

BestTM Cyclotron Systems

A TEAMBEST GLOBAL COMPANY

PRESENTED BY: **DAVID DU AND
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TeamBest Global Companies

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TeamBest Theratronics ASIA

Best Cyclotron Systems

Best Particle Therapy

Best Theratronics

Best medical canada

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HUESTISMEDICAL
making it affordable™

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Best Dosimetry Services

CNMC *Best* NDT
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Best™ B100 Self-Shielded Cyclotron

- Push button graphic interface
- Single or batch dose production
- Capable of producing: ^{18}F FDG, Na^{18}F , ^{18}F -MISO, ^{18}F FLT, ^{18}F -Choline, ^{18}F -DOPA, and ^{18}F -PSMA
- Final dose delivery to syringe or vial
- Integrated self-shielded cyclotron and chemistry module
- Complete production lab in a 5 x 5 meter area



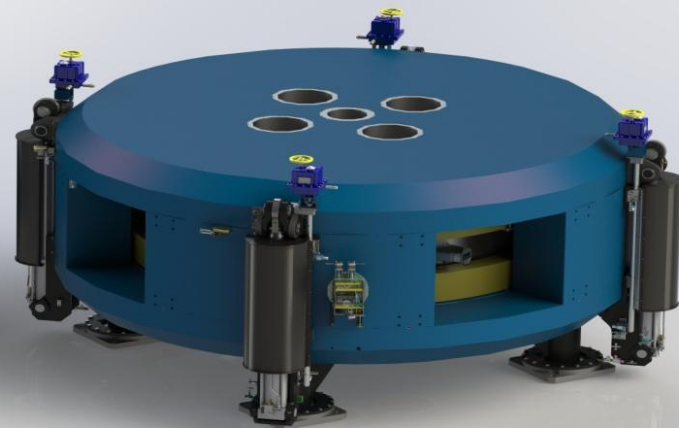
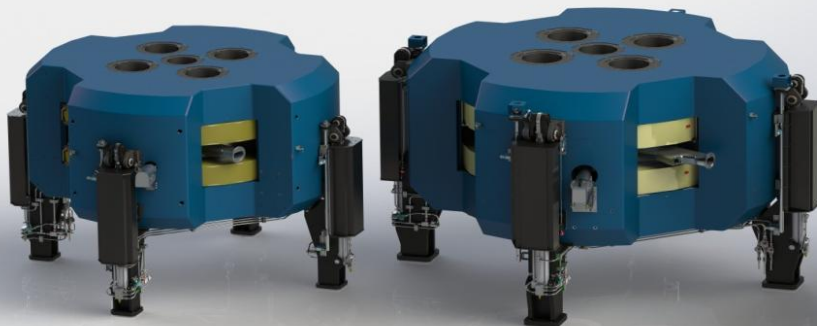
Best™ BG-95 Sub-Compact Self-Shielded Cyclotron

- Low energy compact system, can be placed next to PET/CT
- Easy to operate push-button graphic interface
- Automated quality control testing
- Ideal for Nuclear Cardiology/Oncology and other applications
- Capable of producing: ^{18}F FDG, Na^{18}F , ^{18}F -MISO, ^{18}F FLT, ^{18}F -Choline, ^{18}F -DOPA, ^{18}F -PSMA, ^{13}N and ^{68}Ga

PET and TC^{99m}



SPECT Radioisotopes



Radiotherapeutics and Generators

B15p PET

15 MeV

400 μ A +

Targets Radiochemistry

B20u/25p

20/15-25 MeV

400 μ A +

Targets Radiochemistry

B30u/35p

30/15-35 MeV

400/1000 μ A

Targets Radiochemistry

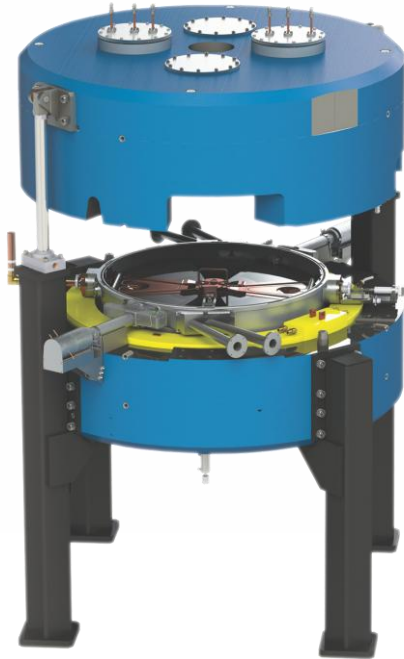
B70p

35-70 MeV

1000 μ A

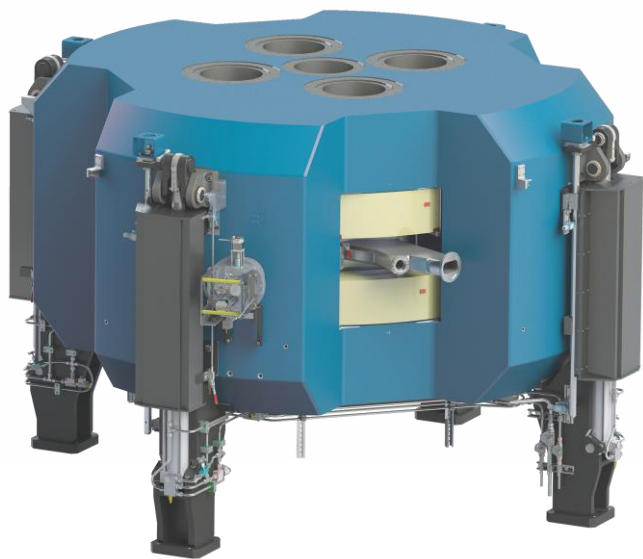
Targets Radiochemistry

Each cyclotron allows production access to special radioisotopes



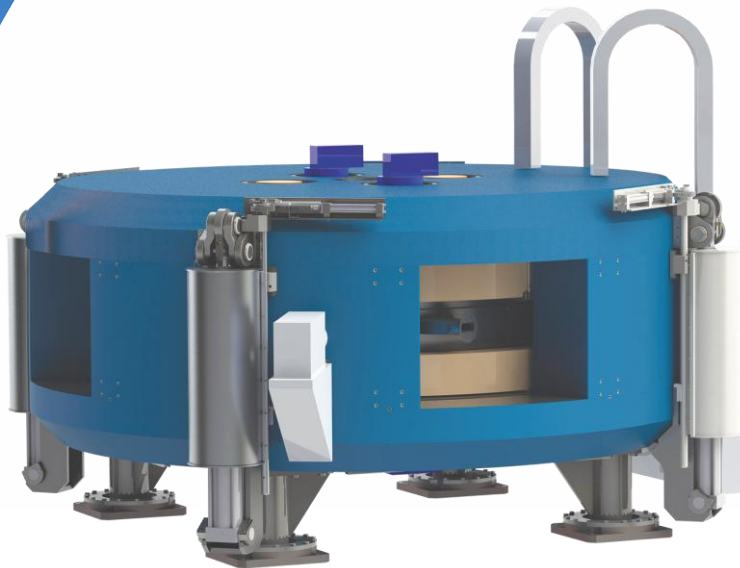
Best™ 6–15 MeV Compact High Current/Variable Energy Proton Cyclotron

- Easy to 1–1000 μA extracted beam current
- Capable of producing the following isotopes:
 ^{18}F , ^{68}Ga , ^{89}Zr , $^{99\text{m}}\text{Tc}$, ^{11}C , ^{13}N , ^{15}O , ^{64}Cu ,
 ^{67}Ga , ^{111}In , ^{124}I , ^{225}Ac and ^{103}Pd
- Up to 5×10^{13} neutrons per second from external target
- 21 stripping foils at each stripping port for 2-minute rapid change



Best™ B25u Upgradeable to B35adp Cyclotron for Medical Radioisotopes Production and Other Applications

- **Proton Particle Beam:** 1000 μ A Beam
Current up to 35 MeV Energy
- **Deuteron Particle Beam:** 500 μ A Beam
Current up to 15 MeV Energy
- **Alpha Particle Beam:** 200 μ A Beam
Current up to 35 MeV Energy



Best™ B-70 MeV Cyclotron Ideal for Sr-82/Rb-82 Supply and Research

- 35-70 MeV variable energy H- cyclotron
- 700 μ A extracted beam current (upgradable to 1000 μ A)
- 2 simultaneous extracted beams
- Multiple independent beam lines and target positions

Installation of 70 MeV Cyclotron

May 2015 – Legnaro, Padova, Italy



Installation of 70 MeV Cyclotron

May 2015 – Legnaro, Padova, Italy



70 MeV Cyclotron at INFN



B100 Cyclotron	7.5 MeV	• Capable of producing: ^{18}F FDG and Na^{18}F • Single or batch dose production • Integrated self-shielded cyclotron, chemistry module and FDG QC module • Complete production lab in a 5 x 5 meter area
BG-95 Cyclotron	1-9.5 MeV	• Low energy, self-shielded compact system capable of producing: ^{18}F FDG, Na^{18}F, ^{18}F-MISO, ^{18}F-FLT, ^{18}F-Choline, ^{18}F-DOPA, ^{18}F-PSMA, ^{13}N and ^{68}Ga
Best Cyclotrons	1–3 MeV	• Deuterons for materials analysis*
	70-200 MeV	• For Proton Therapy*
	3–90 MeV	• High current proton beams for neutron production and delivery*
B6-15 Cyclotron	1–15 MeV	• Proton only, capable of high current up to 1000 Micro Amps, for medical radioisotopes
B25 Cyclotron	20, 15–25 MeV	• Proton only, capable of high current up to 1000 Micro Amps, for medical radioisotopes
B25u–35adp Cyclotron	25–35 MeV	• Proton or alpha/deuteron/proton, capable of high current up to 1000 Micro Amps, for medical radioisotopes
B35 Cyclotron	15–35 MeV	• Proton only system for medical radioisotopes production
B70/70adp Cyclotron	35–70 MeV	• Proton only or alpha/deuteron/proton systems, capable of high current up to 1000 Micro Amps, for medical radioisotopes

*Some products are under development and not available for sale currently.

Thank You

