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

$$
\begin{equation*}
B_{\mathrm{mag}} \equiv \frac{1}{2}\left[\frac{\beta_{2}}{\beta_{1}}+\frac{\beta_{1}}{\beta_{2}}+\beta_{1} \beta_{2}\left(\frac{\alpha_{2}}{\beta_{2}}-\frac{\alpha_{1}}{\beta_{1}}\right)^{2}\right] \tag{87}
\end{equation*}
$$

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

