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## TESLA 500 GeV

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

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