



INSPIRE
solidThinking

Generate Optimal Concepts

Inspire enhances the concept development process by generating optimal structural concepts for parts and assemblies. It's easy to use and works with all CAD systems.

Inspiration for better products

At solidThinking, we believe in starting out on the right foot every time. Our innovative software allows you to define a design space, apply loading conditions, and generate the ideal structural solution for your part or assembly. This often results in reduced costs, development time, material consumption, and product weight. With its easy to use interface, new users need just a few hours of training, and many require none at all.



Validate designs using simulation and visualize displacement, factor of safety, percent of yield, tension and compression, von Mises stress, and major principal stress.

"Inspire is a very useful tool that helps our designers to better understand the behavior of a structure. I believe that with Inspire we are able to create better, lighter, and stiffer products and components."

*Mikael Thellner,
Technical Mgr for Topological Optimization,
Scania*

"Inspire is extremely easy to use and delivers results incredibly fast. After only 10 minutes we already have first results and estimates. I'm always looking forward to new projects for which I can apply Inspire – it's a great tool to work with."

*Uwe Kasper,
Design Engineer,
LEIBER Group*

"What I love about Inspire is that you put in all of your parameters, push 'optimize' and very quickly a completely unique shape for your product is created."

*Seth Astle,
Senior Industrial Designer,
3D Systems*

Design based on intent

Enhance your concept development process by starting with the solution.



Sketch or Import a Part or Assembly

Defeature the Parts

Define Fasteners, Joints, and Contacts

Assign Materials and Loads

Reduce Development Time

Inspire changes the way design engineers approach design. Starting with the optimized structural solution in the early concept development stages reduces design iterations, rework, and failed prototypes.



Quickly and easily generate the ideal concept and refine in a CAD system.



Generate Ideal Shapes

Verify Performance

Smooth Results

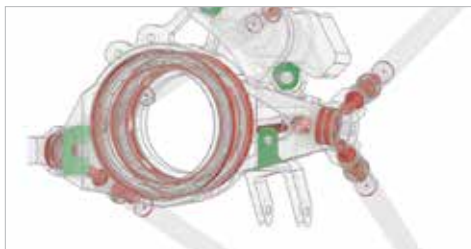
Export Geometry and Refine Concept in CAD

Reduce Weight

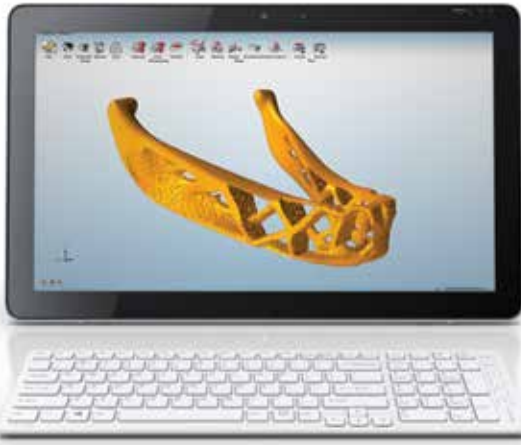
Inspire assists design engineers by generating the optimal structural concept within a design space using loads as input. Design lightweight in, instead of engineering mass out when starting with the ideal solution.



Connect multiple parts using fasteners (bolts and screws) and joints (pins and sliding pins) to model, optimize, and analyze assemblies.



Evaluate neighboring parts and designate whether they should be bonded, contacting, or have no contact.



Inspire's intuitive user interface is incredibly easy to learn, new users often require little or no training at all.

Reduce Costs

Inspire has a straightforward interface and works with existing CAD systems. Decrease costs by reducing design iterations, material consumption, and product weight by designing faster, smarter, and lighter.

Design parts based on their intended use and the preferred manufacturing method using Inspire's Shape Controls.



"The ease of use of the software is great, using Inspire we were able to generate multiple design iterations in just about half a day's time. To create similar results without Inspire would have taken four to five days."

Joel Ball, Design Engineer, Detroit Diesel

Inspire Features



SHAPE CONTROLS & DESIGN CONSTRAINTS

- Min/Max Size
- Draw Direction
- Symmetry
- Pattern Repetition
- Cyclic Repetition
- Stress Constraints
- Frequency Constraints
- Part Instances
- Displacement Constraints
- Gravity Loads
- Fasteners
- Joints
- Contacts



GEOMETRY IMPORT

- ACIS
- CATIA (V4 & V5)
- Creo
- IGES
- Inventor
- JT
- Parasolid
- SolidWorks
- STEP
- STL
- UG NX (Unigraphics)



GEOMETRY EXPORT

- IGES
- Parasolid
- STEP
- STL

Inspire is available for







Windows 64-bit; 10, 8.1, 7



Mac OS X 10.10, 10.9, 10.8

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