



## Customization of a Rosenbauer Fire-truck with EinScan Pro HD



**SHINING 3D<sup>®</sup>**

## Scanner EinScan Pro HD



## Overview

The EinScan Pro 2X Plus offers an enhanced Handheld HD Scan Mode and enlarged scan range, meeting demands for a wide range of applications. It is a professional 3D digitizing solution for versatile application in an easy way.

Rosenbauer is the world's leading manufacturer of systems for firefighting and disaster protection. The company develops and produces vehicles, fire extinguishing systems, equipment and digital solutions for professional, industrial, plant and volunteer fire services, and systems for preventive firefighting. All of the main sets of standards are covered by products manufactured in Europe, the US and Asia. The Group has an active service and sales network in over 120 countries.

The listed family company is in its sixth generation and has served fire departments for more than 150 years. A strong customer focus, innovative strength and reliability are Rosenbauer's key assets.

— — [rosenbauer.com](http://rosenbauer.com)

When the firetruck manoeuvred into our office's driveway everyone wanted to take a look at this massive vehicle. The Team from Rosenbauer Group Karlsruhe coming to pay a visit to SHINING 3D on that day, delivered an elaborate introduction to how firetrucks are tailored on demand adapted to the specific requirements of the customers. The team came to the SHINING 3D EMEA headquarters to explore the capabilities of the EinScan Pro HD.



## Goal: 3D Scanning vehicle parts and equipment to enhance the 3D design process

In the process of equipping a truck with the tools requested by the customer, Rosenbauer started to go fully digital for the fitting of all the equipment into the vehicle. The digital models of the requested products to be integrated in the truck are fitted into the virtual vehicle in Keyshot. This allows the Rosenbauer Team to react fast on customer's comments and requirements of change in the customization journey. It also saved them a great deal of time to go fully digital. So far so good, there is just the issue that sometimes the original drawings and model data of products are too complicated to obtain or simply not available. How can this issue be resolved in order to guarantee a smooth and seamless design of a custom firetruck?

Fast, reliable and authentic acquisition of object characteristics is handled at ease by the EinScan Pro HD Multifunctional Handheld 3D Scanner. With the assistance of the latest 3D scanning technology by SHINING 3D, Rosenbauer was able to fill the gap of missing product details. Let's take a closer look at the workflow in detail:

Upon the arrival of the Rosenbauer Team, the EinScan Pro HD has been set up with a dedicated work station. Due to its versatile and flexible handling, creating a perfect setting for 3D scanning of different areas, tools and equipment of the firetruck only took a few minutes.





Less limitations while scanning dark objects and surfaces

Convenient and uncomplicated 3D data acquisition with EinScan Pro HD. No matter if from the top...

...or from the side. The light weight of the 3D scanner enables a flexible and comfortable handling.



The light weight of the EinScan Pro HD and the capacities of dark objects capturing enabled a fast and uncomplicated data acquisition of the driver's cabin with great results.

Fast scan speed  
for high efficiency



Within short time the team has been able to scan the truck's cabin...

...and check on the scanning data immediately.



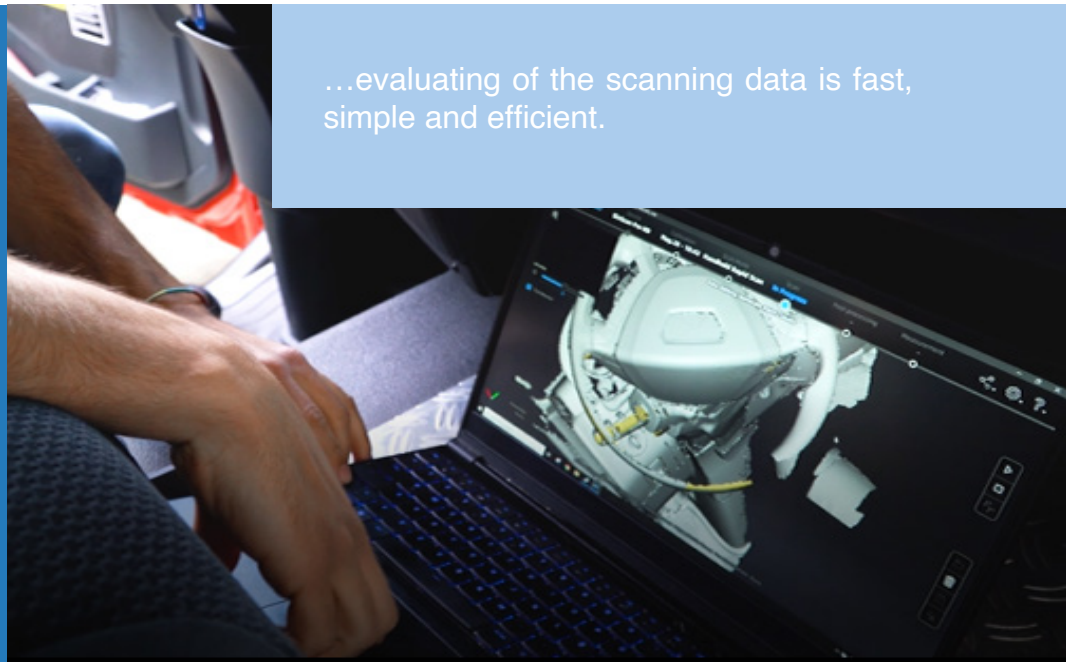
Processing and  
evaluation of scan  
data on site

By using a high power flexible work station  
and the SHINING 3D battery, the sighting  
and...



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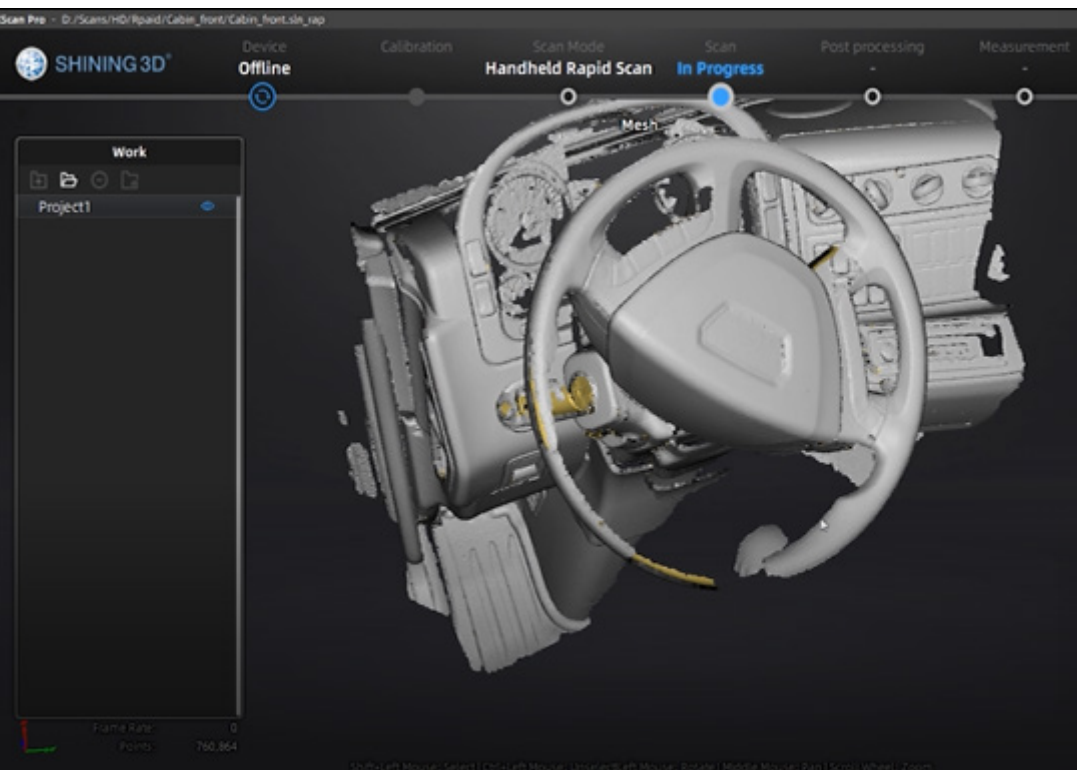
...evaluating of the scanning data is fast, simple and efficient.



## Rosenbauer uses scan data to tailor products on clients request

By using the EinScan Pro HD to scan various parts of the fire-truck, it is possible to obtain authentic and precise 3D data of the objects, which are perfectly suitable for rendering in Keyshot and thus are the perfect match for the application requirements of the Rosenbauer Team.

This project proves evidence that the EinScan Pro HD is the ideal companion to capture highly accurate 3D data of a multitude of different objects empowering the users to take the next step on their digital technology journey.



## About SHINING 3D

SHINING 3D, founded in 2004, is pioneering independent research and the development of 3D digitizing and 3D printing technologies. SHINING 3D provides professional solutions covering “3D Digitizing – Intelligent Design – 3D Printing” for various industries including industrial manufacturing, healthcare & life sciences, product customization, and STEM education. SHINING 3D is well-positioned in the market and has the capacity to handle large sales volume, offer powerful 3D technologies, and provide strong support service. SHINING 3D’s mission is to enable flexible production of high performance, complex structural products, and make 3D imaging and manufacturing technologies accessible to all; from large multi-national corporations worldwide to at home hobbyist. As the leader among Chinese 3D printing companies, SHINING 3D has currently extended a strong international influence with customers in more than 70 different countries in Asia Pacific, Europe, North America, South America, Africa and the Middle East.

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