ENTRY NO: C-33
Machine Name: IC-100
Date: 9/3/01 6:41:02 AM
Institution: FLNR JINR
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HISTORY
Designed By: FLNR JINR
Construction Dates: under reconstruction
First Beam Date:
CHARACTERISTIC BEAMS

ions	/ **energy**(MeV/N)/**curre**nt(pps)/**powe**r(w)		
84 Kr 15+	1.24	2*10 12	525
84 Kr 10+	0.5	3*10 12	210

transmision efficiency(source to extract beam)
typical: 25% - **best:** %
tranverse emmitance
emmitance definition:
vertical: 25π mm mrad
horizontal: 25π mm mrad
longitudinal: 2%(Δ) E/E)%xdeg RF

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

TECHNICAL DATA
a)magnet: **type:** compact
Kb: MeV/A **Kf:** MeV/A
average field (min/max): 1.92 T
number of magnet sectors: 4
hill angular width: 56hill angular width
spiral (max): 0 deg
pole parameters
diameter: 1.05 m
injection radius: 0.019 m
extraction radius: 0.47 m
hill gap: 0.02m **valley gap:** 0.11m
trim coils
-number: x2
-current(max): A-turns
harmonic coils
-number: xNsectorsx2
-current(max): A-turns
main coils
number: 1x2
total ampere-turns: 145000 A-turns
current: 575 A
stored energy: MJ
weight - iron: 43t coils: t
power
main coils (total): 94 kW
trim coils (total max): kW
refrigerator (cryogenic): kW
b)RF
acceleration
frequency range: 21MHz
harmonic modes: 4;6
number of dees: 2
number of cavities: 2
dee angular width: 34degrees
voltage
at injection: 12 - 15kV(peak to ground, max)
at extraction: 35 - 50kV(peak to ground, max)
peak: 50kV(peak to ground, max)
line power(max): 30kW
stability
phase: deg
voltage: %
injection
c)ion source: ECR DECRIS
external injection: axial
components: Solenoids
source bias voltage: kV
injection energy: MeV/N
buncher: sine
injection efficiency: 25%
d)injector:
e)extraction
Deflector Magnetic channels
efficiency
typical: 60%
best: %
f)vacuum
pumps: Turbopumps
achieved vacuum: 6.7*10-5Pa
REFERENCES

EXPERIMENTAL FACILITIES

COMMENTS