RF COM Sistemas Ltda.

Customer Success Story

Autodesk® Inventor®

The ability to easily handle large file sizes is critical. Our products average four to ten thousand parts, and Inventor software combines functional design with easy-to-use assembly tools to help ensure parts and components fit correctly.

—Márcio Faria
Chief Engineer
RF COM Sistemas Ltda.

Wheeling toward the future.

RF COM harnesses the power of Digital Prototyping to facilitate mobile communications.

Image courtesy of RF COM Sistemas Ltda.

Project Summary

News crews are ubiquitous these days, but without trucks and vans outfitted to carry their specialized equipment, there is no way for TV reporters and cameramen to transmit film or video in real time. Based outside São Paulo, Brazil, RF COM Sistemas Ltda. designs and manufactures customized vehicles for the broadcasting industry, as well as mobile units for telecommunications companies. In fact, the company was one of the first in South America to offer a complete line of products and equipment needed by fixed wireless terminal installations, listing Siemens, Ericsson, Alcatel, and Nokia among its customers.

RF COM relies on Autodesk® Inventor® software and Digital Prototyping to:

- Control and manage data created by large assembly design
- Significantly reduce errors and shorten design time
- Help win more bids with realistic 3D presentations

The Challenge

RF COM is facing stiffer competition these days, as satellite service and equipment providers continue to develop faster, better, and less expensive solutions. The company is looking at new markets for the trucks and vans it builds, such as opening up satellite newsgathering to smaller stations and attracting users from the military and emergency services communities.

The challenge is to make the vehicles ready for today's transmission and newsgathering formats at a competitive cost. "Our one-of-a-kind remote units for news broadcasting include electric power components, air conditioning systems, telescopic antennas, automatic hydraulic leveling, parabolic positioning, lighting, and audio and video connections," says Márcio Faria, chief engineer. "It's important we simplify and streamline our design and production cycles to stay ahead of the curve."

The Solution

By using Autodesk Inventor software, RF COM can validate interferences and mass properties to produce quality products the first time around. "The ability to easily handle large file sizes is critical," Faria said. "Our products average four to ten thousand parts, and Inventor software combines functional design with easy-to-use assembly tools to help ensure parts and components fit correctly."

Faria continues, "Moreover, we have unique metal structures—which are not available in standard vehicles—and Inventor software helps us to automate the design of the vehicle's frame and streamline the placement of predefined shapes. It also enables us to generate flat sheet metal parts to match the capabilities of our shop floor, and import them into our bill of materials."

The Result

Manufacturing at RF COM is now faster and easier. Digital Prototyping provides the company the ability to optimize and validate product performance before anything is built, significantly saving time and reducing errors.

Best of all, sales have improved. "We often need to communicate our ideas to customers who are not familiar with engineering," says Faria. "Inventor software gives us the ability to show high-quality visualizations of the final product early in the design process—and win more bids."

For More Information

To find out more about Inventor software capabilities for Digital Prototyping, visit **www.autodesk.com/beyond3d.**

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