

The gamma irradiator at VINAGAMMA is a multipurpose industrial scale type SVST-Co-60/B. It consists of Co-60 source, product transport system, control system, radiation measuring system and supported systems such as air compressed system, ventilation system and water treatment system. The facility was designed and fabricated by Institute of Isotopes Co. Ltd. (Hungary) and has been put into operation since March, 1999.

Main parameters of SVST-Co-60/B

Co-60 source	Double encapsulated in stainless steel, Φ 11 x 451, CoS 43HH equiv. C - 188
Source rack	03 rectangular racks with 04 modules for each
Maximum activity, MCi	2.0
Storage type	Wet pool
Conveyor	Tote box system, maximum speed: 25 boxes/h
Useful dimensions of a tote box, cm	48 x 48 x 90
Maximum load of a tote box, kg	110
Radiation parameters at the product density of 0.2g/cm^3 : - Utilization efficiency - Dose homogeneity (overdose ratio $D_{\text{max}}/D_{\text{min}}$)	min. 27% 1.3 ± 0.1
Maximum processing rate at 300 kCi: - For medical products at $25\text{ kGy}_{\text{min}}$, m^3/h - For foods at $5\text{ kGy}_{\text{max}}$, ton/h	1.0 1.3