



## Best 25p Cyclotron

### Type Of Cyclotron

- Negative hydrogen ion (H<sup>-</sup>)
- External ion source, multi-cusp 5 mA
- Simultaneous dual beam extraction (multiple foil extraction cartridge)
- Standard: 2 target stations on each side of the cyclotron (total of 4 target stations)
- Option: 2 beam lines (with additional beam lines routes downstream of the extracted beam)

### Beam Current

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

### Beam Energy

- 15 to 25 MeV variable energy extraction
- 20 MeV fixed energy extraction (optional)

### Magnet

Magnet coil ..... ~56 kAT  
Magnet weight ..... ~30 tons  
Geometry ..... 4 sectors

### RF System

Resonator ..... 2 Dees  
Dee voltage ..... 60 kV  
RF frequency ..... 74 MHz, 4<sup>th</sup> harmonic  
Power required ..... 25 kW (nominal)  
Energy gain per turn .... 240 keV

### Vacuum System

Base pressure..... <2 x 10<sup>-7</sup> Torr  
Operating pressure ..... <1 x 10<sup>-6</sup> Torr  
Pumps ..... Cryogenic pump system

### Automated Control System

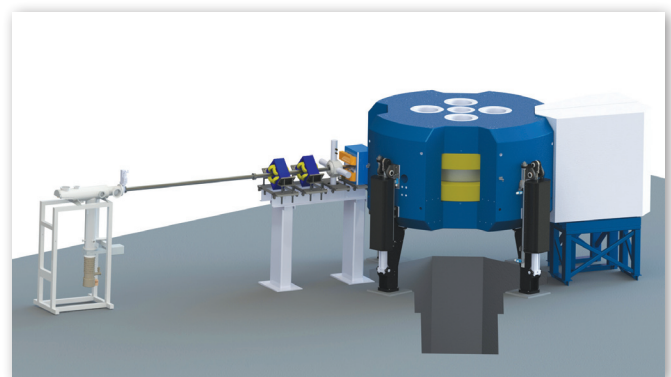
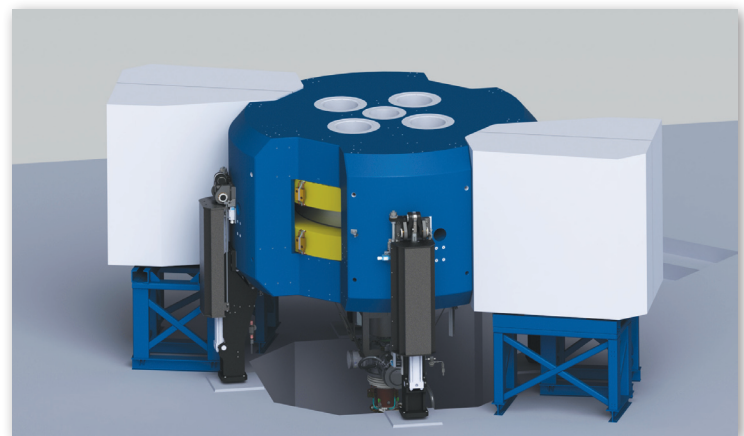
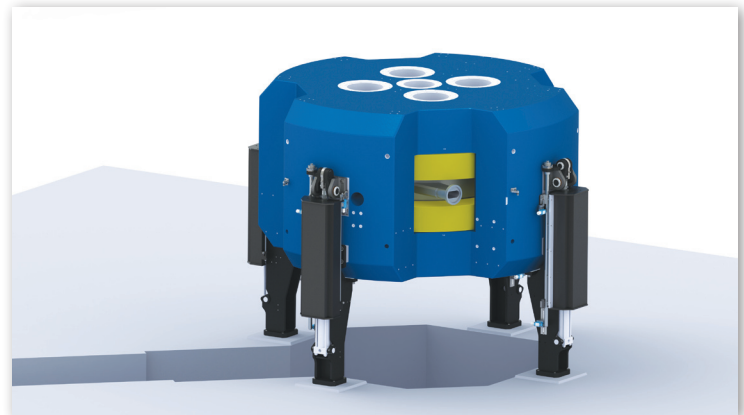
Computer System ..... Standard PC, Windows-based OS  
Controllers ..... Siemens Industrial PLC Modules  
User Console ..... Color monitor  
Interface ..... Graphical user interface  
Networking ..... Standard thin-wire Ethernet hardware

### 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.

High current solid target stations (10 kW) and high current gas target stations (4 kW) are available upon request.



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