

## INTEGRAL APPS AND EXTENSIONS

**Additive Manufacturing** Rapidly create and optimize lattice structures and define printer tray setup

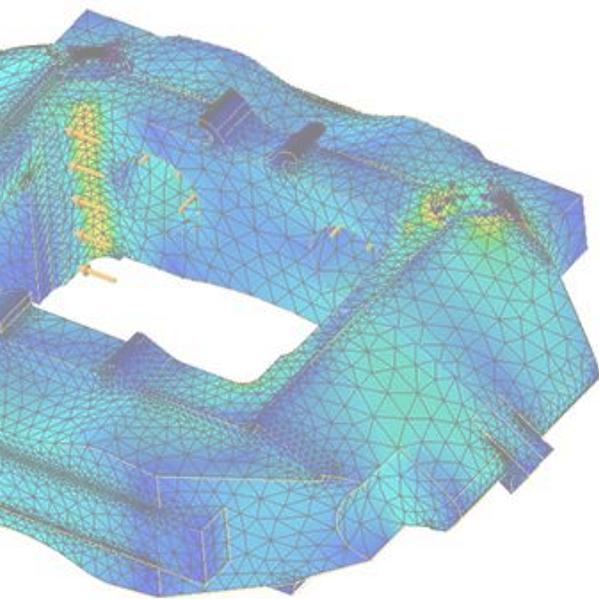
**Advanced Framework** Speed design and improve the accuracy of structural framework assemblies

**Advanced Simulation** Advanced simulation capabilities to support nonlinear materials, large deformation, dynamic and prestress analysis, transient and non-linear thermal

**Ansys Simulation** Creo-embedded high-fidelity linear static structure, modal and thermal analysis powered by Ansys solver and meshing technology

**Behavioral Modeling** Rapidly optimize geometry solving for design goals and engineering objectives

**Computer Aided Verification** Digital inspection and verification of machined parts and assemblies using CMM and first article inspection



**Design Exploration** Rapidly explore, evaluate and review design alternatives using checkpoints to manage files and capture design history

**Direct Modeling (Flexible Modeling)** Make fast, flexible edits to any 3D geometry in Creo

**Fatigue Advisor** Analyze cycle fatigue to determine the number of load cycles components can sustain before failure

**Flow Analysis** Analyze computational fluid dynamics (CFD) to improve the functional performance and quality

**GD&T Advisor** Wizard-like dashboard simplifies and guides the user in the correct application of GD&T

**Generative Topology Optimization** Rapidly generate the optimal design solving for functional objectives, constraints, loads and manufacturing process criteria

**Human Factors Analysis** Analyze human-workplace interactions to validate conformance with health, safety and workplace standards

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**Human Factors Design** Visualize, simulate and optimize human-product interactions to support human-centric design

**Intelligent Fastener** Automated creation of fastener clearance geometry and assembly placement of fastener hardware

**Interactive Surface Design** Combine the power of parametric modeling and flexibility of freeform surfacing

**Layout** Maximize productivity using integral 2D layout and 3D detailed design

**Legacy Data Migration** Support legacy data migration and CAD consolidation efforts

**Mathcad Professional** Document design intent and use engineering calculations to support analysis driven design, verification and validation

**Mechanism Dynamics** Analyze and optimize the dynamic performance of mechanism designs

**Mold Analysis Extension** Analyze and optimize design geometry and mold conditions to avoid part defects and costly rework

**Multi-CAD Collaboration** Easily integrate and work with data from CATIA V4/V5, SolidWorks, Siemens NX and Inventor

**Options Modeler** Build configurable products, assign option choices to configurable modules, and build product variants

**Piping & Cabling** Rapidly create and optimize the routing of 3D cable and piping systems

**Product Insight** Design for connectivity to capture relevant data streams and return real-world data

**Render Studio** Create photorealistic images for design review, sales and marketing

**Schematics** Rapidly create 2D schematics and automate the routing of 3D cable and piping systems

**Creo Simulation Live Plus** Includes the functionality of CSL and adds real-time fluid flow simulation

**Tolerance Analysis** Analyze and understand geometric tolerance stackup and gap analysis

**Tool Design** Accelerate the design of high-quality production mold and cast tooling

**Top-Down Design & Concurrent Engineering** Facilitate and support concurrent design and development using top-down design and publish geometry. Simplify complex assembly designs, streamline the flow of information from design to manufacturing.