The B_{mag} coeeficient represents the mismatch between two optics:

$$B_{\text{mag}} \equiv \frac{1}{2}\left[\frac{\beta_2}{\beta_1} + \frac{\beta_1}{\beta_2} + \beta_1\beta_2\left(\frac{\alpha_2}{\beta_2} - \frac{\alpha_1}{\beta_1}\right)^2\right].$$

Note that $B_{\text{mag}} \geq 1$. B_{mag} is conserved through a beam line unless an additional machine error appears. It is a ratio of the av
incariant to the emittance.