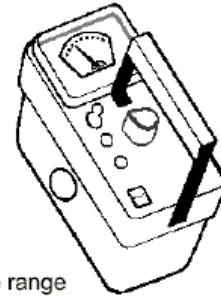
Use with L118 Radiation Monitor

1. You must have with you



2. Set survey meter

- Remove machine key from control console
- Check battery
- Switch on portable survey meter
- Check high voltage (if applicable)
- Set to most sensitive range

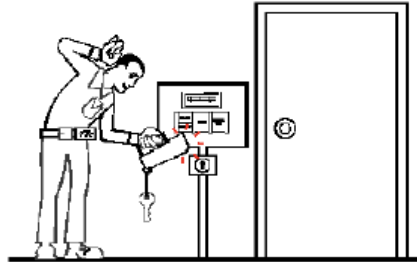


3. Test monitor



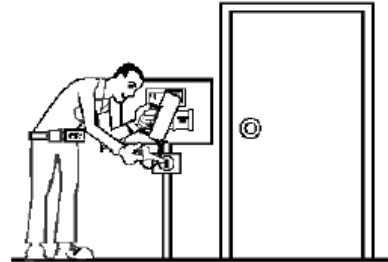
- Press monitor test button until alarm sounds¹
- Release button
- Wait until alarm stops and monitor indicator returns to normal²

4. Test survey meter



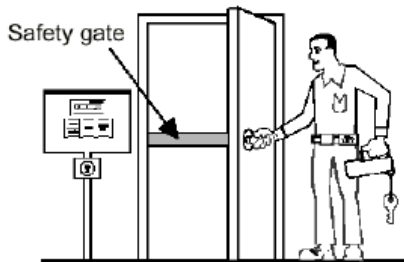
- Check meter against test source
- Listen for audible response
- Look for needle response

5. Unlock door



Unlock personnel access door with the machine key

6. Open door



Open personnel access door

7. Open safety gate and enter



Enter the maze while checking radiation levels with portable survey meter³

Notes

¹ The monitor will only function when the control system indicates source is in storage position.

² The monitor test and memory lights remain on.

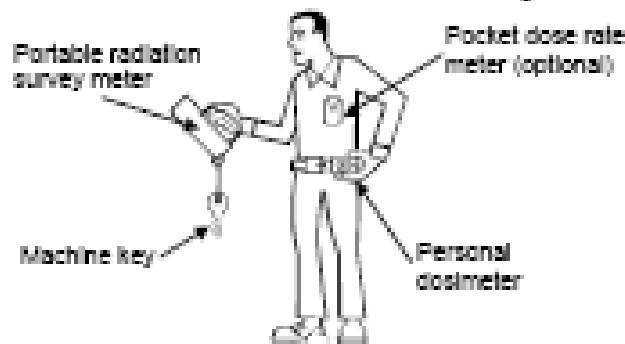
³ If radiation level is not normal leave radiation room immediately, close personnel access door and notify MDS Nordion.

Post in prominent position close to personnel access door

Radiation Room Entry Procedure

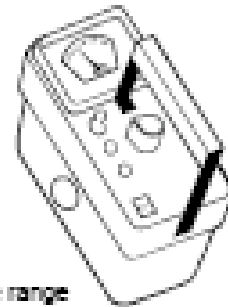
Use with L385 Radiation Monitor

1. You must have with you

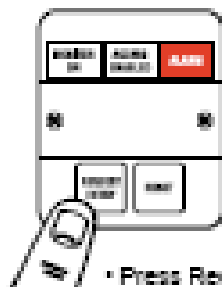


2. Set survey meter

- Remove machine key from control console
- Check battery
- Switch on portable survey meter
- Check high voltage (if applicable)
- Set to most sensitive range

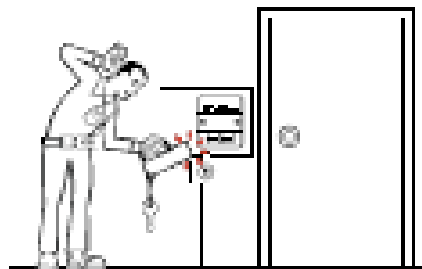


3. Test monitor



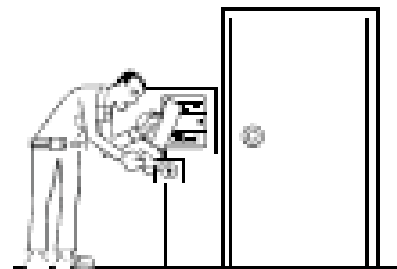
- Press Request Entry button until alarm sounds¹
- Release button
- Wait until alarm stops and Access Enabled light turns on²

4. Test survey meter



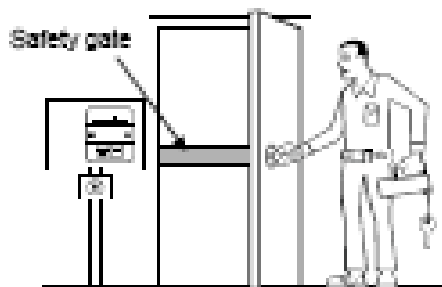
- Check meter against test source
- Listen for audible response
- Look for needle response

5. Unlock door



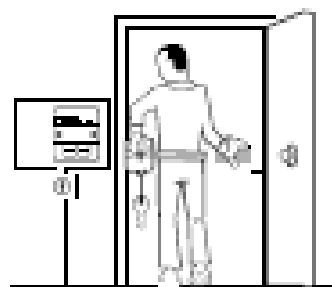
Unlock personnel access door with the machine key

6. Open door



Open personnel access door

7. Open safety gate and enter



Enter the maze while checking radiation levels with portable survey meter³

Notes

- ¹ The monitor will only function when the control system indicates source is in the safe storage position.
- ² Access enabled light turns off after 60 seconds or when the personnel access door is re-closed.
- ³ If radiation level is not normal leave radiation room immediately, close personnel access door and notify the site RSO and MDS Nordion.

Post in prominent position close to personnel access door