

# Radiation Component Testing

TRAD Tests & Radiations provides **advanced services** and a **unique expertise** to assist companies in **predicting and minimizing radiation effects** on their products and systems (electronic components, sub-systems, materials, etc.).

Our electrical test team has crossed-skills on **electronic development** and radiation **test expertise** : a guarantee of optimum cost efficiency and high level of services.

### We can provide you a global solution : from the modelization and radiation analysis of your equipment to a complete test campaign



### **RADIATION TESTS**

**Paramatrics & Functional tests** 

- Total Ionising Dose TID-HDR- LDR
- Displacement Damage TNID
- Single Event Effects Heavy Ions & Protons

## **QUALITY ASSURANCE**

- Electrical testing and measurements
- Visual inspections
- Cross-section and physical analysis







LTX Diamond 10

Pulsed Laser

MU Test

### Our expertise 20 years of experience in radiation Over 5000 tests already carried out

Extensive experience with ESCC, MIL-STD norms







907 voie l'Occitane – 31670 Labège – France Tel : +33 (0)5 61 00 95 60 – Fax : +33 (0)5 61 00 95 61



E-mail : trad@trad.fr



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The cumulated dose can induce a degradation of electrical and functional parameters up to the destruction of the electronic components. Gamma radiation from a **Co-60 source is a standard method for simulating the deposition of "ionizing" energy due to the charged particles of the space environment**.

European leader in total dose testing, TRAD has his own Co-60 irradiation facility:



- To improve value for money, reliability and reactivity,
- To ensure a high quality service providing irradiation procedures compliant with MIL-STD, ESA/SCC, ASTM or other space and nuclear specifications.

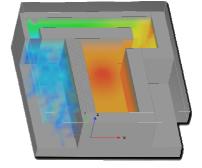


#### **Facility characteristics :**

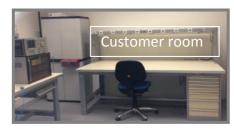
- Dose rate from 7rad(Si)/h to 1krad(Si)/h.
- Gamma radiation with two main lines at 1.17 and 1.33 MeV
- The chamber temperature is controlled : 20°C (±2%)
- The useful irradiation volume is : 45 m3
- Chamber opening at set times

#### **Customers' benefits :**

- Access reserved to ionizing radiation authorized personnel (Category B)
- Dedicated test room with Internet access and telephone line
- Provision of flow rate and total dose measuring means -ESD protected



Preliminary study of dose rate spreading - Rayxpert© Software







For more information : www.trad.fr

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