



Optimax's Story and the Birth of Rapid Prototyping

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With humble beginnings and a vision for greatness, Mike Mandina and his colleagues founded Optimax in 1991, in the basement of a barn in Ontario, NY. The early years were focused on establishing the business while refining the rapid manufacturing process. In 1993, Optimax bought its first Opticam, a computer-numerically-controlled (CNC) machine for precision shaping of brittle optical materials. Participation in a Department of Defense Technology Reinvestment Program in 1994 led to their first attempt at manufacturing aspheres and opened another door of opportunity for meeting emerging market needs.

By 1995, Optimax outgrew their barn and relocated to a nearby, renovated cabbage canning factory. At this time, Optimax was already producing custom lenses in 1 to 2 days. As business expanded, Rick Plympton joined the team with his marketing and sales expertise, as well as Bob Wiederhold with his state-of-the-art fabrication know-how. In 1999, Optimax purchased Gould Precision Optics in Binghamton, NY, and moved into a 15,000 square feet building in Ontario, NY. That building was expanded to 40,000 square feet in 2001 and boasts of over 150 employees, more than 100 of them being opticians.

By creating a culture of continuous learning, continuous improvement, and professional development Optimax has moved from good to great. With both the leadership and the workforce willing to learn, the company is able to compete more effectively in a global market. Today, Optimax manufactures optical components 3 – 300mm in diameter that include aspheres, cylinders, prisms and spheres. Optimax also has in-house capability for providing optical coatings. Its service and customer base span from R&D and aerospace markets to industrial markets such as semiconductor, medical, and defense.

Before Optimax, no optics manufacturer could consistently meet deliveries in less than 4 weeks. Ordering from custom optical catalogs with an 8 to 12 week standard lead-time was common practice. By use of deterministic machining technology and innovative manufacturing methods, Optimax has developed processes to turn a block of glass into a precision lens in less than a week. Since 1996, Optimax has been marketing the capability: **Prototype Optics in 1 Week**. To add credibility to the statement, Optimax offers these expedited deliveries with a money back guarantee.

The Optimax Manufacturing Tolerances Chart has been developed to clarify what Optimax can produce in one week. This chart also provides a reasonable starting point for tolerancing of Commercial and Precision grade optics. Since a quick delivery is somewhat dependant on the availability of optical material in the market, Optimax has created a list of Preferred Glasses that are kept in stock. By working with optical engineers to optimize manufacturing tolerances, Optimax can often reduce pricing.

At Optimax, customer satisfaction is our number one priority. It is recognized that our performance directly affects the success of customer projects and often affects people's careers. Their success is our goal. Our workforce is the number two priority. Extensive training is provided to educate the workforce with highly coveted skills. The owners of Optimax started their careers on the production floor and work hard to ensure that our employees continue to innovate and prosper.

Optimax remains dedicated to small volume, high quality, and quick delivery. Our workforce is committed to completing every order with precision and enthusiasm. We welcome every challenge that allows us to apply our knowledge and leverage our skills.