



## Best 15p Cyclotron

### Type Of Cyclotron

- Negative hydrogen ion (H<sup>-</sup>)
- External ion source, multi-cusp 5 mA
- Unshielded, local-shielded or self-shielded
- Simultaneous dual beam extraction (multiple foil extraction cartridge)
- Minimum 4 external targets

### Beam Current

- 400  $\mu$ A extracted beam current
- Higher currents available upon request

### Beam Energy

- 15 MeV fixed energy extraction

### Magnet

Magnet coil ..... ~107 kAT  
Magnet weight ..... ~14 tons  
Geometry ..... 4 sectors

### RF System

Resonator ..... 2 Dees  
Dee voltage ..... 40 kV  
RF frequency ..... 75 MHz, 4<sup>th</sup> harmonic  
Power required ..... 8 kW (nominal)  
Energy gain per turn .... 160 keV

### Vacuum System

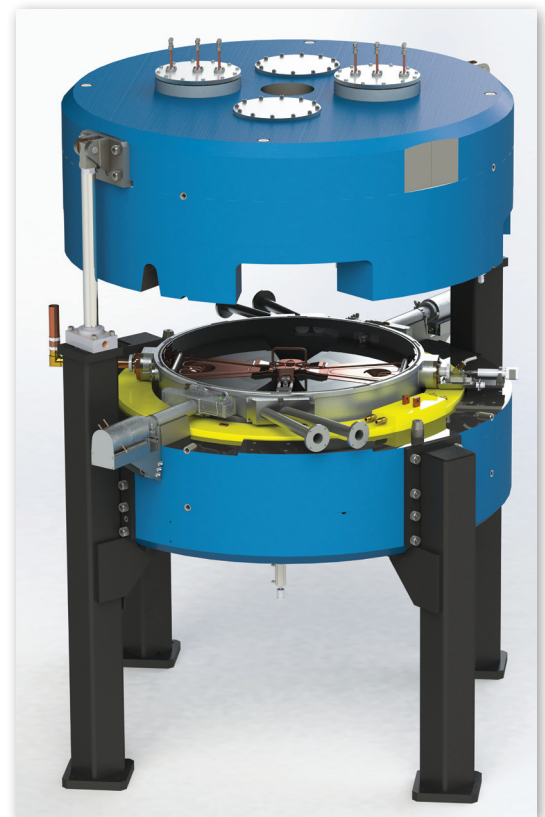
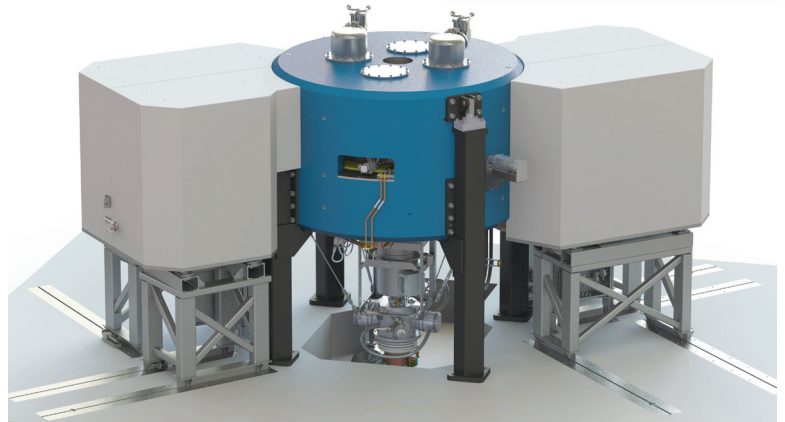
Base pressure.....  $<2 \times 10^{-7}$  Torr  
Operating pressure .....  $<1 \times 10^{-6}$  Torr  
Pumps ..... Cryogenic pump system

### Automated Control System

Computer System ..... Standard PC, Windows-based OS  
Controllers ..... Siemens Industrial PLC Modules  
User Console ..... Color monitor  
Interface ..... Graphical user interface  
Networking ..... Standard thin-wire Ethernet hardware

### External Production Targets

The cyclotron is supplied with two <sup>18</sup>F production targets complete with loading and routing to the production hot cell. Targets for <sup>18</sup>F, <sup>11</sup>C, <sup>13</sup>N, <sup>15</sup>O, <sup>64</sup>Cu, <sup>124</sup>I, <sup>103</sup>Pd and <sup>99m</sup>Tc are available.



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