

Table 1: Baseline parameters for Higgs factory muon collider. Higgs/year assumes a cross section of 5×10^4 fb, Higgs width of 2.7 MeV, 1 year = 10^7 s. (From “Status of Muon Collider Research and Development and Future Plans,” Muon Collider Collaboration, Charles M. Ankenbrandt *et al.*, *Phys. Rev. ST Accel. Beams* **2**, 081001 (1999).)

COM energy (TeV)	0.1		
p energy (GeV)	16		
p 's/bunch	5×10^{13}		
Bunches/fill	2		
Rep. rate (Hz)	15		
p power (MW)	4		
μ /bunch	4×10^{12}		
μ power (MW)	1		
Wall power (MW)	81		
Collider circum. (m)	350		
Ave bending field (T)	3		
rms $\delta p/p$ (%)	0.12	0.01	0.003
6D $\epsilon_{6,N}$ (πm) ³	1.7×10^{-10}	1.7×10^{-10}	1.7×10^{-10}
rms ϵ_n (π mm mrad)	85	195	290
β^* (cm)	4.1	9.4	14.1
σ_z (cm)	4.1	9.4	14.1
σ_r spot (μm)	86	196	294
σ_θ IP (mrad)	2.1	2.1	2.1
Tune shift	0.051	0.022	0.015
n_{turns} (effective)	450	450	450
Luminosity ($\text{cm}^{-2} \text{s}^{-1}$)	1.2×10^{32}	2.2×10^{31}	10^{31}
Higgs/yr	1.9×10^3	4×10^3	3.9×10^3