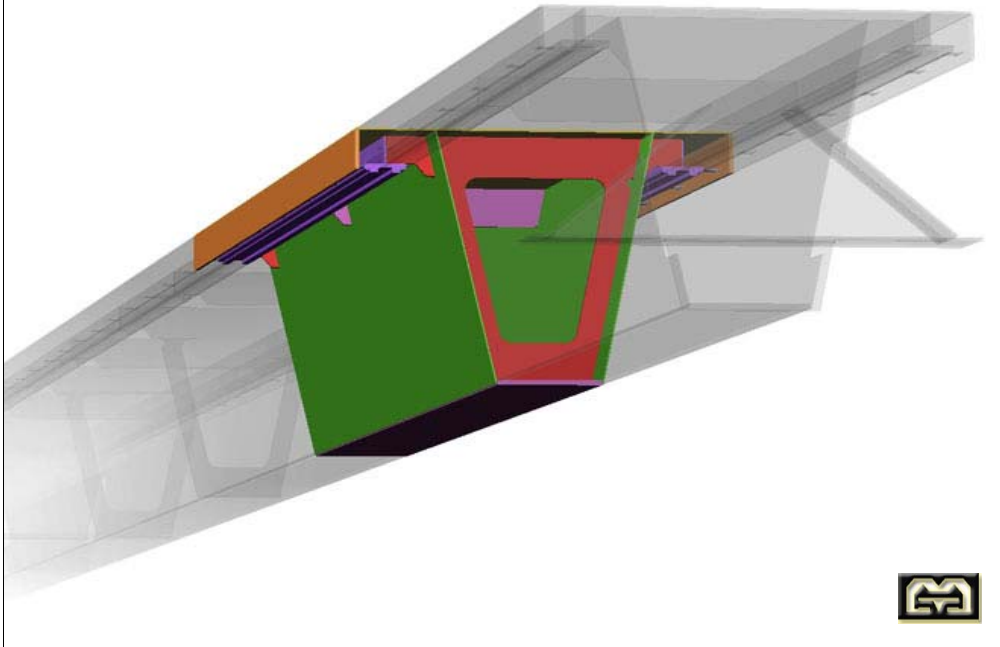


Model Beams as Two Cells of a Larger Beam



Models of larger structures provide a realistic basis for establishing fabrication and processing parameters to be used for full scale production. At MAGLEV, Inc., parameters are being developed for fabricating beams that will be up to 62 meters (about 204 feet) in length. The model being used for this pre-production activity is a beam that consists of two cells of the full length beam. The model beam is 10 percent of the length of a full scale structure, but it otherwise incorporates all of the features of the full length structure.

The beam modeling program at MAGLEV, Inc. is focused on establishing the process parameters that will allow management of the weld distortion that is a natural byproduct of fabrication by welding. A total of eight model beams are being produced in the model beam program. The first parameters to be established will be the fabricability conditions needed for production - meaning the conditions of equipment, tooling, software systems and associated processes that will allow the beams to be produced through computer controlled robotic methods. The expanded model beam program will establish a statistical baseline of the normal variations in dimensional tolerances that would be expected to occur in otherwise identically fabricated beams. It will also provide the basis for analysis of effects of other process conditions such as weld size and related fabrication variables.

When completed, the MAGLEV, Inc. model beam program will provide a national baseline of data for precision fabrication of large steel structures. The program will include establishing and evaluating the criteria for fabrication that will allow lower costs, result in faster time-to-market and higher quality product in these types of structures. These desirable features will be attained routinely resulting in cost reductions of up to 20 percent. It will also provide the basis for fabrication that does not require any re-work that in turn will result in lower inventories and greatly enhanced affordability in manufactured components.