

# ZERO DEFECTS IN TIMBER HOUSE CONSTRUCTION

WOODWORKING INDUSTRY



ARCABO INCREASES PRODUCTIVITY AND QUALITY IN CHALET  
PRODUCTION WITH LAP'S CAD-PRO LASER PROJECTION SYSTEM





ARCABO, Nieuwleusen, Netherlands



## CAD-PRO Laser projector

- Precise and compact
- Robust, designed for industrial use
- Min. 30,000 hours service life
- Multicolor projection



The CAD-PRO laser projection system is mounted above the work surfaces and enables precision laser projection onto flat roof elements from a distance of several meters.



"We are convinced of the benefits of LAP's laser projection system. Production quality and efficiency have increased measurably."

**RIJK HOUTHUIJZEN,**  
General Manager, ARCABO

## THE PROJECT

ARCABO is a leading manufacturer of winter-proof chalets, serving private and business customers such as campsites and holiday parks across Europe. Whether luxury holiday bungalows or dune lodges, all wooden chalets are manufactured on customer request. ARCABO builds several hundred mobile homes a year, currently at two locations in the Netherlands. From the Nieuwleusen plant alone, two houses leave every day – tailor-made from the floor to the roof, including the entire interior. For the demanding manufacturing process, the company uses state-of-the-art production processes with a carousel system modeled on the automotive industry. „We attach great importance to excellent production quality and accuracy to make our chalets durable. From material selection and cutting through to assembly, everything has to be 100 percent. The introduction of a laser projection system was therefore a logical decision to optimally support our production goals," says Rijk Houthuijzen, General Manager at ARCABO.



Easy operation of the projection system via the PRO-SOFT control software installed on tablet PCs



Starting the laser and drilling in a matter of seconds save valuable production time.

## THE SOLUTION

Instead of measuring tapes and rulers, precise laser technology and tablet PCs now support staff in daily operations. LAP's CAD-PRO laser projectors display multicolor outlines at high precision, e.g. onto ceiling elements. The projected laser lines indicate the exact positions of drill holes for fitting elements such as cables or junction boxes for the electrics. Each house is made according to customer's wishes based on 3D drawings. The laser projection data, also based on CAD data, are prepared in work preparation and then directly accessible in production. The PRO-SOFT control software allows operators to easily manage every single projection step. Tablet PCs operate the system and provide users added convenience by avoiding walks to and from a PC to start a task.

## THE RESULTS

Since the implementation of the laser projection system in 2016, ARCABO has been able to measurably increase production efficiency. "The time to create a drawing is shortened by 20 minutes per chalet. Production time is also reduced. Operators just need to start the laser projection and can get to work right away. Production quality has also improved. We make fewer mistakes than before when we used manual measurements. With the laser projection system, we can say that we have zero defects," concludes Rijk Houthuijzen, already looking to the future: "We expect the system to amortize in two to three years. Because of these benefits, we will most certainly be using LAP technology again. For the future, we have plans to extend the use of laser projection and are looking at other possible applications using new systems."

### THE BENEFITS

#### INCREASE IN PRODUCTION QUALITY

- Zero errors due to the omission of manual measurements

#### REDUCTION IN PRODUCTION TIME

- Faster working thanks to projection in a matter of seconds
- Shortened design times by 20 minutes per chalet

#### FAST AMORTIZATION

- Return on investment in two to three years

## ABOUT ARCABO

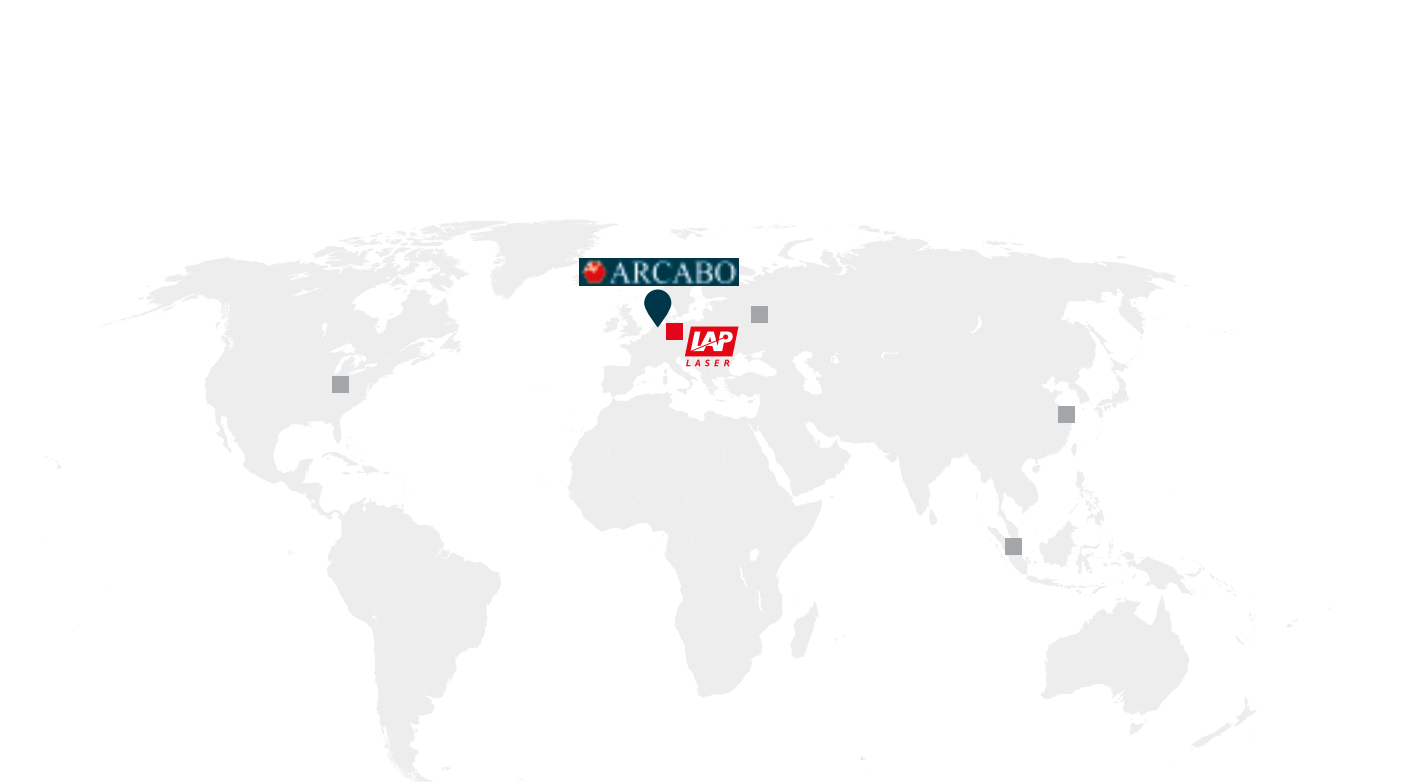
ARCABO is one of the largest manufacturers of winter-proof chalets in Europe. For more than twenty years, ARCABO have been working with a large team of experts from the construction industry, building top chalets down to the fine detail. ARCABO supports private individuals and entrepreneurs of campsite-holiday parks, from project planning to realization, and takes care of the chalet's installation at the required destination.

[www.ARCABO.com](http://www.ARCABO.com)

## ABOUT LAP

LAP is a worldwide leader in the field of laser-based systems for projection and non contact measurement. For more than 30 years, LAP has developed, manufactured and distributed laser measuring systems, line lasers and laser projectors for industry and medicine. Numerous international industrial corporations rely on the precision technology Made in Germany for improvement of the quality of their products and the effectiveness of their production processes.

[www.lap-laser.com](http://www.lap-laser.com)



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