

For PET scans Cyclotron System HM-18HC

R&D

FS/demonstration

Product/service

Industrial Equipment Div. 

- 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 point

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