Choosing The Right Optical Design Software

Introduction: Maximize Your Return on Investment

As a decision maker responsible for making the right choices for your company's bottom line, you understand that the return on any engineering tool investment is a crucial part of your business' growth and profitability. Why would you choose CODE V® when there are potential solutions available with lower up-front costs? Because when the quality of your optics is critical to your product, the return on investment in CODE V is much greater than the cost, and far superior to the return from other solutions.

CODE V is the proven and trusted optical design tool of numerous companies, government agencies, research labs, and universities worldwide. CODE V can help you save time, money, and your company's reputation. CODE V reliably produces better optical designs in less time—designs that are often cheaper to fabricate than those produced with other software. That's why our customers continue to subscribe to CODE V year after year, despite the other choices available.

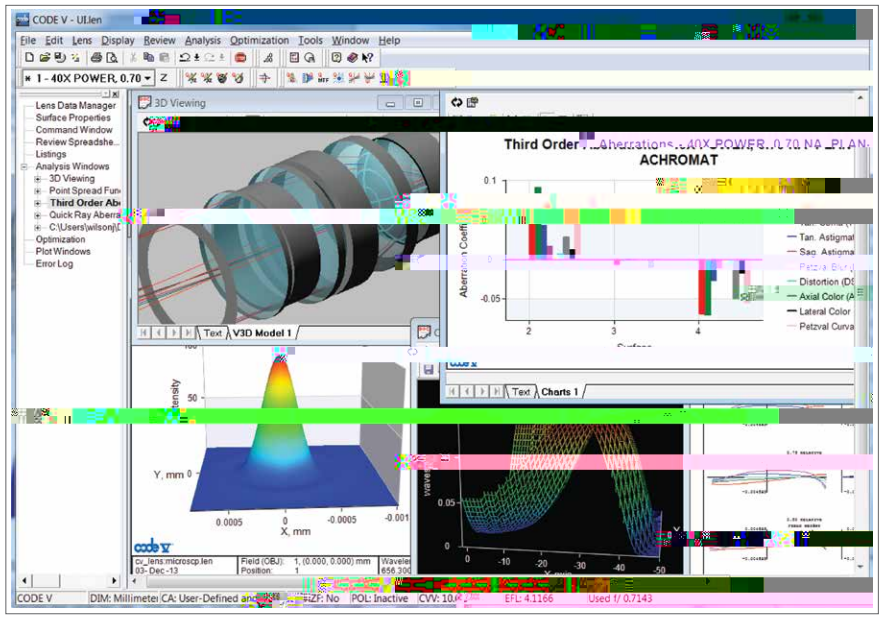

Figure 1: CODE V Graphical User Interface (GUI)

Feature list comparisons will not help you choose the right software for your company. The return on investment is completely dependent on the superiority of the algorithms and the implementation details, and depends little on the feature name. CODE V customers have done design study comparisons with competitive optical design software that prove the time-to-market and cost-to-manufacture savings CODE V can provide. Our customers found that the CODE V optimizer yields better, more manufacturable designs. They found that CODE V's fast wavefront differential tolerancing consistently predicts results that match measured performance, and can be computed in a fraction of the time compared to other tolerance approaches. They also found that their engineers produce better designs, faster. Invest in CODE V and you will save your organization money.

A Team You Can Rely On

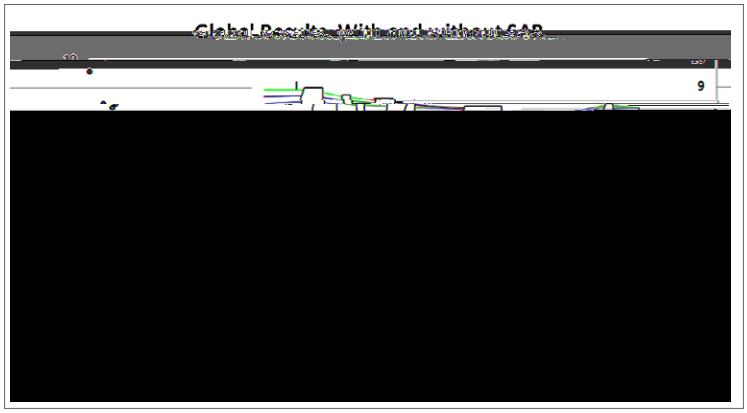

Figure 2: Each dot represents a different solution for an 8-element polychromatic lens, generated by Global Synthesis (GS). The X-axis is the optimization error function. The Y-axis is the field-averaged, as-built RMS wavefront error at a mean+2σ yield probability. If GS is run without any control on tolerance sensitivity (the purple dots), there is no correlation between a lower error function and

CODE V's fast wavefront differential tolerancing feature is recognized in the industry as the most efficient tool for producing robust optical designs that will work when built. Its algorithm is just as accurate as Monte Carlo methods, yet it can be hundreds of times faster. CODE V customers have reported situations where, when using other software, the measured performance of a system did not match the predicted as-built performance. The same tolerance analysis, when re-run in CODE V, agreed with the measured data.

The speed of CODE V's tolerancing enables it to be an integral part of the design process, rather than an end-of-the-design analysis. In fact,