

INDUSTRIAL USE OF ELECTRON ACCELERATORS

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Industrial application of radiation technique has been progressed rapidly during past 10 years. Many radiation processes have been developed, extended and substantialized, in USA, Japan, and Europe.

Main radiations for that purpose are both γ -rays from ^{60}Co or ^{137}Cs and high energy electrons generated by electron accelerators.

Capacity of those radiation sources has been increasing remarkably. The trends in various countries such as the United States, Japan and USSR are shown in Fig. 1, 2 and 3.

----- Fig. 1, 2 and 3 -----

The fast growth in the capacities and in the numbers is demonstrating that the industrial activities are expanding very rapidly in this field.

The reliability of facilities of those sources have been extensively improved. Therefore, the cost of irradiation has been reduced in large extents.

Those conditions make the industrial application of radiation technique much easier.

Under such circumstances, the interests to the use of radiation in various fields are being widely spreaded.

Important examples are explained.

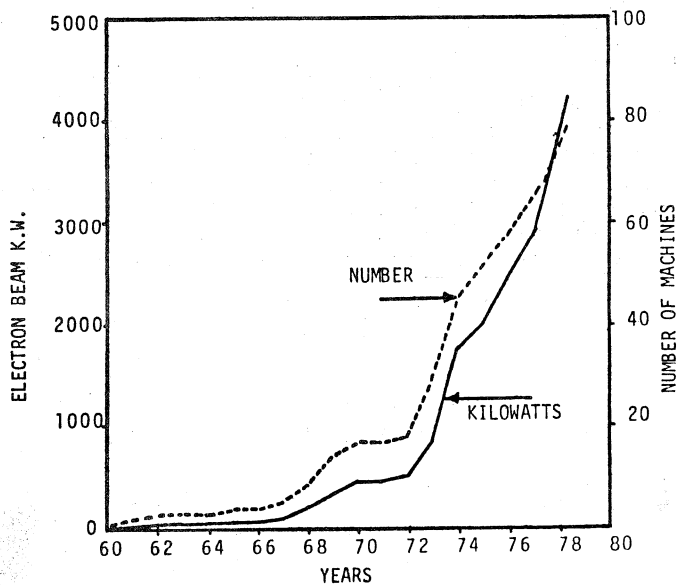


Fig. 1 Cumulative electron capacity delivered by R.D.I.

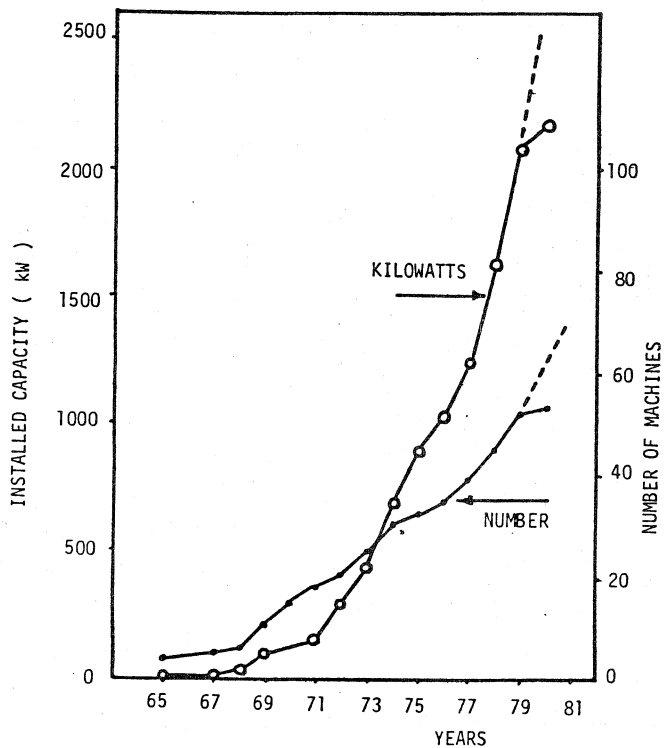


Fig. 2 Installed capacity and number of electron accelerators in Japan.

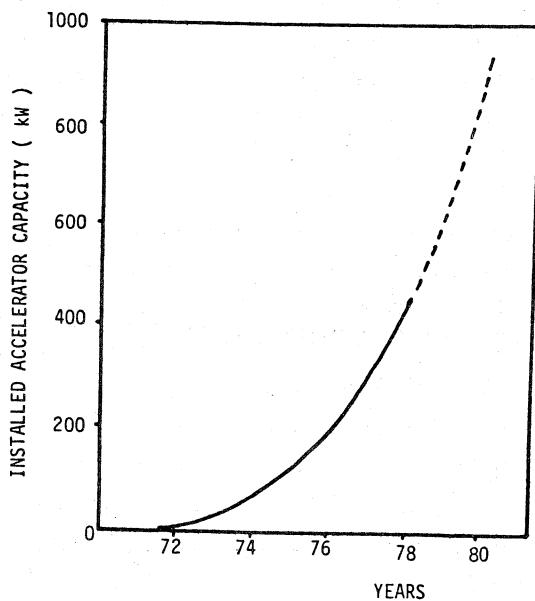


Fig. 3 Commercial accelerators produced by Efremov Institute of Electrophysical Equipment (USSR).