

REVOLUTIONARY MECHANICAL CAD

THE INTEGRATED
CAD/CAM/ERP SOLUTION

TOPSOLID: YOUR COMPREHENSIVE SOLUTION FOR MODELING, INTEGRATING AND SECURING TECHNICAL DATA

Design departments deploy an array of different tools for digitizing calculations, such as design tools, calculation tools, dynamic tools, and also management tools. A vast number of software solutions co-exist but the exchange of information between them remains limited. The problem that arises from working with independent CAD and CAM systems is that due to the loss of synchronization, the manufacturing department might not be aware of changes that the engineering department has made. This can lead to the manufacturing department manufacturing the wrong parts!

One Solution - One Manufacturer

TopSolid integrates everything together in a single software solution with their full CAD/CAM/ERP range of products.

TopSolid provides an entirely controlled and secured environment in which to carry out all your engineering and process-planning tasks. It eliminates the risk of errors:

- > Design and machining data are compatible and synchronized automatically.
- > The integrated PDM automatically manages and monitors all of your design and data is totally transparent!

TopSolid is an integrated CAD/CAM product that makes it possible to link up design through manufacturing in the same environment, while maintaining a complete version history through a seamlessly transparent integrated PDM product. TopSolid is a solution intended for all manufacturers and subcontractors who require significant design, manufacturing, simulation, inspection and data management for the production of their parts.

Natural methodology for the creation of all your major projects

Through the use of cutting-edge software development and harnessing the latest in hardware technology, such as multi-core processors,... TopSolid is able to handle large assemblies without any problem! This allows design departments to focus on the job at hand...designing!

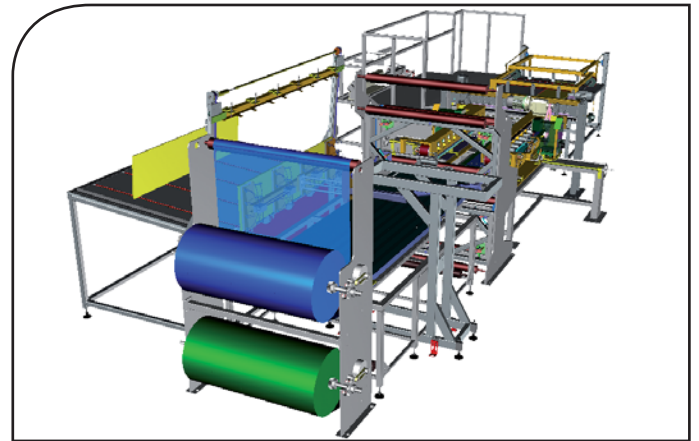
Optimizing the preliminary project and quotation phase

TopSolid enables you to rapidly create a preliminary project which allows for the in-place design of sub-assemblies or connecting parts. It achieves this by resolving issues related to the pre-dimensioning of a mechanism (integrated kinematics, dynamics, calculations) and those related to design problems (realistic renderings), while quickly calculating the cost of the design. And all of this is possible without having to juggle...

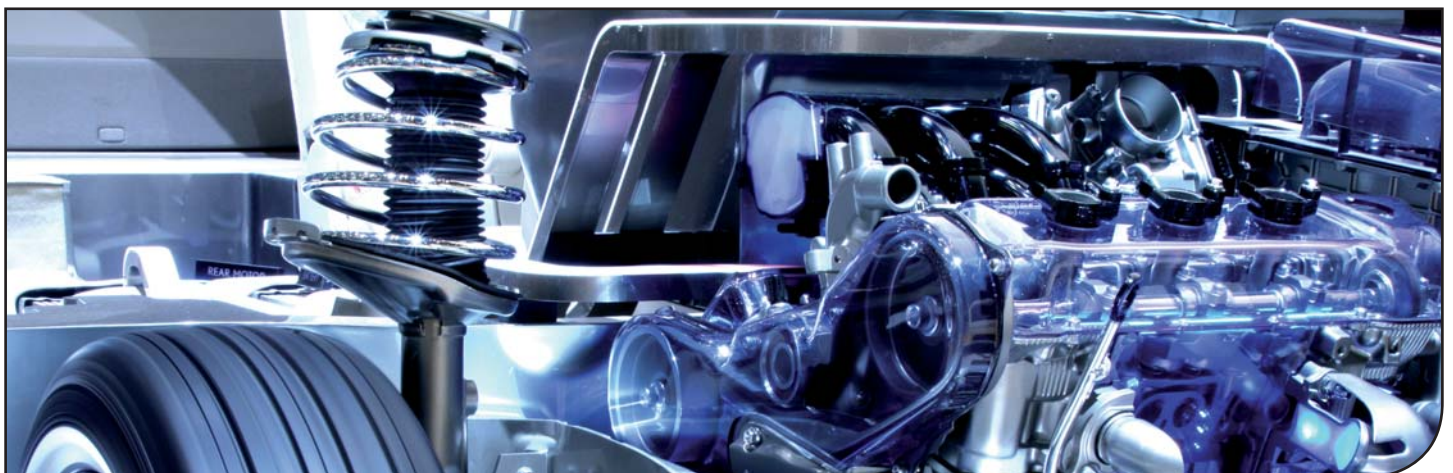
Harness, store and manage company know-how and best practices

Last, but not least, TopSolid is an exceptional tool for efficiently capturing know-how and capitalizing on it in the form of components and processes. Has a particular geometry caught your eye? Capture it from the Internet using the standard interfaces available. Then, in a matter of minutes, you can allocate the required functional characteristics and procedures and break it down into a family of components that the whole company can exploit. A lock ring creates its own groove; a hinge makes its own holes etc. It is all directly machinable while maintaining respect for your workshop know-how.

An extraordinary surge of productivity at your fingertips with the integrated CAD/CAM/ERP suite from TopSolid.



This machine, used in the textile industry, was designed 30% faster through the use of TopSolid.



INTEGRATED AND TRANSPARENT PRODUCT DATA MANAGEMENT (PDM)

With TopSolid, the user can change the name of a part at any time safe in the knowledge that the assemblies in which it is included will not lose their references. The «check-in, check-out» system ensures that everyone is aware of which parts and assemblies are currently undergoing modification. You can work off-line (reserve parts and assemblies for modification) and reassemble them without running the risk of simultaneous modification.

Transparent and native PDM provides discrete and reliable assistance

All software input/output is monitored by a management tool that handles:

- > Links between parts, assemblies, and more generally all the documents making up a project
- > Index changes and minor/major revisions made to parts and sub-assemblies
- > Work done in “remote” mode (sub-contracting, working off-site etc.) and in “collaborative” mode
- > The securing of data
- > Research and application modes of parts and sub-assemblies
- > Modification tracking

During the research and development phase designers continually have to: create and assemble parts, delete them, rename them; modify them, find out if they already exist and so on, while sharing the information with their other design department colleagues. And all this for assemblies made up of possibly thousands of parts!

Without an integrated management tool, it is not easy to keep your cool when performing such a task.

Standard components are managed in the same way

It is not always easy to use external component libraries or standard in-house parts, while also managing the versions of these components. TopSolid provides you with the tools you need for managing them correctly:

- > Application monitoring
- > Automatic management
- > Component family management

Your CAD software solution should be cost effective, easy to learn, and easy to implement. It is, after all, a designer's "word processor". TopSolid has been completely overhauled to offer you solutions which are simple to implement yet immensely powerful. Try it once and you'll never look back!

You won't be able to resist

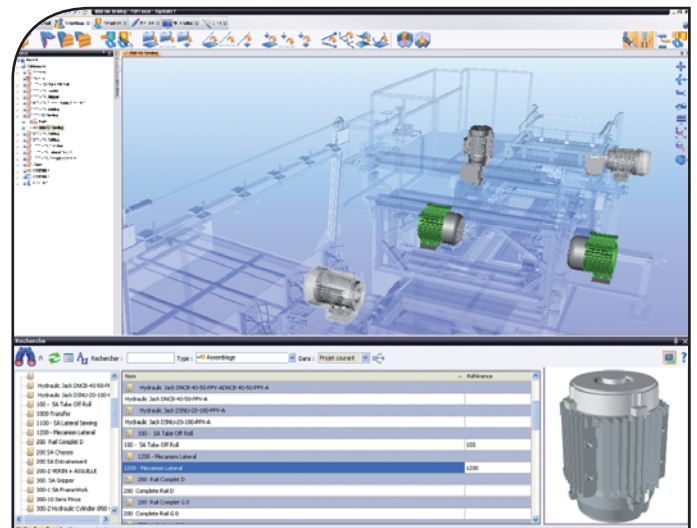
- > Its copy/paste, drag/drop functions
- > Its user interface, with attention to the finest details
- > Its clear and intricately designed appearance
- > Its superior efficiency in handling interactions

A simple, user-friendly software solution...

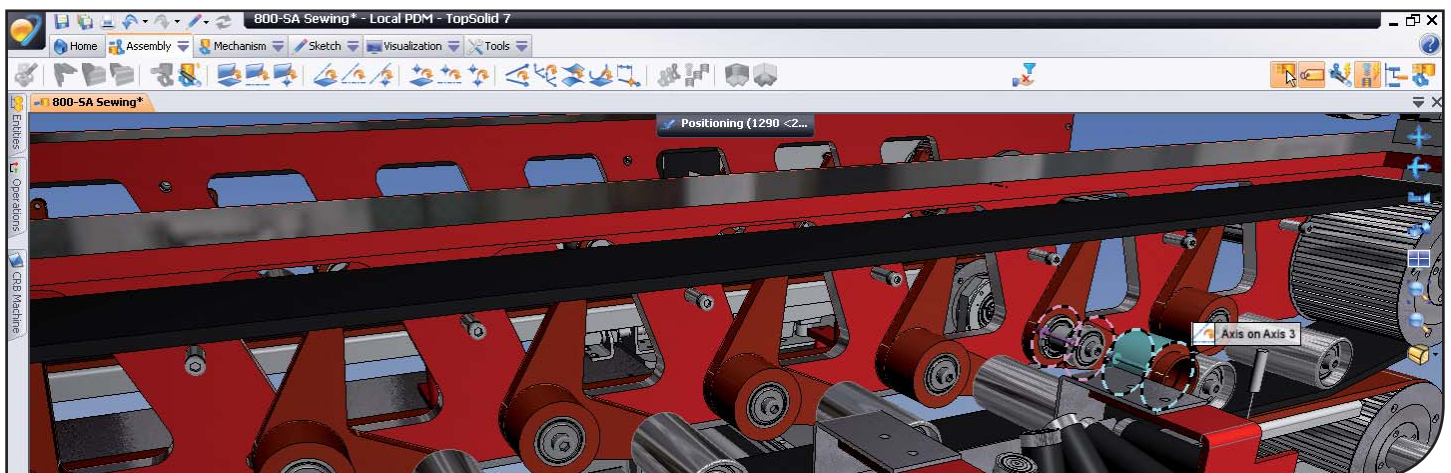
- > Dialog boxes
- > Powerful undo/re-do function
- > Capture and publish the aspects of your designs that are vital to the downstream design and manufacturing processes

... with automatic organization and classification, so you can easily pick up where you left off

- > Entities Manager
- > Operations Manager
- > Chronologically managed
- > Invalid part/operation management
- > Complexity management



TopSolid's transparent, and fully integrated PDM allows you to quickly navigate your project and find data quickly!



TopSolid's interface is efficient and very easy to work with!

DESIGNING LARGE ASSEMBLIES

One of the central issues facing design departments is how to enable virtual design for assemblies comprised of several thousand parts. Moreover, the software must have acceptable response times when working within such assemblies. TopSolid has been completely rewritten, both in terms of software technology and methodology, in order to provide you with this enabling solution.

Mixed designing, in-place or bottom-up, within the assembly itself

- > Creation and modification of connecting parts
- > Synchronization or mutual resolution of assembly parts
- > Management of the representation of the parts (simplified, detailed, for simulation etc.) without loss of associativity within the assembly

Exceptional performance

- > TopSolid has been entirely re-thought and rewritten using new software technology (C#, PDM compatible)
- > Automatic and transparent model simplification
- > Incremental modification management: projects of small size
- > Exceptional management of memory and large assemblies (partial downloading etc.)
- > Incredible reaction speed thanks to multi-core technology (graphics, layout etc.)

It must be possible to design inside the assembly while taking the assembly environment into account. With TopSolid you can design connecting parts or sub-assemblies inside the assembly (mechanically welded frame) that are, at the same time, naturally isolated and managed by the PDM.

Out-of-this-world modeling capabilities

- > Mechanical design basics: holes, threads, grooves etc.
- > Sheet metal processing: folds, flanges, curls, break edges, break corners, lances etc.
- > Mechanically welded frame: wire-frame profile modeling, link sections, welding etc.
- > Cast parts, plastic parts, thermo-forming etc. powerful surface and volume modeling (Parasolid)
- > Tubes, wires, branches

Mechanical engineering software

- > Mechanical features adapted to manufacturing: directly and automatically machinable using TopSolid'Cam, TopSolid'SheetMetal and TopSolid'WoodCam
- > Standardized, rapid and effective layout which is industry-specific (mechanical design, sheet metal processing, tool-making, wood processing etc.)
- > Rich and varied component libraries included as standard, also compatible with manufacturing

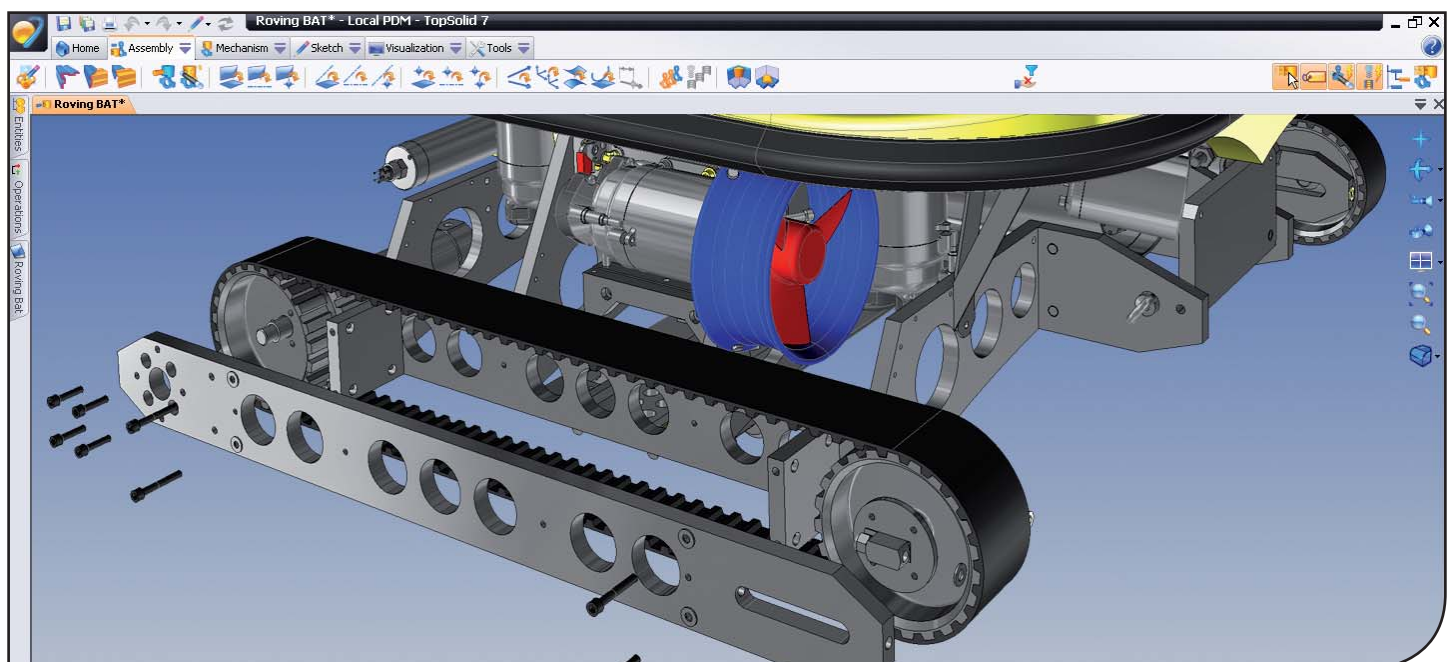
Capitalizing on know-how: an exceptional tool for creating and using components

- > Capture and rapid adaptation of a component retrieved from the manufacturer's Internet site

- > The magic trilogy: components/processes/wizards
- > Functional interfaces and elements associated with the component
- > Component management (modifications, indexing etc.)
- > Articulated components which move in all levels of the assembly
- > Integrated database, searching by criteria
- > Component family management



With TopSolid, you can create perfect exploded assemblies of even the most complex projects.



TopSolid ships with a vast library of "smart" standard mechanical components.

GET NEARER TO THE COMPLEX REALITY

Design is meaningless unless it can bring us closer to the reality of the actual finished product: the actual shapes, visible with synthesized imagery; the real issues concerning material and its resistance, demonstrated with structural calculation; the actual movement shown using dynamic simulation. Everything is integrated perfectly and transparently.

A mechanism is treated as...exactly that

- > Mechanical constraints are maintained everywhere! (in-place and bottom up assemblies, and even on imported parts)
- > Mechanical joints with stops fitted at a post-design stage
- > Complex joints (gears, ball joints etc.)
- > Kinematic/dynamic simulation, with steady-state management
- > Calculation of stress on joints
- > Tolerance management on the 3D model

Bring physics and simulation even further into the equation

- > Complete material definition (physical properties, textures etc.)
- > Photorealistic environment (rapid and detailed modes)
- > Integrated structural calculation, compatible with the kinematics/dynamics
- > Rapid pre-dimensioning of the mechanism (integrated calculation, kinematics, dynamics)

In your hands TopSolid becomes a virtual modeling tool which brings you that much closer to reality, before your parts are manufactured and assembled. With TopSolid, you can check your design to ensure the mechanics of your design are functioning properly. And this is all done based on real material properties!

Communication: upstream and down

All companies have customers and suppliers with whom it is essential to communicate as easily and as efficiently as possible.

A flawless set of documents

The quality of the sets of drawings, exploded views and bills of materials given to the client or subcontractor is often a direct measure of the quality of the work carried out.

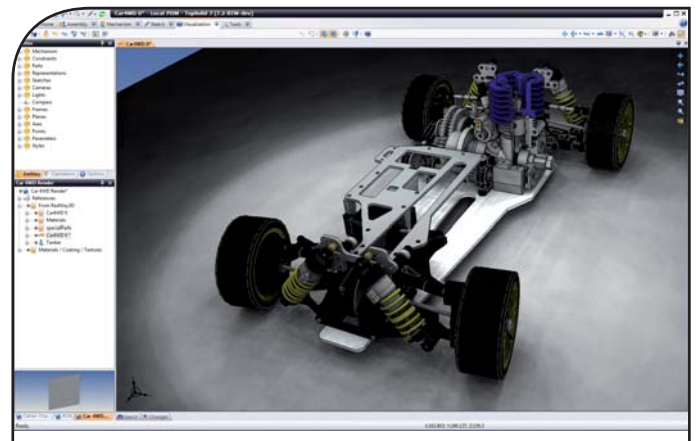
- > All types of views (cuts, sections, interrupted views etc.)
- > Styles of dimensioning, tolerances and symbols
- > Title blocks
- > Exploded views
- > Nomenclatures

Program your design and evaluate different configurations

- > Parameters, variables, associative formulas
- > Master document managed and shared (functional drawing) to steer a project
- > Kinematic analysis on functional drawing

Outstanding interoperability

- > Standard interfaces: STEP, IGES, DXF, DWG, PDF, Parasolid, Acis
- > Digital formats: JPEG, TIFF, etc.
- > Proprietary formats: Catia, UG, PTC, SolidWorks, Inventor, etc.
- > Free, downloadable viewer: measurements, kinematics, rendering, animation, all types of documents (Word, PDF etc.)



TopSolid allows you to make the most of your design with its built in photo-realistic rendering. You can even work directly in this photorealistic mode.



MISSLER SOFTWARE: OUR COMMITMENT, YOUR SUCCESS

For more than 25 years, Missler Software has been regarded by the mechanical engineering, sheet metal and wood processing industries as an industry leader in the fields of design, machining, simulation and management. Due to our innovative development strategy, centered on integration and industry-specific solutions, all of these fields and industries can be catered for using the different modules of one single software solution: TopSolid.

- > TopSolid'Cam for metal machining
- > TopSolid'SheetMetal for sheet metal processing (design and machining)
- > TopSolid'Mold for injection mold making
- > TopSolid'Progress for progressive die design
- > TopSolid'Wood for wood design and machining
- > TopSolid'Fea for structural calculation
- > TopSolid'Erp for production management

Missler Software's teams and partners are at your disposal. Every-day over 10 000 customers worldwide rely on TopSolid as their single-source, totally integrated software solution for meeting their design, simulation, manufacturing and management needs.
TopSolid: not an evolution - a revolution!

Missler Software is an international team of professionals from the challenging and demanding backgrounds of manufacturing and management. They have long understood the necessity of integrating design, manufacturing and data management in order to accelerate the release of new products onto the market, which is the key to the success of any modern company. Both the industry and manufacturing processes are the winners here! Why wait any longer? Stop trying to force integration between products that are developed by different companies. Come join us and the great community of TopSolid users.

We are not just offering an idea or a marketing concept. What we are proposing is a universal solution for everyday use at the heart of design and process-planning departments the world over. The industry is already reaping the benefits, so why shouldn't your business?

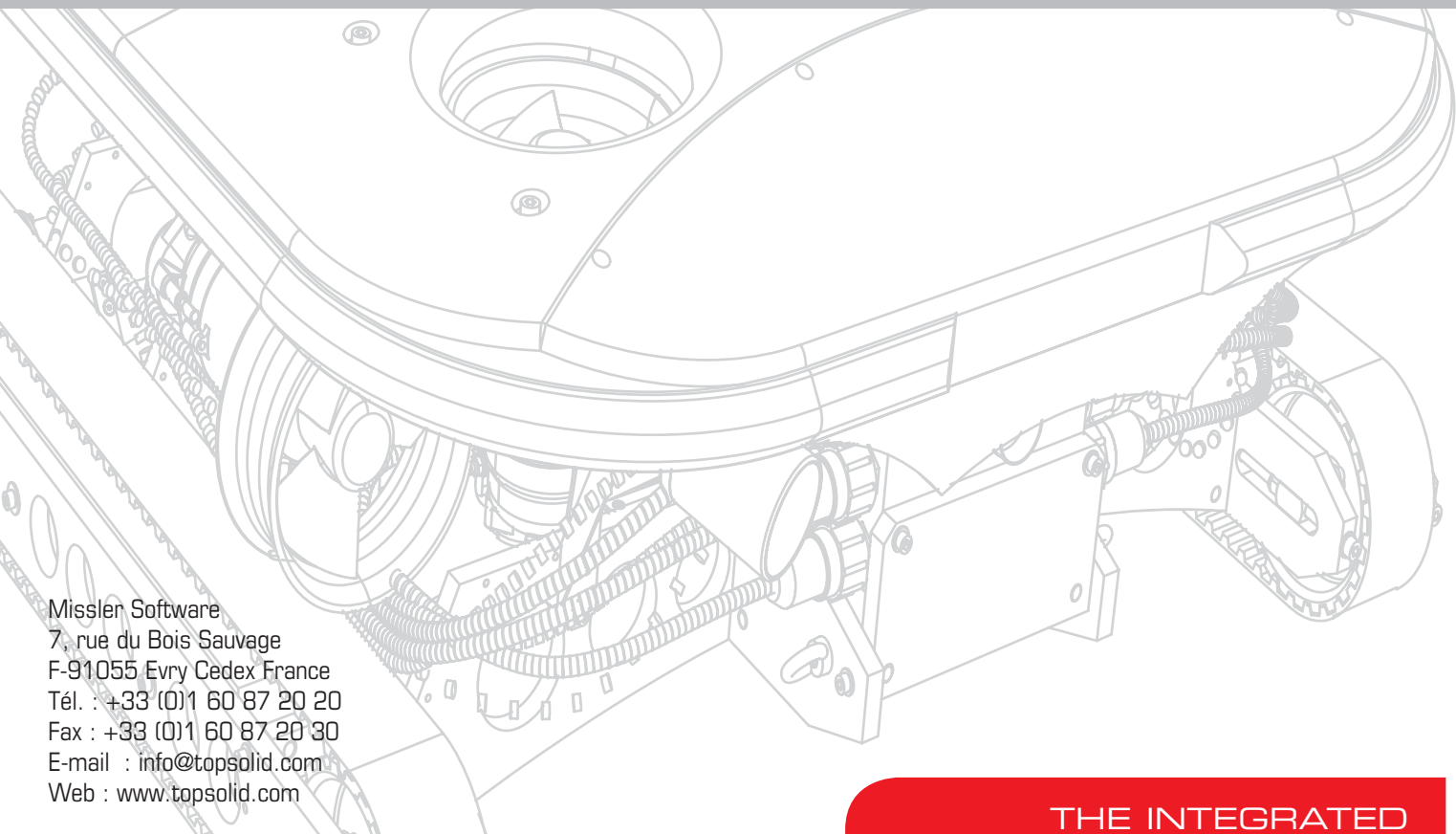
Do you have a project, a design program to develop, or are you working to particular specifications?
Do you wish to benefit from expert advice?
Contact us right away or visit our website at: www.topsolid.com

Near or far – we're wherever you are!



Reams of clients all over the world use TopSolid, like IWC in Switzerland.





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