

# SOCAGE S.R.L.

TAKING AERIAL WORK PLATFORM DESIGN TO NEW  
HEIGHTS WITH SOLIDWORKS SOLUTIONS



SOCAGE relies on SOLIDWORKS design, analysis, product data management, and technical communication solutions to develop lighter, more compact aerial work platform products while simultaneously shortening design cycles, improving quality, and accelerating time-to-market.



### **Challenge:**

Develop lighter, more compact aerial work platform products while simultaneously shortening design cycles, improving quality, and accelerating time-to-market.

### **Solution:**

Implement SOLIDWORKS Professional design, SOLIDWORKS Premium design and analysis, SOLIDWORKS Simulation Professional analysis, SOLIDWORKS Enterprise PDM product data management, and SOLIDWORKS Composer technical communication software solutions.

### **Benefits:**

- Shortened development cycles and time-to-market
- Increased number of projects each year
- Cut documentation costs in half
- Improved performance and reliability

SOCAGE s.r.l. is a leading designer, manufacturer, and marketer of aerial work platforms. Based in Italy, the company has played a major role in aerial platform development on a global scale for the last 30 years. SOCAGE markets and sells its products all over the world, and specializes in the production of truck-mounted aerial work platforms. The company's lightweight, compact platform products are known for both their working height and reach, and have garnered industry awards. Most recently, the company's boomlift DA392 platform (a 92-foot platform used on a non-commercial-driver's-license truck), won the Product Innovation Award for truck-mounted units at the 2014 Access, Lift, & Handlers (ALH) Conference in Miami, Florida.

Until 2002, SOCAGE used AutoCAD® 2D design tools to develop and manufacture its products. However, the need to improve its design process in order to efficiently respond to growing market demands for lighter, more compact aerial work platforms prompted the company to transition to a 3D development platform, according to Technical Director Fabio Di Minico.

"Producing lighter, more compact aerial work platforms is challenging because we need to ensure that we maintain user safety and reliability while reducing size and weight," Di Minico notes. "In order to balance these elements while maintaining the performance for which we are known, we needed access to flexible and intuitive 3D design and simulation tools."

SOCAGE evaluated the Pro/ENGINEER® and SOLIDWORKS® 3D engineering packages before deciding to standardize on SOLIDWORKS solutions. The work platform manufacturer chose SOLIDWORKS software because it is easy to learn and use, supports integrated design simulation, and provides better value for the price. Today, SOCAGE relies on SOLIDWORKS

Professional design, SOLIDWORKS Premium design and analysis, SOLIDWORKS Simulation Professional analysis, SOLIDWORKS Enterprise PDM product data management, and SOLIDWORKS Composer™ technical communication software solutions.

"We were looking for a modern, fast, and easy-to-use tool," Di Minico recalls. "Our evaluation assessed SOLIDWORKS software as the better solution for SOCAGE, including a more user-friendly approach and extensive capabilities at an affordable price."

### **A MORE EFFICIENT DESIGN PROCESS**

Since transitioning from 2D to SOLIDWORKS 3D software, SOCAGE has realized a more efficient design process, enabling the company to shorten development cycles, accelerate time-to-market, and increase the number of projects undertaken each year. "SOLIDWORKS software makes the whole design process more efficient and faster, because many of the steps that previously required manual tasks are automated—such as drafting, projecting sections, views, and assembling schemes," Di Minico says.

"While we've never assessed the time saved numerically, it is clear that there has been an increase in the number of projects each year," Di Minico continues. "Furthermore, our drawings and the results of our projects are more accurate, and we simply discover fewer mistakes in the prototypes."

### **REDUCING WEIGHT WHILE ENSURING SAFETY**

In addition to taking advantage of SOLIDWORKS design tools, such as leveraging design configurations to capture every single position when the platform is extended and moved, and automating the creation of optional tools, SOCAGE relies on integrated SOLIDWORKS Simulation software to achieve its overarching objectives of developing lighter, more compact aerial platforms while ensuring user safety.



**"By enabling us to simulate and accurately predict how structural and kinematic design behavior will affect performance, SOLIDWORKS Simulation and SOLIDWORKS Motion software provide significant advantages in terms of a better project quality, which means that we produce better-performing and more reliable equipment."**

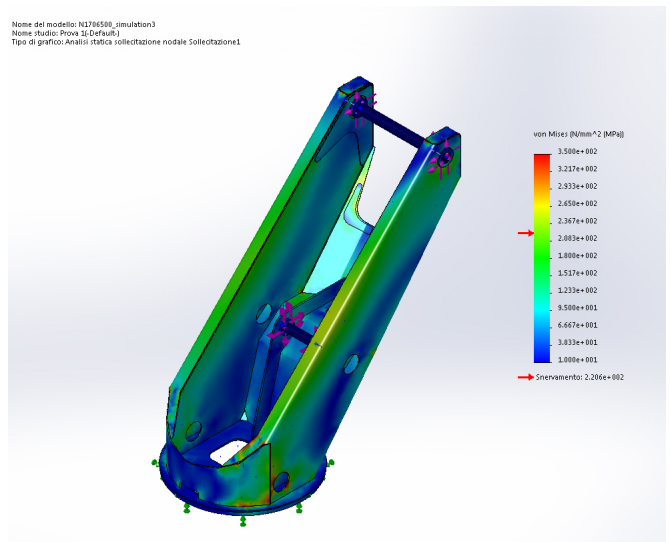
— Fabio Di Minico, Technical Director

"The distinguishing features of our products are performance, taking into consideration the stabilizing and overturning forces; compactness, reducing the occupied space required to extend and close the platform; and reliability, making sure the product provides sufficient resistance to strain and fatigue," Di Minico stresses. "By enabling us to simulate and accurately predict how structural and kinematic design behavior will affect performance, SOLIDWORKS Simulation and SOLIDWORKS Motion software provide significant advantages in terms of a better project quality, which means that we produce better-performing and more reliable equipment."

### CUTTING DOCUMENTATION COSTS IN HALF

SOCAGE has also benefited from the implementation of SOLIDWORKS Enterprise PDM product data management software, which provides tight revision control and facilitates effective workflows, and SOLIDWORKS Composer technical communication software, which SOCAGE uses to create user manuals and documentation. On the company's spare parts manuals, for example, replacing outsourced drafting required to develop illustrations for the manuals with SOLIDWORKS Composer images has resulted in a 50 percent reduction in costs.

"Having a supplier create drawings for the spare parts manuals used to cost €50 per illustration," Di Minico notes. "Considering that a manual contains an average of 40 drawings, the costs used to be €2,000 per manual. Each year, we need between eight and 10 new manuals, plus revisions to existing and customized documentation. Using SOLIDWORKS Composer software to address these requirements has allowed us to cut our previous documentation costs in half."



Using integrated SOLIDWORKS Simulation tools enables SOCAGE to achieve its overarching objectives of developing lighter, more compact aerial platforms while ensuring user safety.

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### For more information

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