



Application of advanced technology in our nation’s fabrication shops can result in reduced costs, improved quality product and enhanced time to market. In turn, these features will increase the profitability of our nation’s fabrication shops and make them more globally competitive. MAGLEV, Inc. approaches the advancement of fabrication technology as a national imperative for the economic viability and international competitiveness of the industry.

Currently, MAGLEV, inc. has implemented its factory computer integration process with a combination of “Commercial-off-the-Shelf” (COTS) software and in-house software code to assure a complete and seamless factory operated system. Design criteria are analyzed to assure a complete mathematical definition of the product to be fabricated is input into a digitized data base. From the database, computer integration to drive cutting machines, set-up tables, robotic welding processes, real time feedback quality assurance and finish processes is established. Fully implemented, the MAGLEV, Inc. fabrication process assures agility and flexibility to allow “one-of-a-kind” job shop production to be performed as simply as mass production runs. Cost reductions of 20 percent or more and elimination of rework are the anticipated benefits.

MAGLEV, Inc.’s approach to implementing advanced technology in our nation’s fabrication shops is based on this totally computer integrated process. The approach will be applicable to individual fabrication stations or to the entire factory operation. It will be able to be adopted by existing industry in either a complete or piecemeal fashion of integrated processes to assure a totally integrated shop.

In the near term, MAGLEV, Inc. will work with existing industry in two ways. The first is to form partnerships to assist existing industry to capture jobs for which they possess full equipment capability but not advanced engineering capability. The second is through its in-place advanced fabrication training partnership with the Community College of Allegheny County and Penn State University. The program is applicable to incumbent workers and to Associate Degree students.