

The Estec Co-60 Facility

Nominal activity 2000 Ci for Total Dose Testing

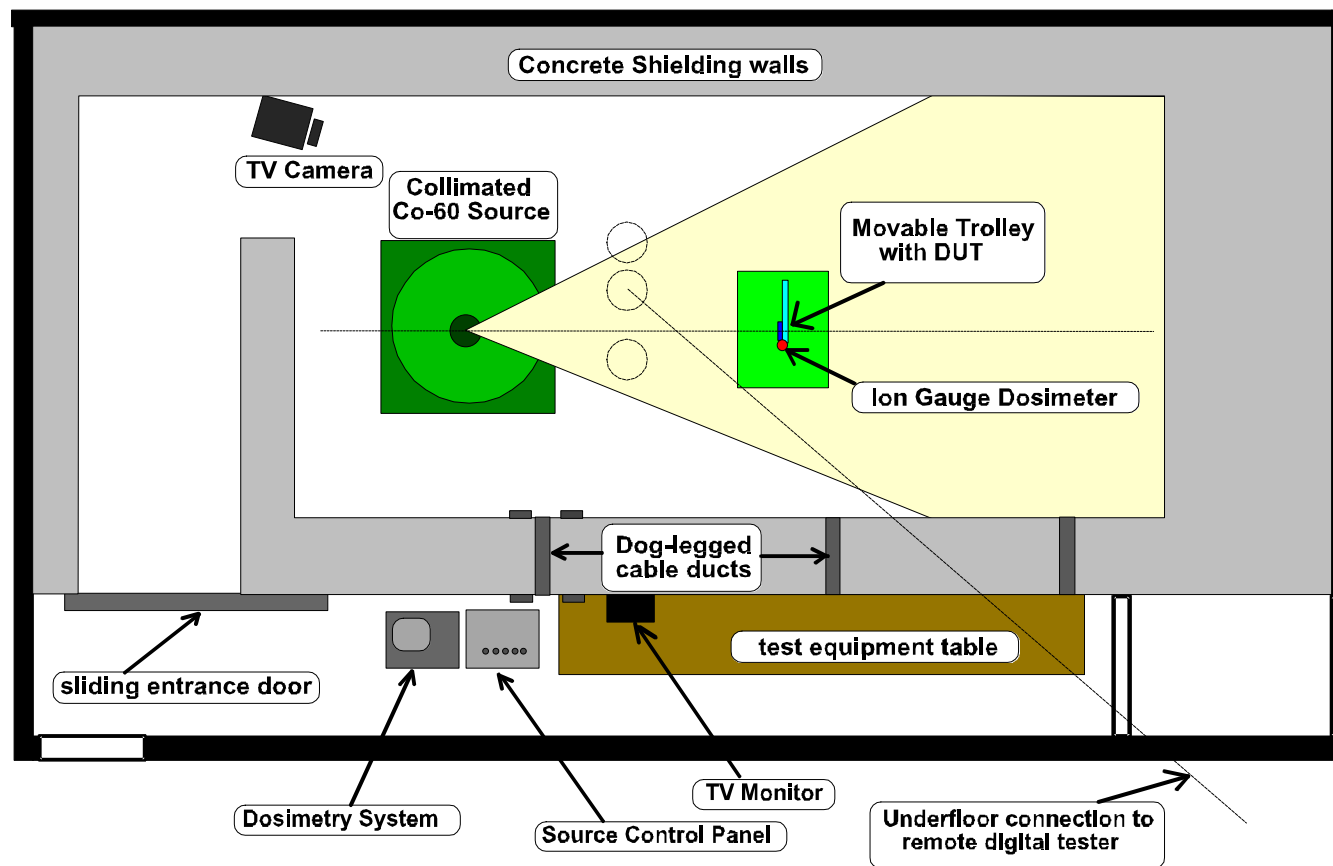
Present Activity around 1100 Ci which permits
dose rates between :

0.7 and 50 Rads/min (0.007 and 0.5 Gy/min)

At 50 Rads/min uniform irradiated area approx. 15 x 15 cm.

At 0.7 Rads/min uniform irradiated area 240 x 240 cm.





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Before :

- Manual setting and checking of dose rate.
- Calculate time of irradiation from total dose required and dose rate.
- Manually log radiation and DUT parameters.

Now :

- Dynamic setting of dose rate via computer both before and during radiation runs.
- Computer controlled Halt of radiation test at required total dose.
- Logging of radiation and DUT parameters at defined intervals to a pc text file.

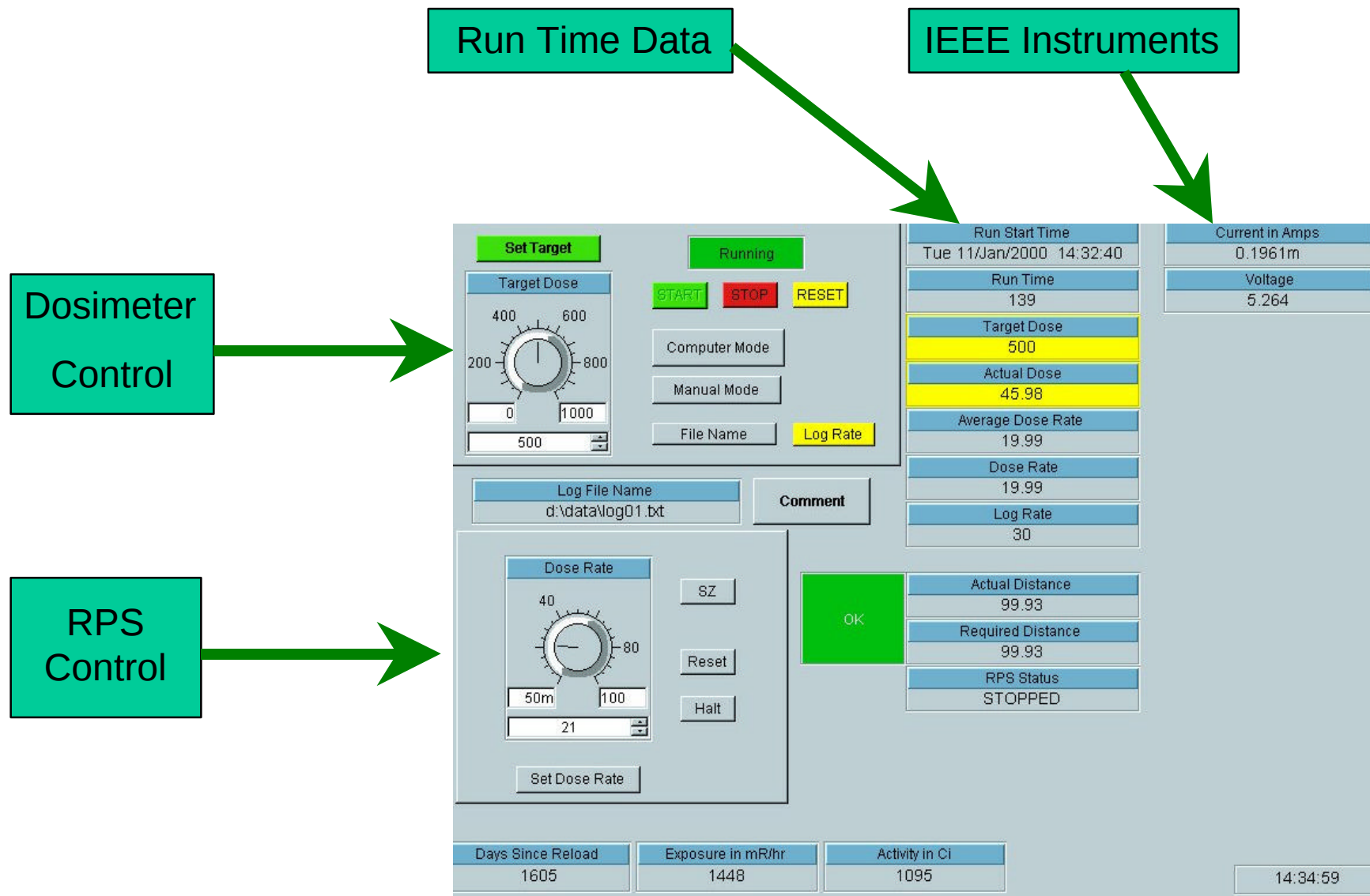


The Computer Controlled Dosimetry System and Remote Positioning System (RPS) is based on :

- - Farmer 2670 Dosemeter
- - RPS (Remote Positioning System)
- - HP-Vee Software

Using Hp-Vee permits remote internet monitoring of the run status.





RPS System

- 6.5m long rail
- Stepper motor controlled by a micro-controller with an RS-232 connection to the pc.
- System takes less than one minute to go from one end to the other (ie from minimum to maximum dose rate) with a positional accuracy of about 1mm



Dosimetry System



- Based on Farmer 2670 Dosimeter
- Uses standard 0.6cc air ionisation chamber
- Can be fully controlled via RS-232 connection
- Trip output interfaced to Co-60 Control system to enable lowering of source when desired dose reached



