

ENTRY No. 67

NAME OF MACHINE AGOR DATE June 1989
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IN CHARGE S. Galès REPORTED BY H.W. Schreuder

HISTORY AND STATUS

DESIGN, date 1986 Model tests
ENG DESIGN, date 1989
CONSTRUCTION, date 1988-1992
FIRST BEAM, date (or goal) 1992
MAJOR ALTERATIONS

COST, ACCELERATOR Mfl 33
COST, FACILITY, total
FUNDED BY

ACCELERATOR STAFF, OPERATION AND DEVELOPMENT

SCIENTISTS ENGINEERS
TECHNICIANS CRAFTS
GRAD STUDENTS involved during year
OPERATED BY Research staff or Operators
OPERATION hr/wk, On target hr/wk
TIME DISTR. in house % Outside %
BUDGET, op & dev
FUNDED BY

RESEARCH STAFF, not included above

USERS, in house outside
GRAD STUDENTS involved during year
RESEARCH BUDGET, in house
FUNDED BY

MAGNET

POLE FACE, diameter (compact) 188 cm, R extraction 91 cm
R injection 1,3-1,7 cm
GAP, min 7 cm, Field kG
max cm, Field kG at
AVERAGE FIELD at R ext 17-41 kG Ampere turns
B max/
NUMBER OF SECTORS compact 3 separated 3 Spiral, max deg
SECTOR ANGLE (SSC) separated deg
TRIMMING COILS 15

CONDUCTOR, material and type NbTi
STORED ENERGY (cryogenic) 57 MJ
POWER: main coils max, kW; current stability
trimming coils 30 max, kW; current stability
WEIGHT: Fe 320 tons; coils
COOLING system
ION ENERGY (bending limit) E/A = 600 q^2/a^2 MeV/amu
(focusing limit) E/A = 200 q^2/a^2 MeV/amu

ACCELERATION SYSTEM

DEES, number 3; mode in valleys
BEAM APERTURE 1.8 cm; DC Bias kV
TUNED by, coarse short fine short
RF 24 to 63 MHz, stable +/-
Orb F 6 to 63 MHz
HARMONICS, RF/Orb F, used 2,3,4
DEE - Gnd, max 110 kV, min gap
STABILITY, (pk-pk noise)/(pk RF volt) 10^-4
ENERGY GAIN, max 300 kV/turn
RF PHASE, stable to +/- 0,2 deg
RF POWER input, max 3*70 kW
FREQUENCY MODULATION, rate /s
modulator, type
beam pulse, width

VACUUM SYSTEM

OPERATING PRESSURE < 10^-7 Torr or mbar
PUMPS, No, Type, Size 3 cryopumps
2 turbopumps

ION SOURCES multicusp, ecr, polarized (all external)

INJECTION SYSTEM axial

EXTRACTION SYSTEM

1. electrostatic, 2. electromagnetic

FACILITIES FOR RESEARCH

SHIELDED AREA, fixed m^2; movable m^2
TARGET STATIONS in rooms
STATIONS served at same time, max
MAG SPECTROGRAPH, type
COMPUTER model
OTHER FACILITIES

CHARACTERISTIC BEAMS

Table with columns: PARTICLE, ENERGY (MeV) Goal, Achieved, CURRENT (pA) Internal, External. Rows include p, alpha, q/A=0,3, q/A=0,14.

SECONDARY

BEAM PROPERTIES

MEASURED CONDITIONS
PULSE WIDTH RF deg pA of MeV ions
PHASE EXC, max RF deg pA of MeV ions
EXTRACT eff % pA of MeV ions
RESOL ΔE/E % pA of MeV ions
EMITTANCE
(π mm. mrad) axial rad pA of MeV ions

OPERATING PROGRAMS, time distribution

BASIC NUCLEAR PHYSICS SOLID STATES PHYSICS
BIOMEDICAL APPLICAT. ISOTOPE PRODUCTIONS

REFERENCES/NOTES

PLAN VIEW OF FACILITY, NOTEWORTHY FEATURES, COMMENTS