

We repair, maintain, and improve electron accelerators



BULLETIN #04
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MONTE CARLO SIMULATION OF AN ACCELERATOR BUNKER

SHIELDED CAMERA

The entire stainless steel casing is lined with lead to reduce the effects of radiation on the electronics. The classical camera is properly mounted inside the casing. The leaded glass allows the lens to directly film the zone of interest, which is most of the times the product handling system.

By implementing this fundamental feature, you ensure longer lifespan to the surveillance system inside your accelerator's bunker, and guarantee a greater visualization of the product treatment.

We simulate your bunker (Monte Carlo) to determine the best place for the shielded camera (see top picture) while exposed to minimum radiation hazard.



Advantages

- **Shielding** : Integrated lead protection ensures longer lifespan of the camera by reducing radiation's effects
- **Easy installation** : Portable, it can be placed on a table or attached to a wall
- **Pressurized enclosure** : Continuous air flow inside the casing prevents from ozone corrosion
- **Inexpensive** : Made of basic components, it is much less expensive than existing radiation tolerant equipment
- **Monte Carlo Simulation** : We determine the optimal place to install the camera in order to ensure greater lifetime

SERVICES

- Maintenance of your accelerator
- Engineering projects (R&D)
- Audit and expertise
- Electronic components repairing
- Dosimetry
- Installation
- Upgrades
- Training
- Process optimisation
- Hotline 24/7
- Technical support
- Spare parts

SPARE PARTS

MSE supplies components and parts for your accelerator, including hardly accessible or **obsolete** items



BTD / HVD RESISTOR STRINGS

Both carbon and ceramic resistor strings are available



OSCILLATOR TUBES

Triodes 75kW, 150kW, 225kW and 375kW
-> 150 KW old model is available



RECTIFIER STACKS

Withstand 50k VDC reverse voltage
rectifier stack

And more upon request