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Addressing Challenges Posed by Electron Beam Irradiation through Innovation

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Over the past decade, the use of electron accelerators for sterilization and disinfection has made considerable progress and the offer has greatly diversified. The challenges that gamma technology is facing has also raised considerable interest in E-Beam and X-Ray technology as a possible alternative to the use of radioisotopes.

However, commercial operation of electron accelerators faces several challenges. The penetration depth of electron beams, even at 10MeV, does not permit to process all of commercial packages that are encountered. Companies operating a single e-beam machine are often confronted to downtime that results in delays in production due to the time necessary to repair.

The presentation will introduce an innovative solution that allows overcoming these challenges and was designed and proven through a long and broad experience of using and manufacturing electron accelerators. This solution is based on an optimal mix of electron accelerators types (Linac and HFHV), different energies (10MeV and 5MeV) and different types of ionizing radiation (e-beam and X-ray).

In conclusion, a recent example of successful use of this combination will be shown.

Country/Organization invited to participate

China

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