



TESLA 500 GeV

acc. gradient [MV/m]	23.4
site length [km]	32.8
av. power per beam [MW]	11.3
AC power (main linacs RF & Cryo) [MW]	97
Total site power [MW]	140
beam pulse length t_{pulse} [μs]	950
# bunches n_b /pulse	2820
bunch spacing Δt_b [ns]	337
rep. rate f_{rep} [Hz]	5
# of particles N_e /bunch [10^{10}]	2
ϵ_x / ϵ_y (@ IP) [10^{-6}m]	10 / 0.03
beta at IP $\beta_{x/y}^*$ [mm]	15 / 0.4
spot size at IP σ_x^* / σ_y^* [nm]	553 / 5
bunch length at IP σ_z [mm]	0.3
beamstrahlung δ_B [%]	3.2
luminosity L_{e+e-} [$10^{34} \text{cm}^{-2}\text{s}^{-1}$]	3.4
