



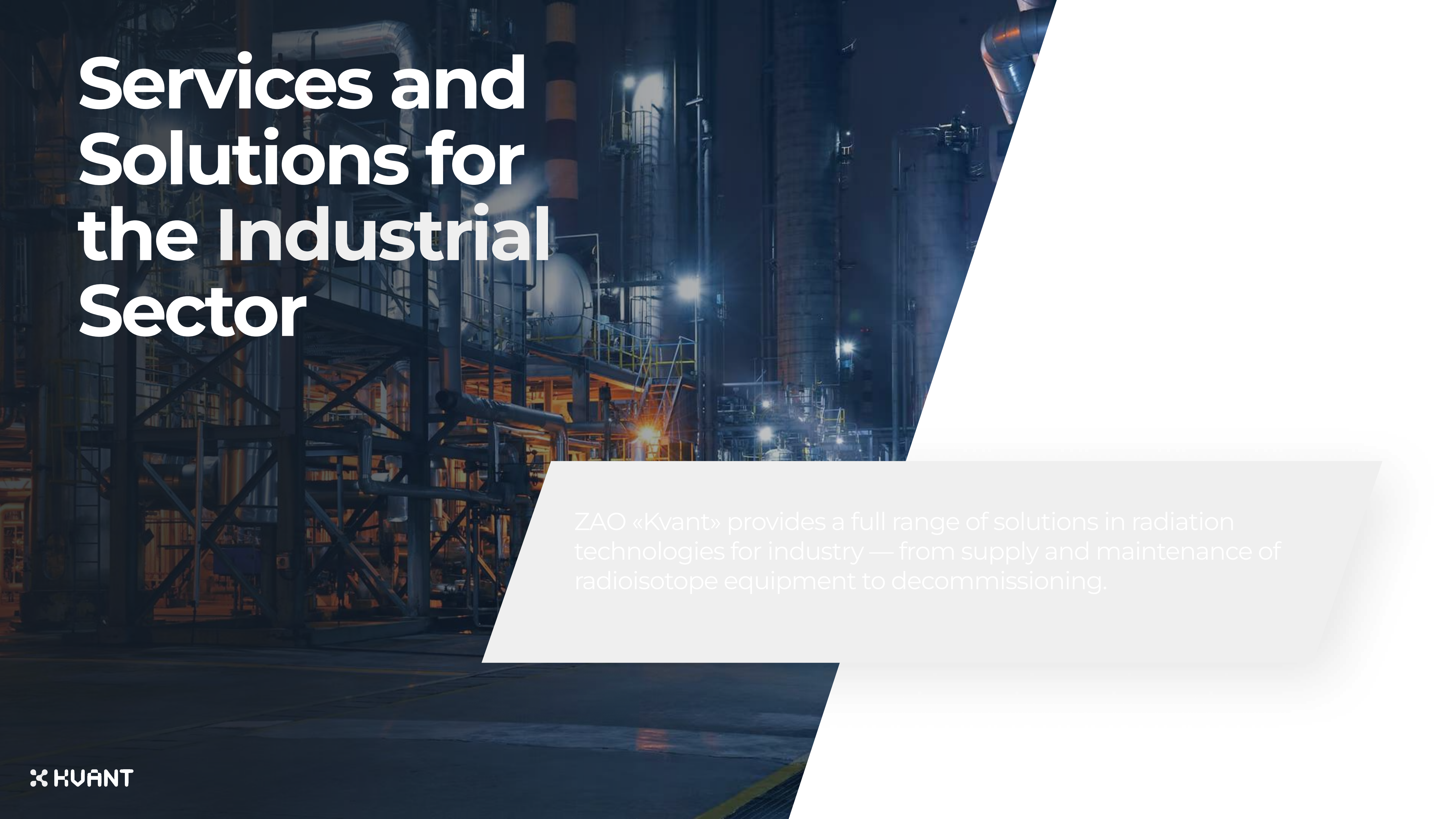
**ZAO «Kvant» — installation and
commissioning of radiation
equipment**

ZAO «Kvant»

A manufacturing enterprise with over 55 years of experience in the field of atomic energy use.

The company is one of the leading suppliers of radioisotope products and sources of ionizing radiation in Russia and abroad, providing a full range of services — from development and supply to maintenance, service life extension, and decommissioning of equipment.

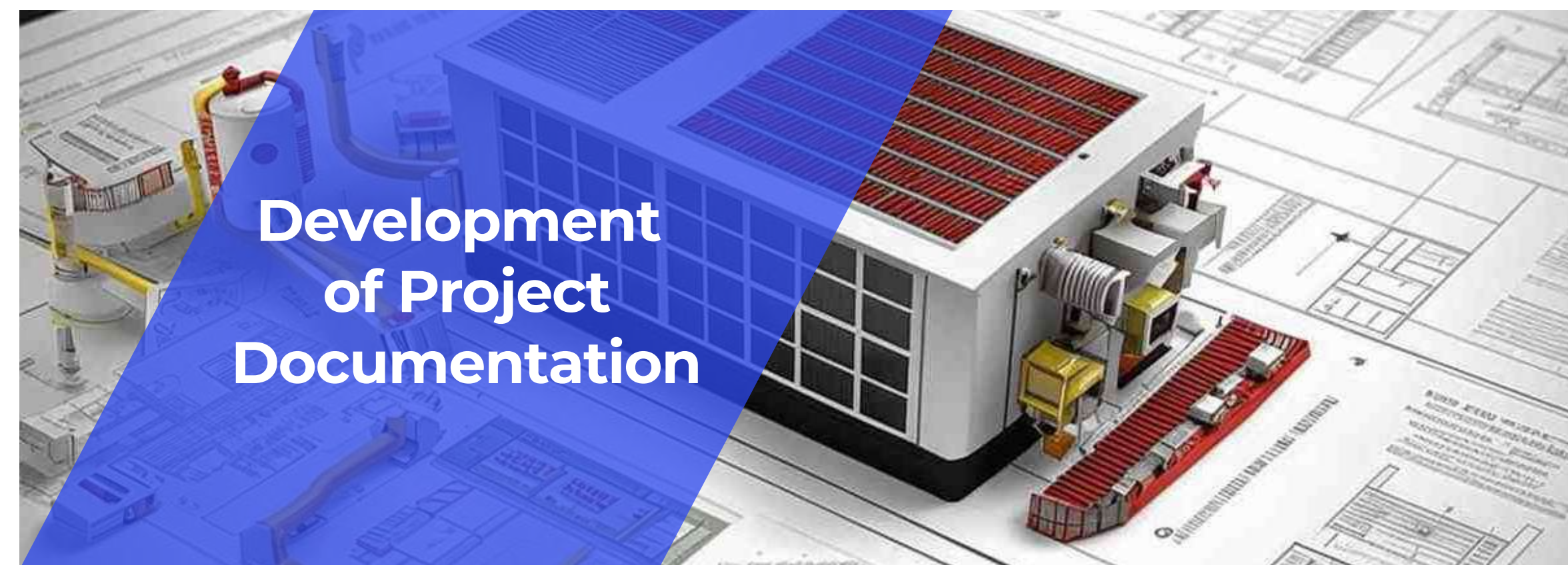


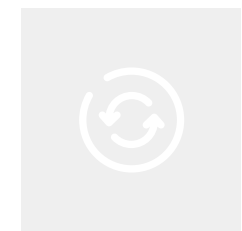
A photograph of a large industrial facility, possibly a refinery or chemical plant, at night. The scene is illuminated by various lights, creating a complex network of pipes, tanks, and structural elements. The image is used as a background for the slide, with a white geometric shape on the right side.

Services and Solutions for the Industrial Sector

ZAO «Kvant» provides a full range of solutions in radiation technologies for industry — from supply and maintenance of radioisotope equipment to decommissioning.

Key Services





Full Cycle of Source Management

Comprehensive Services for Handling Radioactive Sources



Custom Source Fabrication

Supply of Sources of Ionizing Radiation

Radionuclide Sources
Co-60, Cs-137, Ir-192, etc.

Service Life Extension

Expert Assessment for
Service Life Extension of
Sources

Storage

Safe Temporary or Long-
Term Placement of
Sources

Radioisotope Refueling

Replacement of Spent
Radionuclides

Transfer to RW and Disposal

Full Cycle of Source
Disposal

Supply of Sources of Ionizing Radiation

Alpha Radiation

- Am-241
- Am-243
- Cm-244
- U-234
- Pu-239
- Pu-238

Beta Radiation

- Fe-55
- Kr-85
- Sr-90+Y-90
- Ru-106+Rh-106
- Ce-144+Pr-144
- Pm-147
- Ti-204
- Pu-238

Gamma Radiation

- Co-57
- Co-60
- Zn-65
- Se-75
- Ag-110m
- Sb-124
- Cs-134
- Cs-137
- Ce-144+Pr-144
- Eu-152+Eu-154
- Tm-170
- Ir-192
- Am-241
- Pu-238
- Pu-239

Neutron Radiation

- Am-241
- Pu-238
- Pu-239
- Cm-243
- Cf-252

X-Ray Radiation

- Fe-55
- Sr-90+Y-90
- Pm-147
- Ti-204
- Pu-238

Custom Solutions for Your Applications

- **Activity Selection:** supply of alpha sources of various activities according to technical specifications.
- **Source Holders:** use of standard or specially designed holders.
- **Geometry:** possibility of manufacturing sources in non-standard shapes upon request.
- **Encasement:** production of different types of housings, including double-encased sources.

Transport Packaging Kits

Mobile Storage Units for Radioactive Materials

Specialized containers for the safe storage and transportation of radionuclide sources, ensuring protection of personnel and the environment.

Supported Radionuclides: Co-60, Cs-137, Se-75, Ir-192, Am-241, Pu-238, Pu-239.



Mobile Storage Units for Radioactive Materials

Мобильное хранилище для безопасного хранения радиоизотопных приборов и контейнеров с закрытыми источниками, оснащено радиационно-защитными сейфами и системами сигнализации, освещения и вентиляции.



Transport and Refueling Containers

Transport and Refueling Containers (TRC) provide safe charging, refueling, storage, and transportation of sealed radionuclide sources.



Gamma Source Units

Gamma Source Units (GSU) are used in radioisotope instruments to form a directed radiation beam and protect personnel; they are applied in densitometers, thickness gauges, and level gauges.



ChatGPT сказал: Manual Grippers for Radioactive Materials

Designed for safe handling of radioactive materials and waste, providing secure holding of radiation sources and protection of personnel through increased distance and the use of biological shielding.



Radiation Shielding Devices

Radiation Shielding Devices (RSD) are designed for the safe storage of sources of ionizing radiation, including gamma flaw detectors and isotope containers, providing personnel protection and suitable for stationary or mobile use.



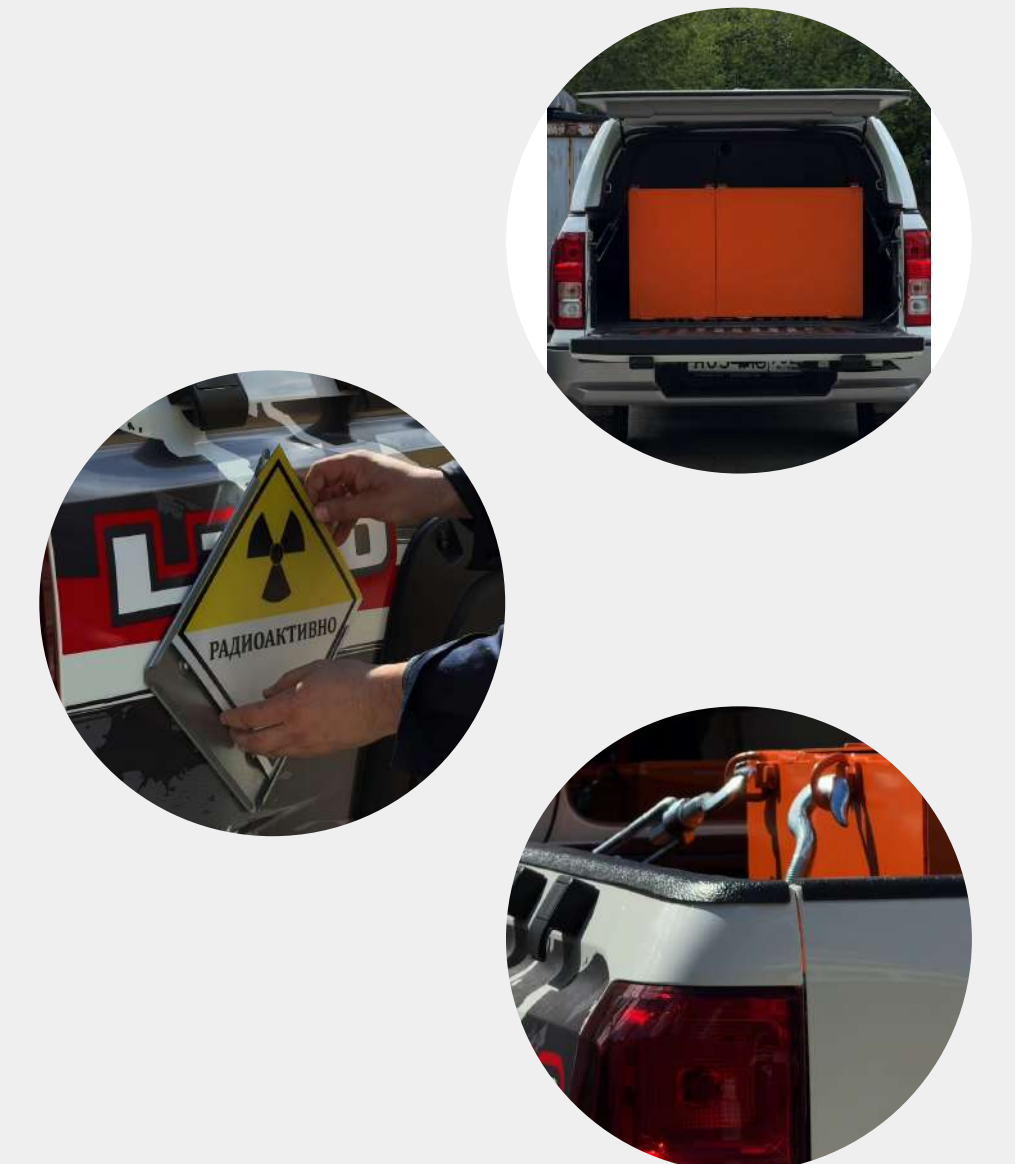
Protective Shields

Shields against gamma and neutron radiation for the protection of personnel and equipment. Made from lead, paraffin, lead glass, and plastics; available in stationary, mobile, and source-handling configurations.



Vehicle Equipment

Includes the installation of protective shields, fabrication of pallets for containers, provision of an emergency kit, and full compliance with the requirements of the ADR international agreement for safe transportation.





Maintenance of Radioisotope Instruments

ZAO «Kvant» is a manufacturer and supplier of radioisotope instruments for industry. Our company specializes in the full cycle of work with radiation equipment:

- Service and calibration of equipment
- Design and installation of radioisotope instruments
- Supply and transfer of radioisotope instruments
- Decommissioning and disposal

Industrial Gamma Installations

JSC «Kvant» specializes in comprehensive maintenance of industrial gamma installations.

- Service and maintenance
- Service life extension
- Equipment installation, commissioning, and personnel training
- Modernization of outdated units
- Decommissioning and source refueling

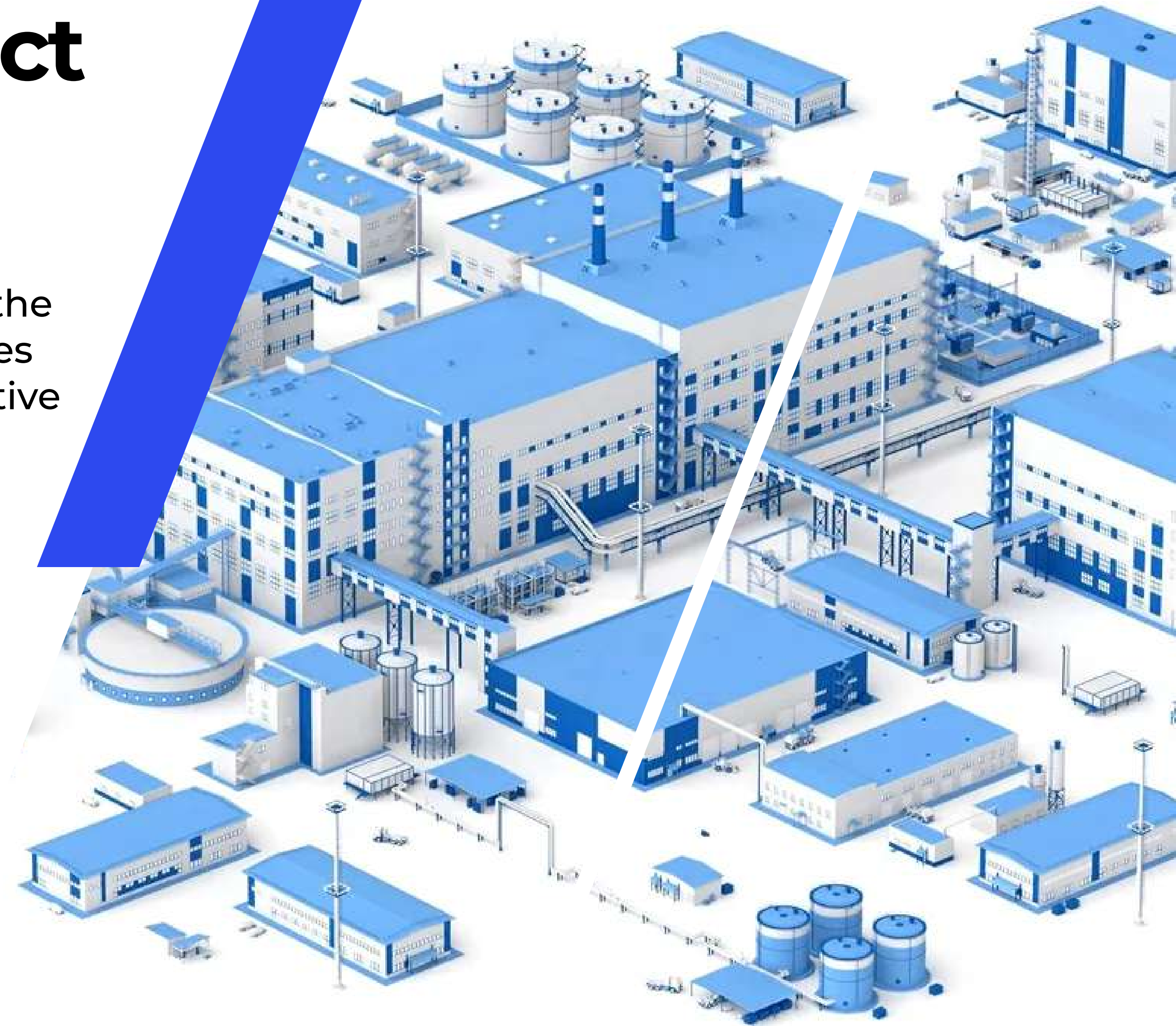


Development of Project Documentation

JSC «Kvant» provides comprehensive services for the development of project documentation for facilities dealing with sources of ionizing radiation, radioactive materials, and waste.

Main areas of design:

- Radiation Safety
- Physical Protection
- Decommissioning
- Technological Solutions
- Design of Medical Facilities





One of the Key Areas — Technical Support for Nuclear Medicine

JSC «Kvant» provides a full range of technical solutions for nuclear medicine facilities.

The company ensures the safe operation of oncology centers using radiation technologies in diagnostics and therapy.



Gamma Therapeutic Devices

Maintenance, repair, refueling, and dismantling of devices (Terabalt, Theratron, Agat, Rokus, Multisource)



Supply of Radiopharmaceuticals

Molybdenum-99 (Mo-99), Lutetium-177 (Lu-177), Iodine-131 (I-131), Custom preparation of radiopharmaceuticals according to individual specifications

Main Services

Class 7 Cargo Logistics

Organization of the safe transportation of radiopharmaceuticals and radiation sources with full documentary support.



Accredited Radiation Control Laboratory

Dosimetric monitoring of radioisotope instruments
Individual dosimetric monitoring



Gamma Therapeutic Devices

A full range of services for the maintenance of gamma therapeutic devices used in radiation oncology

1

Technical Maintenance

Scheduled inspections, repairs, and source refueling for Agat, Rokus-AM, and Theratron Equinox devices.

2

Placement Project

Development and approval of documentation for the safe installation of equipment in medical facilities.

3

Service Life Extension

Comprehensive diagnostics of devices with the issuance of a report on the possibility of continued operation.

4

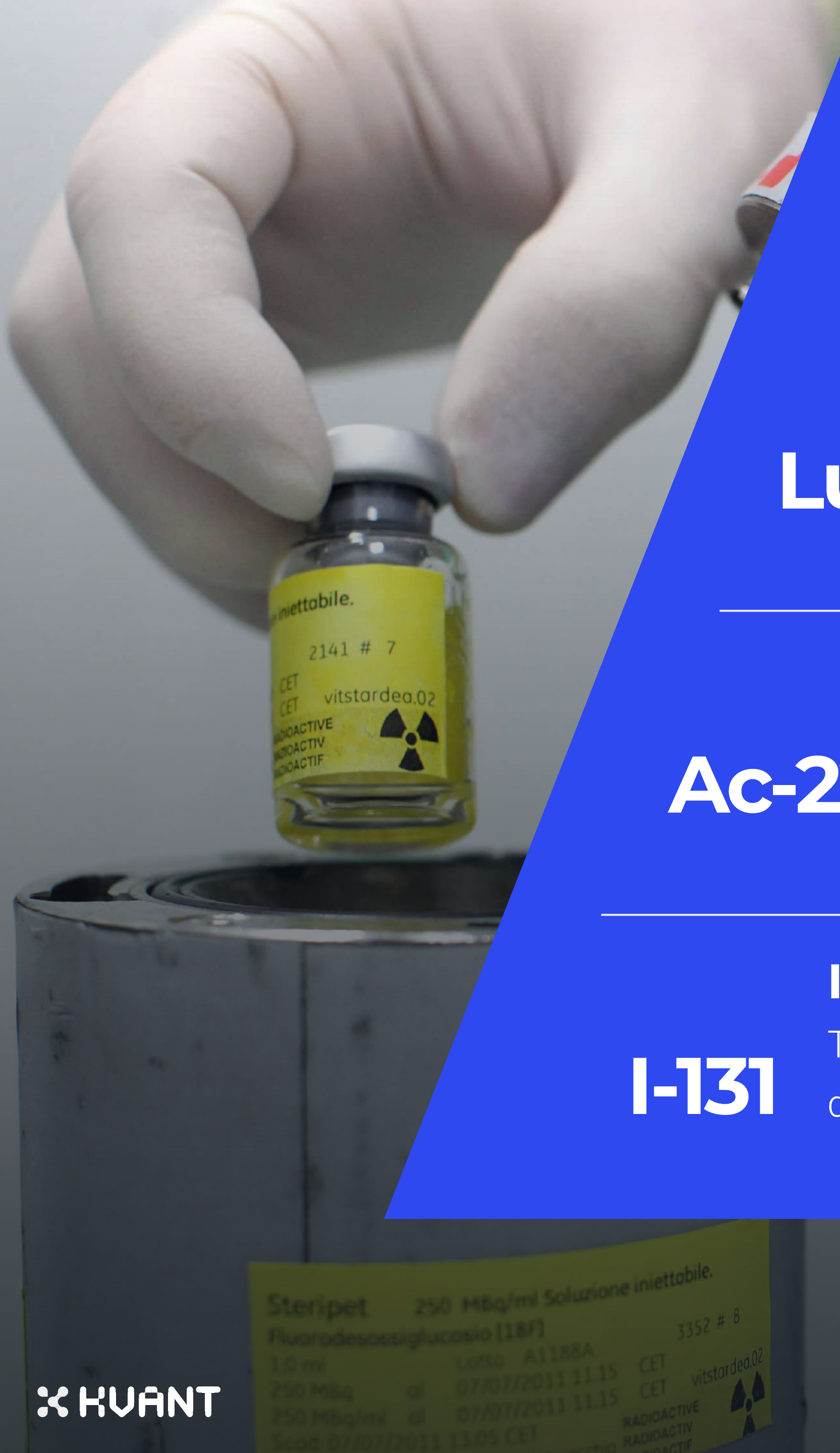
Equipment Diagnostics

Detection of malfunctions and assessment of the technical condition of gamma therapeutic installations.

5

Decommissioning

Dismantling, decontamination, and disposal of end-of-life devices with full documentary support.



Mo-99

Molybdenum-99

The basis for Technetium-99m, the most widely used diagnostic radionuclide in nuclear medicine.

Lu-177

Lutetium-177

A radionuclide for targeted tumor therapy with a well-defined molecular target.

Ac-225

Actinium-225

A powerful alpha emitter for the therapy of resistant oncological diseases.

I-131

Iodine-131

The standard for the treatment and diagnosis of thyroid diseases.

Radioisotopes and Radiopharmaceuticals

We provide reliable supplies of high-quality medical radioisotopes and radiopharmaceuticals for diagnostics and targeted therapy.

Accredited Radiation Control Laboratory of JSC «Kvant»

Main Areas of Work:

- Testing of X-ray, radioisotope, and gamma installations for various purposes
- Dosimetric and radiation monitoring of equipment, premises, and medical personnel workplaces
- Individual dosimetric monitoring and assessment of the effectiveness of protective equipment

Class 7 Cargo Logistics

JSC «Kvant» provides a full range of services for the transportation of radioactive and hazardous cargo:

- Organization of transport using specialized vehicles
- Air transportation of hazardous goods
- Customs clearance
- Transit of Class 7 hazardous cargo
- Export and import of radioactive materials
- Provision of secure packaging and containers

The company has its own certified vehicle fleet, providing dosimetric monitoring and physical protection.



Let's work together!

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Discover all areas of JSC «Kvant»
activities via the QR code

