



सत्यमेव जयते

भारत सरकार

Government of India

भाभा परमाणु अनुसंधान केंद्र

Bhabha Atomic Research Centre

बी. ए. आर. सी. संरक्षा परिषद

BARC Safety Council

सेंट्रल कॉम्प्लेक्स, ट्रॉम्बे
Central Complex, Trombay

Ref.: BSCS/T-3/2022/365

April 28, 2027

**LICENCE FOR REGULAR OPERATION OF INDUSTRIAL RADIOGRAPHY
EXPOSURE DEVICES (IRED)**

In exercise of the power conferred under section 16 of the Atomic Energy Act, 1962 read in conjunction with Rule 3 of the Atomic Energy (Radiation Protection) Rules, 2004, based on recommendations from SRCRS, the BARC Safety Council (BSC) hereby grants the regulatory clearance in the form of licence in favour of **Head, ITIS, RC&IG** hereinafter referred to as the licensee, for regular operation of following Industrial Radiography Exposure Devices (IRED) at **Digital Radiography and Industrial Computed Tomography Lab, S-8, HIRUP, BARC** used for the purpose of Industrial Radiography and Tomography.

INDUSTRIAL GAMMA RADIOGRAPHY EXPOSURE DEVICES (IGRED)

S. No.	Make & Model Name	Radionuclide	Max. Activity (Ci)	Qty.	Name & Address of Manufacturer / Supplier
1	ROLI-I (Sr. No. 12054)	Ir-192	35	1	Board of Radiation and Isotope Technology, Vashi, Navi Mumbai
2	ROLI-II (Sr. No. 12009, 17432, 17433)	Ir-192	65	3	
3	ROLI-III (Sr. No. 17261, 11142)	Ir-192	20	2	

RADIATION GENERATING EQUIPMENT (RGE) FOR RADIOGRAPHY

S. No.	Make & Model Name	Type of X-ray machine	Name & Address of Manufacturer	Name & Address of Supplier	Max. kVp	Max. mA
1	Comet-450*	Fixed at S-8, HIRUP, BARC	Comet Inc, Herrengasse 10 3175 Flamatt Switzerland	M/s. Eastwest Engineering & Elec. Pvt. Ltd, Nerul, Navi Mumbai	440*	3.4 mA

बी. ए. आर. सी. सचिवालय / BSC Secretariat, सेंट्रल कॉम्प्लेक्स / Central Complex ट्रॉम्बे / Trombay, मुंबई-85 / Mumbai -85

दूरभाष / Tel: 91-22-26559 2208/5415 (O), फैक्स / Fax: 91-22-2550 5165

ईमेल / e-mail: bscs@barc.gov.in

S. No.	Make & Model Name	Type of X-ray machine	Name & Address of Manufacturer	Name & Address of Supplier	Max. kVp	Max. mA
2	Gulmay - 225	Mobile	M/s. Gulmay LTD, Cyan House 1, Canada road Byfleet, Surrey, KT14 7JL, UK	M/s. Innotech Systems Private Ltd., Diamond Ind. Estate, Ketki Padara Road, Dahisar (E), Mumbai	225	8
3	Golden-XRS4	Portable	Golden Engineering Inc. P.O. Box, 185	M/s. NDTs India Pvt. Ltd., The Greate Eastern Galleria, Sector-4, Nerul	370	--

* kVp shall be limited to 250 kV

TERMS AND CONDITIONS

The licensee is responsible for,

- Ensuring compliance with the relevant provisions of the
 - Atomic Energy Act, 1962;
 - Atomic Energy (Radiation Protection) Rules, 2004; and
 - AERB Safety Code on 'Industrial Radiography' (AERB/SC/IR-1, 2001) and any other applicable codes.
- Ensuring that operation of the machine/s is done under the supervision of Radiological Safety Officer (RSO) as per approved SOP.
- Ensuring that the equipment containing radioactive source/radioactive material would be physically secured during its useful life and returned to the authorised waste management facility if the source/material is no longer useful.
- Providing Personnel Monitoring badges and protective devices, as appropriate to all the personnel operating the RGE.
- Compliance with stipulations stated in Annexure-I, as applicable.
- Compliance of recommendations of SRC-RS (Copy attached).
- Only one machine shall be operated at a time in an enclosure.
- The licence is valid till April 30, 2027.** The application for renewal of licence shall be submitted before at least one month in advance before expiry of this licence.

This licence shall be suspended/ modified/ withdrawn in the event of any contravention of the above terms and conditions.

Copy of this licence should be displayed in a prominent location within the Radiography Facility.

(Clement C. Verghese)

Chairman and Member-Secretary, BSC

✓ **Dr. Umesh Kumar,**
Head, ITIS, RC&IG, BARC

cc: Director, RC&IG
Chairman and Member-Secretary, SRCRS

STIPULATIONS OF THE LICENCE

1. No activity will be carried out for purposes other than those specified in this consent.
2. The regular operation shall be done under the supervision of RSO following the approved SOP.
3. **Responsibilities of employer, licensee and RSO:** The responsibilities of the employer, licensee and the RSO are laid down in the Atomic Energy (Radiation Protection) Rules, 2004. If the RSO leaves the institution or is transferred to another department of the same institution or ceases to be in a position to discharge his/her duties in respect of the Radiation Generating Equipment (RGE) in the institution, the same should be brought to the notice of Head, BSCS immediately.
4. **Regulatory Inspection:** Full facilities should be accorded to any authorised representative/s of the Regulatory body (BSC) to inspect the RGE at any time.
5. **Radiation surveillance and medical surveillance:** Radiation surveillance and medical surveillance of all persons engaged in radiation work should be provided as per guideline of BSC Safety Manual on Radiation Protection Manual for BARC Facilities (BSC/SM/2020/3).
6. **Regulatory recommendations:** All recommendations made from time to time by representatives from BSC in respect of radiation safety measures should be implemented.
7. **Periodic Radiological Safety Status Report:** The periodic radiological safety status report of RGE in the possession of the institution shall be submitted twice in a year (half-yearly).
8. **Sale or transfer of RGE:** The RGE should not be sold or otherwise transferred to another person without obtaining the specific permission from BSC.
9. **Shifting of RGE within the same premises:** The RGE should not be shifted, without obtaining prior permission from BSC, from the location where it was intended to be used as indicated in the application for issuance of authorisation.
10. **Emergency Condition:** Emergency condition, if any shall be attended as per approved EOP/Emergency Plan.
11. **Incident involving the RGE:** Any incident involving radiation exposure to person from the RGE should be intimated to Head, BSCS within 24 hours of the occurrence of the incident.
12. **Renewal of licence/authorisation:** In case of expiry of the licence/authorisation, the same shall be renewed within three months from the date of expiry. Application for the same in the prescribed format should be submitted to Head, BSCS at least one month in advance.
13. **Amendment to licensee/authorisation:** In case there is change in information contained in this licensee/authorisation after its issuance, such as addition/decommissioning of RGE in the possession of licensee, it shall be ensured by the licensee that the necessary amendment to this effect to the consent is obtained from the competent authority (BSC).
14. **Non-Compliance:** The consent may be withdrawn, modified or suspended by BSC, as specified in the Atomic Energy (Radiation Protection) Rules, 2004, if any of the terms and conditions of the authorisation is not complied with.
15. **Local Safety Committee:** A Local Safety Committee (LSC) should be constituted by the Licensee for periodic safety review of the facility, involving RSO as one of the members of the committee. The LSC should meet at least quarterly. The copy of the minutes of meeting of the LSC should be submitted to Head, BSCS.

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