For PET scans

Cyclotron System HM-18HC

R&D | FS/Demo | **Product/ Service**

Medical & Quantum Solutions SBU

- PET scans, which are highly effective in imaging diagnosis of tumors, cerebral infarctions, cardiac diseases, and more, require labeled RIs like 18F-FDG, which accumulate in cancerous lesions and help pinpoint their location.
- Our cyclotrons for PET assure a safe and reliable supply of the radioactive isotopes necessary for producing these labeled RIs.
- Our new cyclotron systems have achieved **approximately a 12% reduction of electricity consumption compared to conventional systems***, by combining the following two newly developed products.

  (i) Cyclotron with an external ion source: HM-18HC
  (High beam current output is achievable)
  (ii) 18F high yield target with enhanced cooling
  (High beam current irradiation is achievable)

  * Comparison was made by producing an equivalent amount of radioactive isotopes

Carbon Neutral Contribution points

✓ **Reducing electricity consumption by approximately 12%**

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