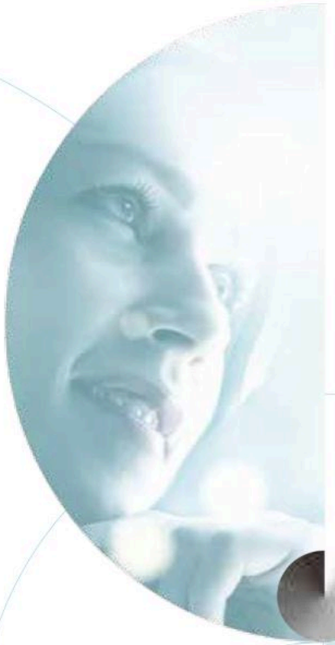
To Cherish Humanity is Our Best Value

New Advances in Lead-Free Radiation Protecion for Human & Environment.

MDR CE

ISO 13485

DROOVU







DR-VU

Cherish Humanity through Protection of People and Environment.

It is the founding mission of DR-VU
An everlasting motto.





Greetings From **CEO**

Starting with the development of eco-friendly radiation shielding materials, our company now produces medical and daily life products. All these efforts were held under a single ultimate goal of DR-VU: "Ensuring healthy life for ourselves and the upcoming generations."

In 1895, Wilhelm Conrad Rontgen found the existence of radiation, which has existed ever since the birth of Earth. Since then, artificial radiation has been used for medical treatment and it has been developed rapidly so far. As radiation is now a critical tool to improve human health and longevity, the clinical value of radiation usage is significant. However, as exposure to radiation became more frequent, humans were in greater risks.

In this regard, DR-VU tries to realize the company's mission by developing and commercializing lead-free radiation shielding sheet and protective clothing for patients and medical staff as a tool that minimizes the impact of radiation on human body. As a result, we have launched an optimized radiation protective clothing and DR-VU is steadily seeking to develop various tools to ensure the safety of X-ray device usage, not only in the medical field but also in the industrial working environment.

Image-based surgical guidance system, one of our business items, is a technology that overcomes the conventional navigation limitations, which will be an important tool to improve accuracy, predictability, and safety of a surgery. Furthermore, with its computerized clinical education system, the image tracking technology enables a new educational environment for students and dentists by providing augmented reality.

The beginning of DR-VU is a small step, but we are confident that we will be able to bring a big difference to the future of medical education and clinical/industrial environment; DR-VU will do its very best to practice humanity through human protection by faithfully following the company's founding mission: "Cherish humanity through protechion of people and environment".

President Therese Park

Mission and **Vision**

Doctor's view :

Delivering Professional Knowledge and Experience of an Expert's.

Based on professional knowledge and experiences of a doctor, we will develop medical technologies that will enhance the value of humanity and create a reliable medical environment for both patients and medical staffs.

Defensive Radiology - Valuable U :

Secure safety from radiation with protection technology.

We will build a defensive system that will allow a safer usage of radiation diagnosis technology for the benefit of human health with cutting-edge technologies.

Dental Radiology - Various Usage :

Maximizing the use of dental X-radiation.

We will develop a device that can safely use radiological diagnostic images that are essential for clinical practice and maximize the utilization of image information to ensure continuous care and safety of the patients.

Digital Radiology - Viewing Utility :

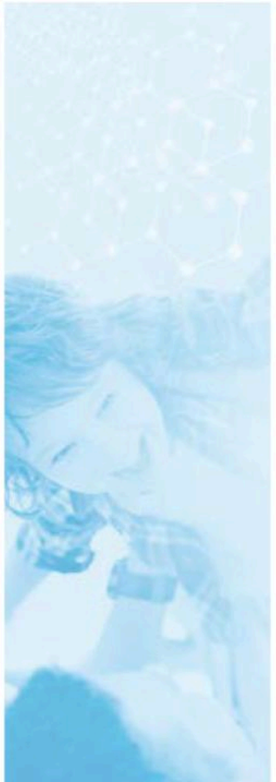
Delivering visualized information through digital radiology.

Based on visualization and information enhancement technology, which uses digital radiography and CBCT images, we will increase the diagnostic value of the clinic and improve the safety and the success rate through the image-based surgery induction technology.

Dream-like Reality - Virtual Unit :

Realization of the Augmented Reality.

Through computer-based simulation technology that realizes the augmented reality, we'd like to provide a tool that would improve the skills of the preliminary dentist as well as their confidence, which would lead to a safer procedure for clinical patients.





Business **Area**

Manufacture of Radiation Shielding Sheet

- Lead-free high performance radiation shielding sheet.
- Thin, light, flexible and stable radiation shielding performance.

Manufacture of Radiation Protective Clothing & Accessories

- Staffs' and patients' radiation protective clothing/accessories for medical, dental, and animal hospitals.
- Workwear for industrial purposes.

Implant Surgery and Dental Navigation System

- CBCT image-based real-time computer navigation technology.
- Guidance of real-time images during surgery.

Computer-based Clinical Skill Simulation System

- Clinical education through realization of augmented reality.
- Optimal tool for clinical skill and evaluation based on augmented reality.

Realization and Commercialization of Creative Knowledge

- Business based on the Patent and Design-oriented knowledge.
- Realization and information database of experts' knowledge.

Tapping into the new market of tele-radiography for Image Information

- Network solution of image information and development of cloud service.
- Development of tele-radiography system and exchange of information between medical institutions.

Starting Research and Development for Human Protection.

DR-VU started from the development of new materials(radiation shielding sheet) that can replace the conventional harmful lead protection products, which lacks to protect patients, medical staffs, and workers under the risk of radiation.





Rad-Ban sheet is a lead-free shielding sheet based on patented technology.



The discovery of the new method, apart from the conventional radiation shielding sheet manufacturing method, has become the driving force behind the development of the Radial Shielding Sheet's daily life product..



We aim for the best quality with stable shielding performance manufactured in Korea.

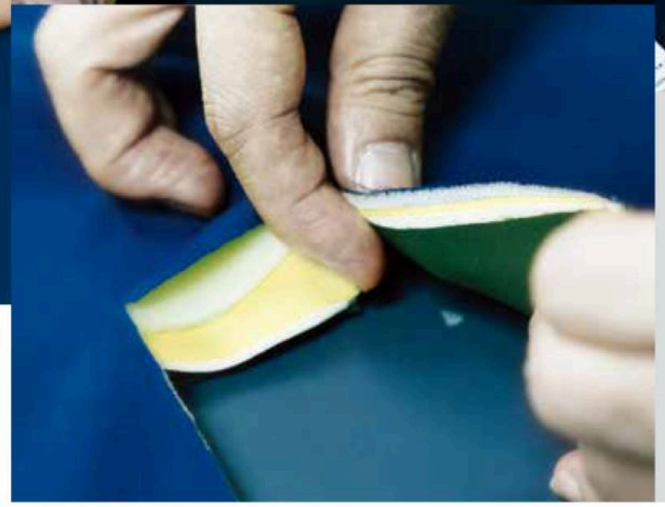


DR-VU Runs a Factory That Produces Ergonomic Designs and High-Quality Products.

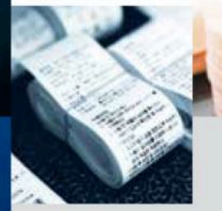
It is designed to meet the needs of the field through the cooperation of medicine, dentistry, veterinary clinics, and industry. It produces high-quality products that contain one-by-one craftsman's sincerity with over 40 years of manufacturing experience.







Industrial, medical, and laboratory work clothes and other accessories that require an alternative product of the radiation shielding can be designed to suits your needs.





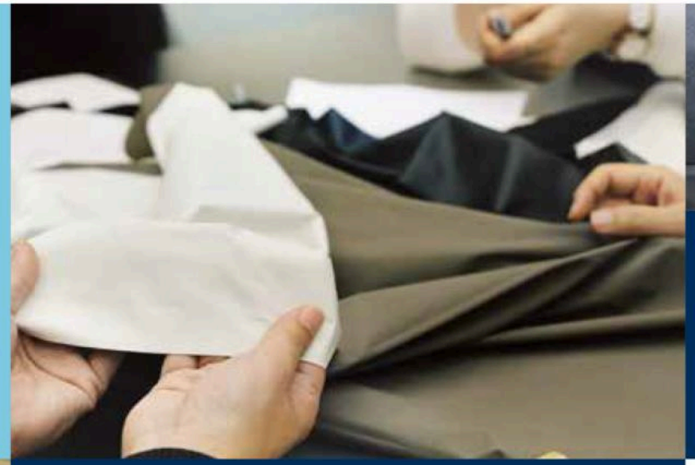
Endless Efforts for Research and Development.

Composed of researchers in specialized fields, DR-VU strives to develop radiation products that can be used daily in medical and industrial areas through continuous research.



DR-VU is a Healthcare Company Specialized in Radiation Shielding Products.

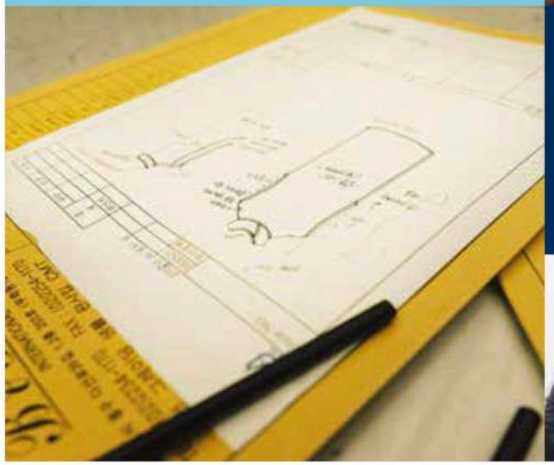
DR-VU consistently researches, develops, and commercializes lead-free radiation shielding products based on patented technologies for industrial, medical workers, as well as patients exposed to radiation.



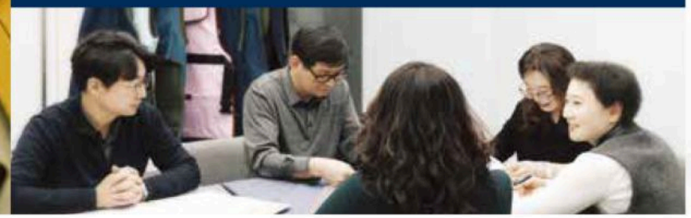


We Boast the Highest Quality.

We are proud of the highest quality in terms of product performance, design, and fit by realizing product upgrades through continuous field feedback.



Based on the flexibility and uniform shielding performance of lead-free radiation shielding materials, we were able to develop a variety of shielding equipment that could not be realized before due to the thickness and weight of the conventional lead radiation shielding sheet. By actively introducing patented technologies, products needed in medical and industrial sites have been released.

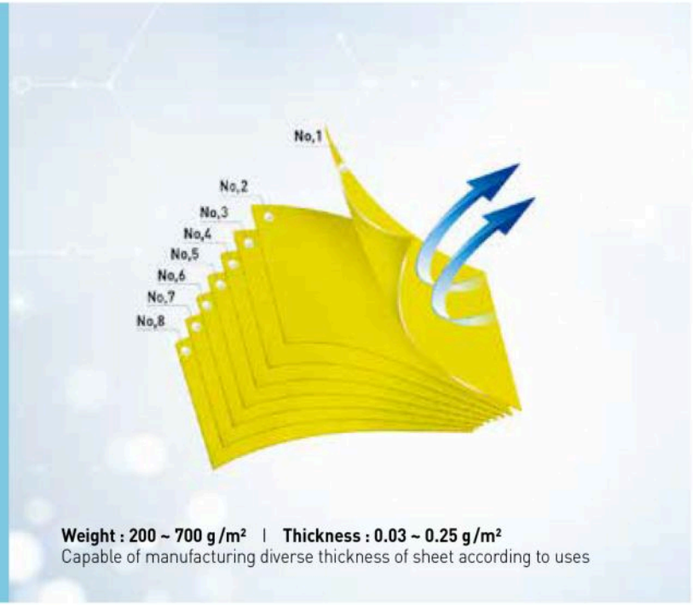






Radiation Shielding Sheet Rad-Ban

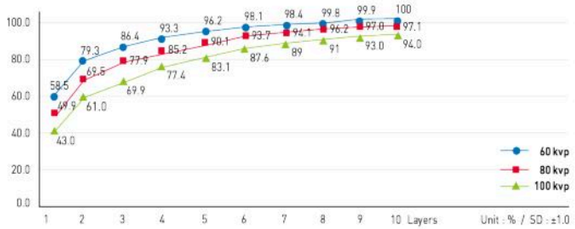
The excellence of lead-free radiation shielding sheet(Rad-Ban) is proven by the International Journal SCIE.



Weight : 200 ~ 700 g/m² | **Thickness : 0.03 ~ 0.25 g/m²**
Capable of manufacturing diverse thickness of sheet according to uses

Rad-Ban I — Medical & Industrial Use

Thickness : 0.25 mm
Weight : 623 g/SQM
Deviation standard (±7%)

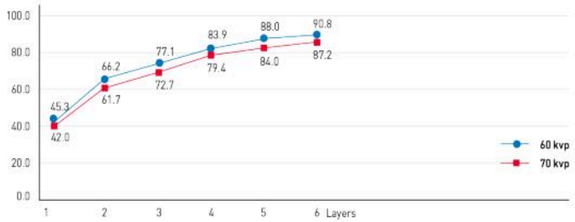


- Korean Institute of Test & Examination (KITE)
- 200 mA , 0.1sec , SSD 1500mm , 20 x 6 - 60E

Uses » Protective clothing & protective accessories Curtains for airport security radiation devices & X-Ray Inspection devices Radiation shielding Material for hospital or laboratory rooms

Rad-Ban II — Additional Use for Hospitals, Industries, laboratories

Thickness : 0.42 mm
Weight : 318 g/SQM
Deviation standard (±7%)

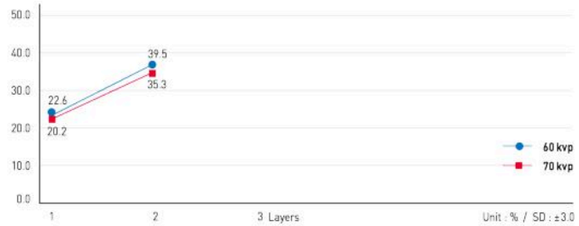


- The Institute of Oral Biology Kyunghee University
- 7mA , 0.2sec , 35cm

Uses » Uniform, Working suits, Military protection etc / Accessories (Gloves, Aprons etc.)

Rad-Ban III — Daily Life

Thickness : 0.37 mm
Weight : 220 g/SQM
Deviation standard (±7%)



- The Institute of Oral Biology Kyunghee University
- 7mA , 0.2sec , 35cm

Uses » Blanket for the flight against radiation from space Pancho or raincoat Wallpaper, Interior materials etc.

DR-VU Co., Ltd.

Industrial Lead-Free Radiation Shielding Curtain

Advanced X-Ray Protection Solution
for Industrial Inspection Systems

Lead-Free | Lightweight | High Shielding | Eco-Friendly

Rad-Ban IC

CE RoHS REACH ISO



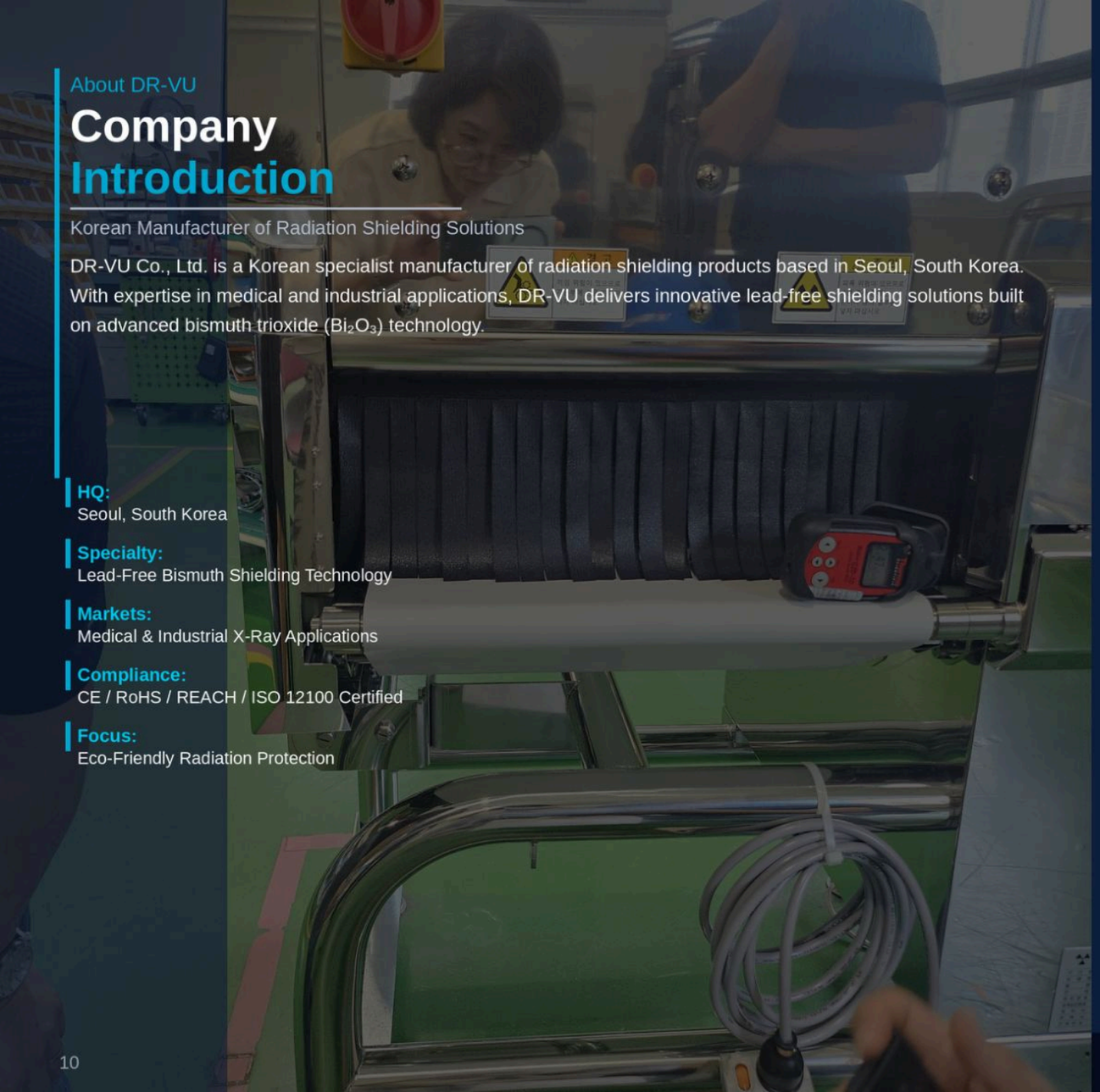
Korean Radiation Shielding Specialist

Bismuth-Based Lead-Free Technology

- **Lead-Free Material**
  Bismuth Oxide (Bi_2O_3) composite — no hazardous lead
- **Multi-Layer Structure**
  Effective X-ray attenuation through laminated layers
- **RoHS / REACH**
  Full EU regulatory compliance certified
- **Easy Replacement**
  Detachable bracket system — minimal downtime
- **IEC 61331-1 Tested**
  0.04 mmPb certified shielding performance

www.dr-vu.com | info@dr-vu.com | +82-70-7787-0459

DR-VU



About DR-VU

Company Introduction

Korean Manufacturer of Radiation Shielding Solutions

DR-VU Co., Ltd. is a Korean specialist manufacturer of radiation shielding products based in Seoul, South Korea. With expertise in medical and industrial applications, DR-VU delivers innovative lead-free shielding solutions built on advanced bismuth trioxide (Bi_2O_3) technology.

HQ:
Seoul, South Korea

Specialty:
Lead-Free Bismuth Shielding Technology

Markets:
Medical & Industrial X-Ray Applications

Compliance:
CE / RoHS / REACH / ISO 12100 Certified

Focus:
Eco-Friendly Radiation Protection

Our Strengths

01 Lead-Free Bismuth Technology
Proprietary Bi_2O_3 composite provides equivalent or superior shielding to conventional lead, without toxicity risks.

02 Medical & Industrial Expertise
Dual-market experience in radiation protection for medical imaging (DR screens, gloves, aprons) and industrial X-ray systems.

03 Eco-Friendly Manufacturing
All products comply with RoHS 2011/65/EU and REACH (EC) 1907/2006, eliminating hazardous substances from the production chain.

04 CE Certified Products
Full CE conformity declaration across product lines, including EU Machinery Directive 2006/42/EC compliance documentation.

05 Custom Solutions
Custom dimensions, thicknesses, and colour options available to meet specific OEM and industrial integration requirements.



Industrial Products

Product Overview

Rad-Ban IC

Industrial Lead-Free Radiation Shielding Curtain

The Rad-Ban IC is a flexible, lead-free radiation shielding curtain designed for installation at the entry and exit ports of industrial X-ray inspection systems. Using eco-friendly bismuth oxide (Bi_2O_3) composite material, it effectively reduces X-ray leakage and protects operators — without the hazards of conventional lead curtains.

Key Advantages

- Zero lead — safe for operators and environment
- Lightweight design improves material flow
- Easy on-site replacement with bracket system
- IEC 61331-1 certified shielding performance
- Customisable dimensions for any equipment

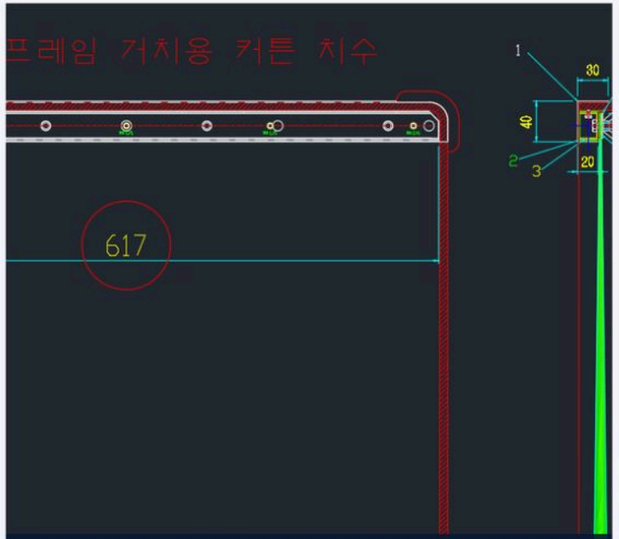
Industrial Applications



Airport Security & Cargo Scanners



Radiation Measurement & Testing



Food & Pharmaceutical Inspection



Industrial Curtain Installation

Optimized for modern industrial X-ray inspection environments."

Key Features

Rad-Ban IC — Industrial Lead-Free Shielding Curtain

01 Lead-Free Shielding Material

Bismuth Oxide (Bi_2O_3) replaces hazardous lead.
Environmentally safe · fully RoHS/REACH compliant.

02 Lightweight Design

Significantly lighter than conventional lead curtains.
Improved material flow through inspection systems.

03 Multi-Layer Shielding

Laminated sheet: Bi_2O_3 + TPU composite layers
provide effective, uniform X-ray attenuation.

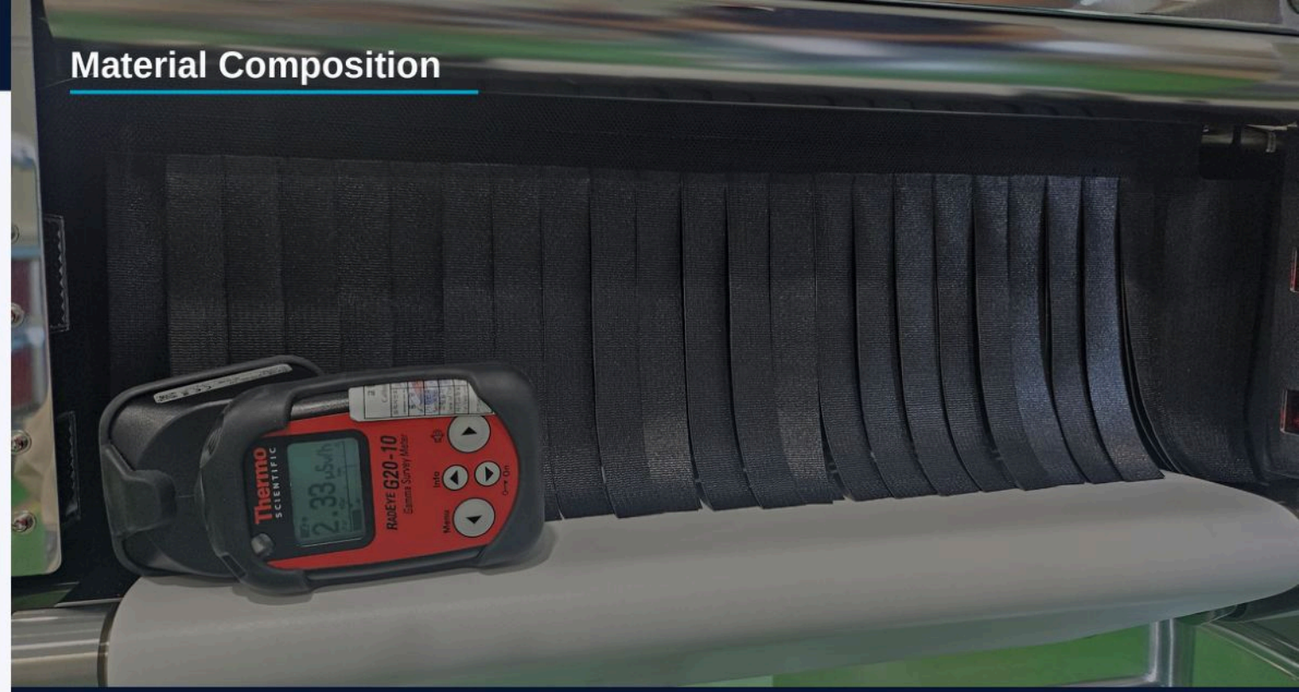
04 Easy Replacement

Detachable bracket system enables quick on-site
maintenance — no special tools required.

05 Eco-Friendly Compliance

RoHS Directive 2011/65/EU · REACH (EC) 1907/2006
ISO 12100 risk-assessed · CE marked.

Material Composition



Multi-Layer Cross-Section

L1 Polyester Fabric (PET) Surface protection & mechanical strength	L1
L2 Bi_2O_3 Composite Sheet PRIMARY X-ray radiation shielding layer	L2
L3 TPU Polymer Matrix Flexible binder — bonds shielding composite	L3
L4 Bi_2O_3 Composite Sheet SECONDARY X-ray radiation shielding layer	L4
L5 Polyester Fabric (PET) Base protection & long-term durability	L5

Lead-Free · Eco-Friendly · CE Certified

Technical
Specifications

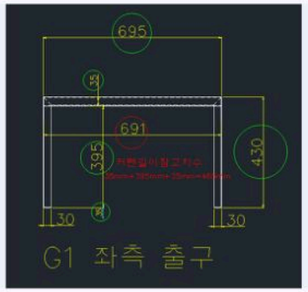
Physical & Mechanical	
Material	Eco-friendly bismuth composite fabric
Structure	Multi-layer laminated sheet + fabric bonded
Thickness	0.8 mm standard / up to 1.2 mm custom
Weight	Approx. 1.6 kg/m²
Dimensions	Standard: 695 × 440 mm (custom available)
Installation	Detachable bracket — easy on-site replacement
Colour	Black / custom per customer requirement

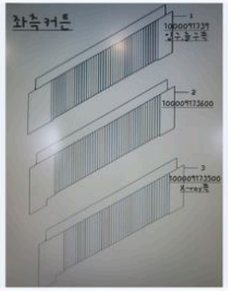
Radiation Shielding Performance	
Test Standard	IEC 61331-1
Pb Equivalent	0.04 mmPb (certified)
Attenuation	Multi-layer Bi_2O_3 + TPU composite

Environmental & Chemical	
RoHS	Lead-free — full compliance EN 50581 / 2011/65/EU
REACH	Full compliance (EC) 1907/2006
Lead (Pb)	Non Detected — per IEC 62321-5
Temperature	-20 °C to +60 °C operating range

Durability & Lifespan	
Flex Cracking	≥ 100,000 cycles (Class 6 — NF EN ISO 7854)
Abrasion	≥ 2,000 cycles (Level 3 — Martindale)
Tear Strength	≥ 12 N (trapezoid tear test)
Service Life	1–2 years under regular industrial usage

Drawings &
Shielding Performance





Radiation Shielding Performance	
Test Standard	IEC / EN 61331-1
Pb Equivalent	0.04 mmPb (factory certified)
Shielding Layer	Multi-layer Bi_2O_3 + TPU composite
Purpose	Minimise radiation leakage at equipment openings
Applications	Security scanners · food inspection · industrial X-ray
Operator Safety	Designed to protect operators from scattered radiation

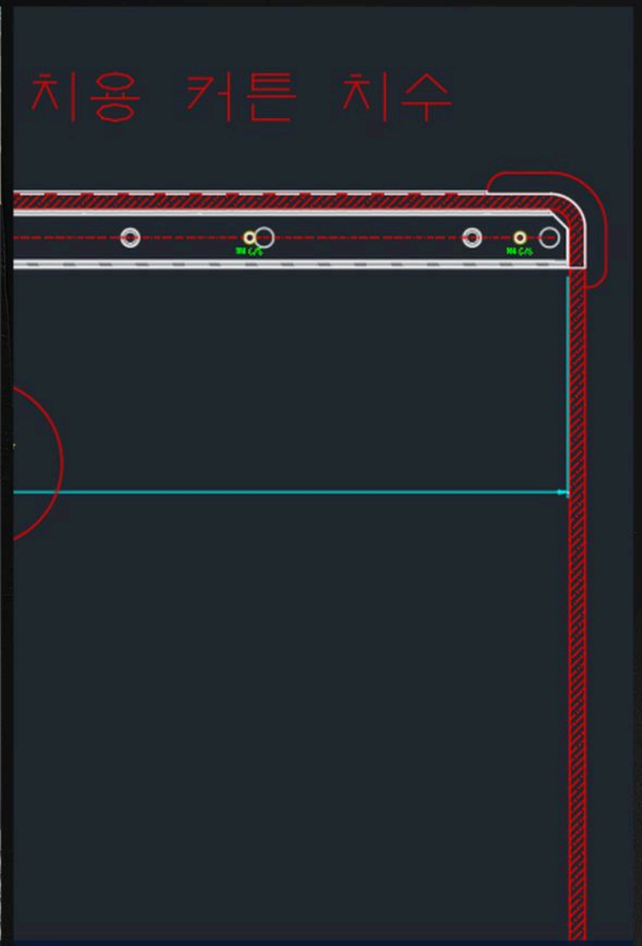




Industrial Applications



Food & Beverage Inspection
Detects foreign objects in food products.
Keeps operators safe from X-ray leakage.



Airport & Cargo Security
Installed at baggage/cargo scanner openings for effective personnel shielding.



Logistics & Parcel Inspection
Protects workers at conveyor entry/exit points in e-commerce sorting facilities.



Industrial X-Ray Systems
Fits OEM equipment from leading manufacturers; customised dimensions available.

The Rad-Ban IC installs in minutes and requires no special tools — minimising downtime in 24/7 industrial operations.

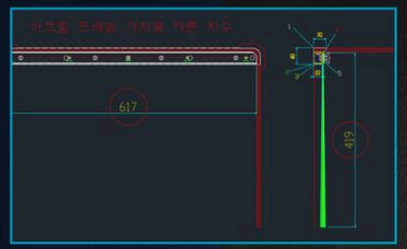
Custom sizes, colours and Pb-equivalent levels available on request · www.dr-vu.com

Protecting People.
Protecting
Environment.

Rad-Ban IC

DR-VU's Rad-Ban IC industrial shielding curtain delivers proven X-ray protection with zero lead — safer for operators, safer for the planet, compliant with global standards.

Lead-Free | CE Certified | IEC 61331-1 | RoHS / REACH | Made in Korea



Contact Information

Manufacturer:
DR-VU Co., Ltd.

Address:
40, Dongil-ro 96-gil, Jungnang-gu, Seoul, Korea

Tel:
+82-70-7787-0459

Email:
info@dr-vu.com

Website:
www.dr-vu.com

Product:
Rad-Ban IC | Industrial Shielding Curtain