

# Michael L. Goldberg

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## Notable Achievements

in STAR format (Situation, Task, Action, Result)

Since I was generally working as a contractor, I abbreviated company names for confidentiality; in some cases, I can reveal them in one on one conversation.

### Design Related Notables:

- BH an “engineered product company” was in financial chaos and short of cash. When I was hired, the engineering team was in total disarray with not management or structure. I **Reorganized** the staff, implemented project and data management methods and completed 13 new product design releases in 2 years. These products hit all aspects of the business, uniformly meeting a new corporate vision to provide customers with equipment that improved their work process, improved work environment and improved work result. Several patent applications were submitted and with approval now pending. **Result:** Products received industry awards and the company received general recognition as the industry trendsetter enabling the company to obtain investor financing and go from \$4.2mm sales with \$450K annual loss to \$6.8mm and \$500 profit in 28 months.
- EE was a sole source vendor to S and constantly needed to provide fresh designs. I **Designed** a Professional Screwdriver line to be superior to anything else in the market and that would esthetically distinguish it to mark and celebrate S’s 50<sup>th</sup> anniversary. Starting with the old design I created a new product had a new ergonomic handle (improving appearance, grip and manufacturability), a high strength ductile blade shank with hex wrench flats and a supper hard-coated tool steel tip. To achieve the desired appearance, corrosion resistance and surface performance, I replaced the plating with technology new to the industry. **Result:** The new product had the longest lasting tip and corrosion resistance of any screwdriver made to date, met the customer’s appearance and cost criteria, and received their “Best Design Award” for the “hand tool” category.
- At BH, EE and BSD the challenge was always to come up with a better product design. I **Designed** products that brought together elements of different industries to the one in which I was working. and resulting in a new creative design that yielded better or heretofore not seen performance for the product I was working on. In all cases, these resulted in patents or trade secrete technology that provides a competitive edge. **Result:** Some examples of these creative designs are: the marriage of thin-film with hand tools (at the same time TiN was being introduced on cutting tool edges) for an improved decorative coating that replace wet plating processes; using the design of a collet mechanism to create a better mag-yoke color band for color CRTs; taking the toggle mechanism design from a injection molding machine and applying it to a mechanical animal squeeze. Another example is my pioneering work in rapid prototyping, where I joined the xerographic process with powdered metal sintering to invent a machine that is still more advance than any on the market today.
- CPC had been using multiple mechanical conveying systems in conjunction with a dump chute and air lock to provide feedstock into a pyrolytic combustion chamber. I was tasked with reducing system complexity, eliminating air leaks that reduced system efficiency and reducing system cost. I **Conceived** and **Designed** a new system based on completely different material handling technology. **Result:** The new system completely eliminated the mechanical conveying systems and airlock by using a sealed metering valve and vacuum conveying. Cost was reduced to less than half, air leakage was virtually eliminated, and component count was reduced from several hundred parts to less than forty.