



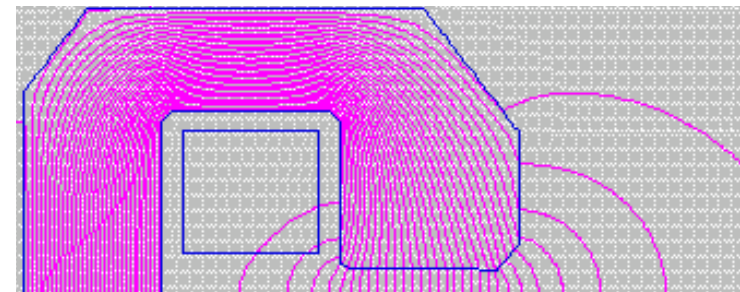
Linac-Ring Magnet Parameters

60.5 GeV LHeC Recirculator FODO Version

	Dipoles				QF			QD		
	Number	Radius	Field	Mag Length	Number	Gradient	Mag Length	Number	Gradient	Mag Length
LINAC 1										
LINAC 2										
Arc 1	600	764	0.046	4.000	600	2.5	0.100	600	2.5	0.100
Arc 2	600	764	0.089	4.000	600	4.87	0.100	600	4.87	0.100
Arc 3	600	764	0.133	4.000	600	7.25	0.100	600	7.25	0.100
Arc 4	600	764	0.176	4.000	600	9.62	0.100	600	9.62	0.100
Arc 5	600	764	0.220	4.000	600	12.00	0.100	600	12.00	0.100
Arc 6	600	764	0.264	4.000	600	14.38	0.100	600	14.38	0.100

Units: meter (m), Tesla (T), T/m

Dipoles	
Number of magnets	3600
Vertical aperture [mm]	25
Pole width [mm]	80
Number of coils	2
Number of turns/coil	1
Current [A]	2750
Conductor material	copper
Magnet Inductance [mH]	0.1
Magnet Resistance [$m\Omega$]	0.1
Power per magnet [W]	800
Cooling	Air or water



23 cm

Transfer line to be added

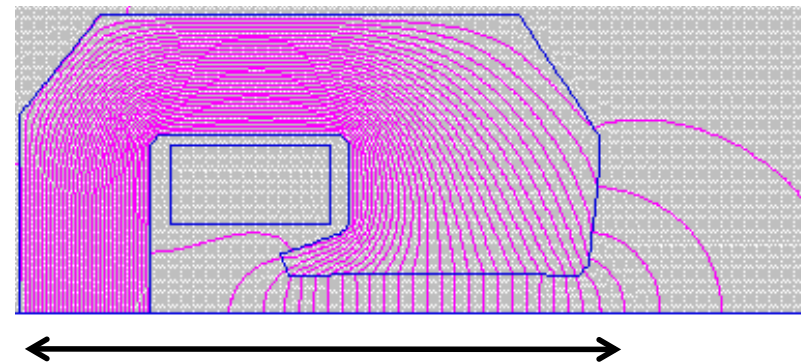
R-R Magnet Parameters

10 GeV Linac + TL + 70 GeV Ring

	Dipoles				QF			QD		
	Number	Radius	Field	Mag Length	Number	Gradient	Mag Length	Number	Gradient	Mag Length
LINAC	0									
RING	3080	straight	0.874	5.450						

Units: meter (m), Tesla (T), T/m

Dipoles	
Beam Energy [GeV]	70
Magnetic Length [m]	5.45
Magnetic field [Gauss]	874
Number of magnets	3080
Vertical aperture [mm]	40
Pole width [mm]	150
Number of coils	2
Number of turns/coil	1
Current [A]	1500
Conductor material	aluminum
Magnet Inductance [mH]	0.15
Magnet Resistance [mΩ]	0.20
Power per magnet [W]	450
Cooling	air



30 cm

Transfer line to be added