

**MAIN INJECTOR SEXTUPOLE STRENGTH – SUPPLEMENT**

S.A. Bogacz

Accelerator Physics Department,  
Fermi National Accelerator Laboratory  
P.O. Box 500, Batavia, IL 60510

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Previous study of the sextupole strengths required to maintain specific chromaticity program (reported in MI-0056) was carried out assuming eddy current sextupole contribution corresponding to relatively low vacuum pipe resistivity of  $47 \times 10^{-8}$  Ohm m. Replacing it with a higher resistivity stainless steel (resistivity of  $74 \times 10^{-8}$  Ohm m) would significantly reduce the eddy current contribution to the sextupole field generated by the dipole magnets. Here we repeat the previous analysis described in detail in MI-0056 in case of the above situation. The difference between MI-0056 and the new analysis is illustrated in Figures 1 and 2. One can see that changes in the sextupole strength programs are very minute (compare Figure 1 with Figure 5 of MI-0056 and Figure 2 with Figure 6 of MI-0056), since the eddy current sextupole is not a dominant contribution.

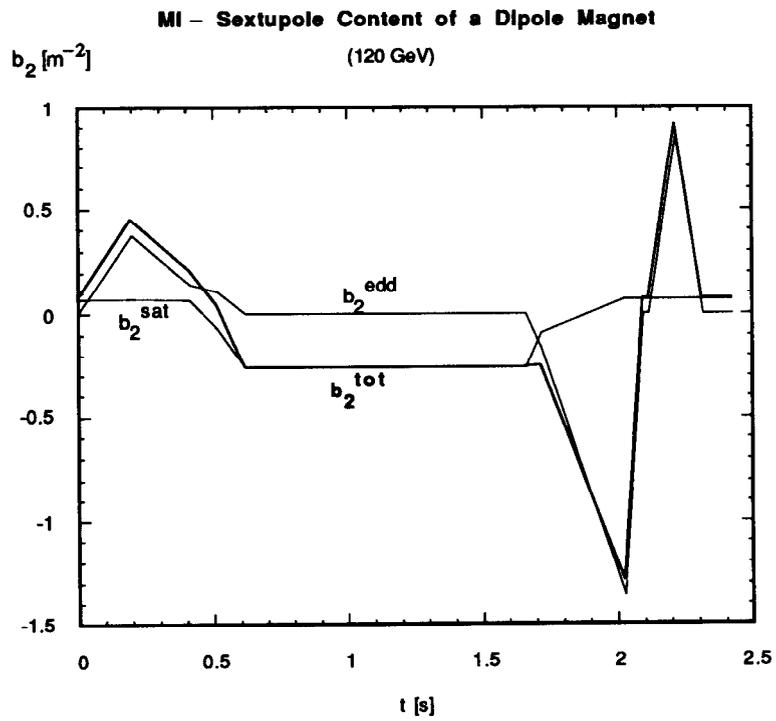
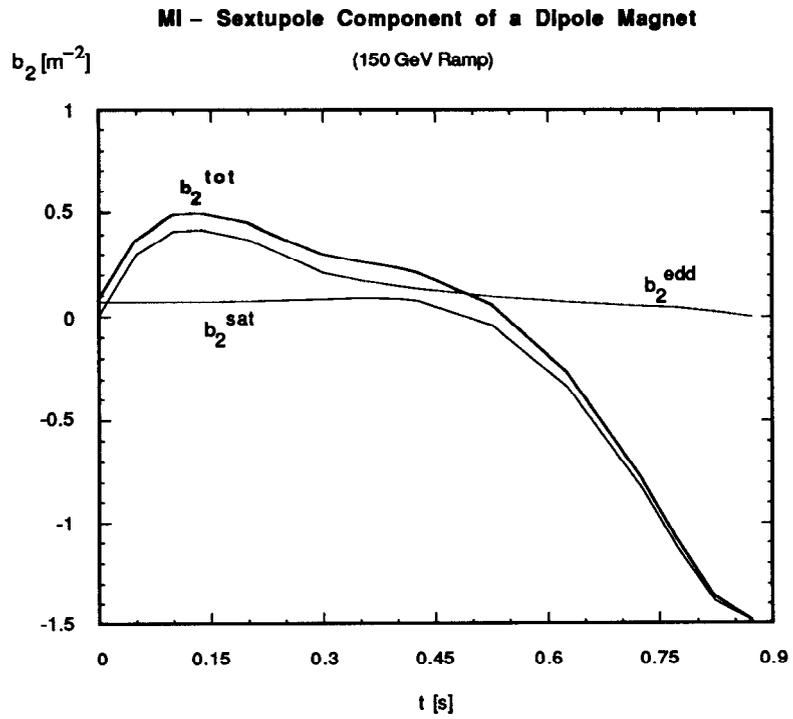
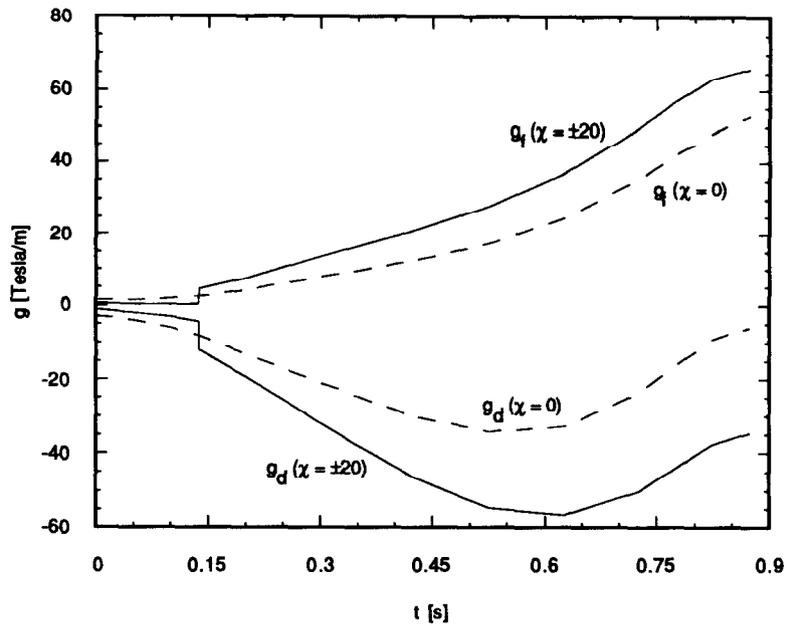


Figure 1

### Correcting Sextupole Strength

(150 GeV Ramp)



### Correcting Sextupole Strength

(120 GeV Ramp)

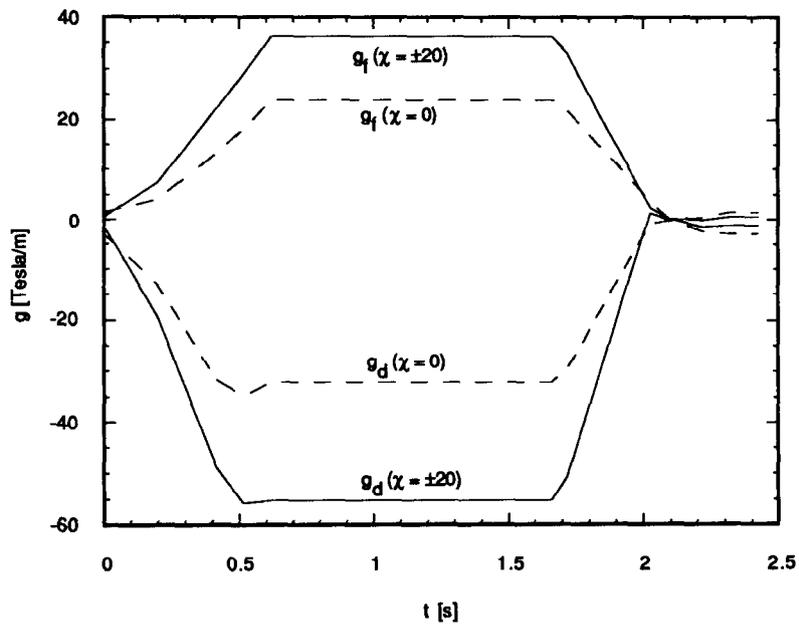


Figure 2