



ADVANCED
CYCLOTRON SYSTEMS, INC.

ADVANCED TR-30 CYCLOTRON SYSTEMS

Built for power.
Built for high production.

750 μ A

1000 μ A

1200 μ A

The TR-30 cyclotron has been the most powerful 30 MeV cyclotron in the marketplace since 1988.

ABOUT THE TR-30

The only commercial cyclotron in the world to routinely exceed 1 mA!

Up to 1200 μ A beam current guaranteed

Up to 1600 μ A beam current achieved

Since 1996 all 30 MeV cyclotrons installed in North America have been ACSI's TR-30

Over 90% of ^{201}Tl , ^{123}I , ^{67}Ga and ^{111}In supplied in North America is produced with TR-30 cyclotrons

Unprecedented Reliability: 1200 μ A with 98% uptime in continuous 24/7 commercial production

ADVANCED TECHNOLOGY

Variable Energy Extraction: ranges from 15 MeV to 33 MeV to produce and explore a broad spectrum of radioisotopes

Dual Particle Acceleration: can accelerate both protons and deuterons

Flexibility: concurrent production of two different radioisotopes

External Ion Source: this feature significantly reduces maintenance time

Cryogenic Vacuum System: eliminates oil contamination while requiring low maintenance



1 877 270 1493

www.advancedcyclotron.com

The TR-30 at a glance:

	TR-30	TR-30/15 (deuteron option)
Accelerated Ions	H ⁻	H ⁻ D ⁻
Extracted Ions	H ⁺	H ⁺ D ⁺
Extraction Method	Carbon Foils	Carbon Foils
Extracted Beam Current	Protons: 750 μA, 1000 μA or 1200 μA	Deuterons: 50 μA
Acceleration Plane	Horizontal	Horizontal
Extraction Ports	2	2
Dual Beam Operations	Dual irradiation at any split ratio	Dual irradiation at any split ratio
Standard Extraction Probes	Carousel type, multiple foils per carousel, which allows automated switching between extraction foils	Carousel type, multiple foils per carousel, which allows automated switching between extraction foils

RADIOISOTOPE PRODUCTION SYSTEMS

Advanced beam extraction system, customizable beamlines, innovative targetry and reliable target transport systems have been developed to take full advantage of the unrivalled TR-30 beam output.

BEAMLINES

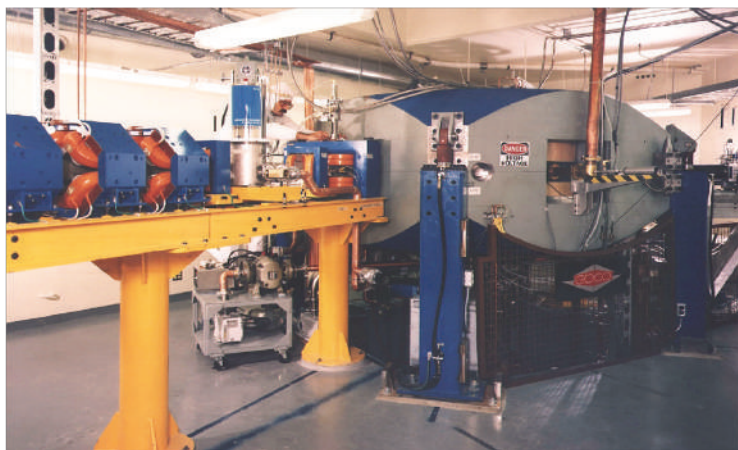
- Flexible design
- Adjustable focusing
- High Current rating (>1 mA)
- Minimal maintenance
- Beam diagnostics, sizing and rastering

HIGH CURRENT GAS TARGET STATION

- 3 months maintenance intervals with 24/7 production schedule
- ¹²⁴Xe recovery system
- Automated window change, low dose service
- Integrated with ¹²³I delivery and processing systems

HIGH CURRENT SOLID TARGET STATION

- Rated for 600 μA
- 3 months maintenance intervals with 24/7 production schedule
- Low dose service
- Fully automated and integrated with pneumatic target transport system
- Designed for commercial production of ²⁰¹Tl, ⁶⁷Ga, ¹¹¹In, ⁶⁸Ge, ^{99m}Tc, ⁹⁹Mo and other isotopes



Nordion TR-30 has been operating 24/7 for over 25 years.



MADE IN CANADA
FABRIQUÉ AU CANADA