If you follow the PTC Mathcad blog, you’re already acquainted with the features and advantages of using the engineering math software for your calculations. But not every company initially chooses PTC Mathcad for the same reasons.

We’ve compiled stories from five companies that use PTC Mathcad for unique and complex engineering challenges. While each of them lists a different reason for initially seeking out engineering math software, their successes are largely the result of the same features you know and love.

**Stress at 30,000 Feet**

Minnesota-based 3M has spent more than 100 years creating sticky new innovations. If you ever had posters of famous bands taped to your bedroom walls, you probably used a 3M product.

The **3M Aerospace and Aircraft Maintenance Division** creates adhesives much stronger than the clear tape we use in our homes and offices. With PTC Mathcad worksheets as a whiteboard-style environment, they calculate and test the properties of adhesives to understand how well they hold up under the stress of 500+ mile per hour flights.
Avoiding Collisions in Space

Aegis needed to know how two orbiting satellites would interact and possibly intersect. They chose PTC Mathcad for three specific reasons. First, the engineers enjoyed the intuitive and natural interface. Second, programming the two-day simulation in PTC Mathcad saved time when compared to using another programming language. And third, PTC Mathcad worksheets preserve and organize their calculations.

With PTC Mathcad, Aegis knows their IP is documented, cataloged, and able to be referenced in all future projects.

Not Everything is Digital

GKN Aerospace Engineering Services didn’t choose PTC Mathcad for a particular project. Their needs centered on natural math notation, calculation engine accuracy, the friendly features of a word processor, and hard copies. Spreadsheets didn’t allow for legible equations when printing out calculations to attach to legal contracts. Handwriting left room for errors. PTC Mathcad gave GKN all the features they wanted in engineering math software, plus the ability to print error-checked calculations in natural math notation.

Training and Mentoring

Fostering collaboration among hundreds of engineers is no easy task. Yet it’s a prominent feature that attracted Honeywell to PTC Mathcad.

Honeywell’s engineers come in all ages, experience levels, and geographic locations. Training new hires, who may be at a different site, is easier when knowledge transfer included centralized PTC Mathcad files stores. Projects packaged into worksheets contain all the information a new engineer needs to get up to speed and contribute.

PTC Mathcad for Music?

The Chrysalis Foundation isn’t your typical engineering shop. In fact, it’s a nonprofit music educational organization. Its founder is Cris Forster, a master builder and composer. He invents and builds custom acoustic instruments to explore musical intonations not commonly heard in Western music.

PTC Mathcad gives Forster the ability to create custom units, such as the “Mica” unit of mass. It helps him convert his work to measurements favored among instrument builders. It also reduces the need for manual conversions, which limits the opportunity for errors.

More Success Stories at PTC

Scores more companies benefit from the natural math notation, computational power, collaboration, and flexibility of PTC Mathcad. To get the full stories above and read about even more successes, check out the PTC Case Studies page and scroll through past PTC Mathcad blog posts.

And if your company has a PTC Mathcad win to share, post it in the discussions on our social media channels.
**About the Author**

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