A HUGE LEAP FORWARD!

Beginning in September 2008, Empire Optical took a huge leap forward in lens processing technology by switching to 100% custom tooling.

Why? Because we constantly challenge ourselves to lead the market and create the most accurate eyeglass lenses possible.

What does it mean for you? It means that our new custom tooling process creates the most accurate, distortion free prescription lenses on the market today.

And the best part - we don't charge you an extra penny for this huge technological leap. We do it because we can. We do it because we always strive to be the best.

A brief explanation of our "custom tooling" process.
When the prescription is "ground" into your lenses, the lenses are polished on a lab "tool" which sets the power of the lens. The accuracy of that tool will directly affect the accuracy of your lenses.

Traditionally, labs have used eighths of a diopter for these tools (0.00, 0.125, 0.25, 0.375, 0.50, etc.). Eight breakpoints per diopter = 4096 possible tools.

Over the past decade, many labs have switched to a more accurate method of tenths (0.00, 0.10, 0.20, 0.30, etc.). Ten breakpoints per diopter = 6400 possible tools.

Our lab is the only one we know of in the country that has switched to 100% custom tooling down to the hundredths (0.00, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, and so on). One hundred breakpoints per diopter = 640,000 possible tools. This means that we use over 640,000 combinations to make your lenses, when other labs only use 6,400 or 4096. The difference is a more accurate RX - every time!

(All figures are calculated on the standard power range of +3.00 D to -3.00 D with a -2.00 D Cylinder).