

ENTRY NO: CU-24
Machine Name: General Electric PETtrace
Date: 5/23/01 11:02:55 AM
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HISTORY

Designed By: GE
Construction Dates: December 1999
First Beam Date: January 2000

CHARACTERISTIC BEAMS

ions	/ energy(MeV/N)	/current(pps)	/power(w)
p+	18	60 A	
d	9	50	

transmission efficiency(source to extract beam)

typical: % - **best:** %

transverse emittance

emittance definition:

vertical: π mm mrad

horizontal: π mm mrad

longitudinal: (Δ) E/E)%xdeg RF

USES

basic research: %	therapy: %
development: %	isotope production: 100%
other: %	maintenance: %
beam tuning: %	Total Time: 1000h/year

TECHNICAL DATA

a)magnet: type:

Kb: MeV/A **Kf:** MeV/A

average field (min/max): T

number of magnet sectors:

hill angular width: hill angular width

spiral (max): deg

pole parameters

diameter: m

injection radius: m

extraction radius: m

hill gap: m **valley gap:** m

trim coils

-number: x2

-current(max): A-turns

harmonic coils

-number: xNsectorsx2

-current(max): A-turns

main coils

number: x2

total ampere-turns: A-turns

current: A

stored energy: MJ

weight - iron: t **coils:** t

power

main coils (total): kW

trim coils (total max): kW

refrigerator (cryogenic): kW

b)RF

acceleration

frequency range: MHz

harmonic modes:

number of dees:

number of cavities:

dee angular width: degrees

voltage

at injection: kV(peak to ground, max)

at extraction: kV(peak to ground, max)

peak: kV(peak to ground, max)

line power(max): kW

stability

phase: deg

voltage: %

injection

c)ion source:

external injection:

components:

source bias voltage: kV

injection energy: MeV/N

buncher:

injection efficiency: %

d)injector:

e)extraction

efficiency

typical: %

best: %

f)vacuum

pumps:

achieved vacuum: Pa

REFERENCES

EXPERIMENTAL FACILITIES

COMMENTS