

Engineering Design Services

Get products to market faster with end-to-end engineering design services that extend your team's capacity, improve product performance, and ensure manufacturable, production-ready designs.

The Challenge: Why CAD Tools Alone Aren't Enough

Every successful product starts with a great idea, but even the best ideas stall without the right engineering bandwidth and expertise. Many organizations own powerful tools like Creo, yet still struggle with resource constraints, inefficient modeling, and bottlenecks that slow time-to-market.

Companies experience:

- ✓ Limited in-house engineering capacity or specialized design skills
- ✓ Inefficient modeling and revision practices across engineers and sites
- ✓ Inconsistent design standards and documentation, creating rework and risk
- ✓ Product development delays due to overloaded teams and shifting priorities
- ✓ Lack of integrated CAD/PLM workflows connecting design to downstream teams

How We Help: Services Built Around Engineering Design

EAC's Engineering Design Services give you a flexible, expert extension of your engineering team. Using cutting-edge tools like PTC Creo, our engineers work side-by-side with your staff to take concepts through modeling, simulation, optimization, and manufacturable documentation so you can hit deadlines without sacrificing quality.

A simple three-step approach:

Assess & Plan

Align on goals, requirements, and timelines; identify where external design horsepower adds the most value.

Design & Optimize

Model, simulate, and refine concepts into robust, manufacturable designs using best-practice workflows.

Deliver & Support

Provide complete design deliverables, production-ready documentation, and support through prototyping and handoff.

What's Included in Our Engineering Design Services

Strategy & Readiness

Upfront scoping of product requirements, constraints, and success criteria

Alignment with your existing CAD/PLM environment and design standards

Resource planning and phased engagement model based on your timelines

Design & Engineering Execution

3D CAD Modeling & Assemblies: Detailed, accurate models using PTC Creo and other advanced tools

Simulation & Analysis: Thermal, structural, and motion studies to validate and de-risk designs early

Design Optimization: Iterative modeling to improve performance, reliability, weight, and cost

Reverse Engineering & Legacy Conversion: Digitize and modernize existing designs for reuse

Ongoing Collaboration & Scale

Flexible resource augmentation when your team hits capacity

Support for New Product Introduction (NPI) projects and redesign efforts

Alignment with your broader digital transformation initiatives and PLM strategy

Manufacturing & Documentation Support

Production-ready drawings with GD&T and clear assembly instructions

Manufacturability guidance to reduce machining time, cost, and complexity

Support for prototyping, initial runs, and design-for-production refinements

Who It's For

Engineering / Product Development leaders needing extra design horsepower

R&D and NPI teams with aggressive timelines or limited internal resources

Operations and manufacturing teams seeking more manufacturable designs

Results Our Customers See

Compressed design timelines and faster time-to-market for new products

Improved product performance and reduced weight or cost through optimization

Lower machining and production effort from manufacturability-focused redesigns

Peace of mind knowing experienced engineers can step in and contribute on day one

Ready to Get More from Engineering Design?

Let's turn your product ideas into robust, manufacturable designs without overloading your team.

EAC's Engineering Design Services give you the expertise, capacity, and tools to move from concept to production quickly and confidently.

Next Step: [Schedule a Design Consultation](#)

