

we invent solutions

we develop customized solutions from idea to production and beyond.

Project details: Laser shooting range for professional shooting

- 🎯 RedDot Target (laser target)
- 🎯 Shot transmitter (laser)
- 🎯 evaluation software

Industries

- Shooting Sports

Technology fields

- Measurement Technology, Bus Systems and Radio, Software Development, Image Processing

Project requirements

- The aim of the project was the development and production of a shooting range for children under 12 years consisting of a precision aim, a laser and an evaluation software. Due to the use in training and competitions, a high demand on the system was an extreme accuracy. The functionality had also to be ensured for different laser weapon types and manufacturers. The hits are displayed and evaluated on the display medium, by using Bluetooth and the software.

Facts / Highlights

- Camera delivers 60 frames per second for the shot evaluation
- Determination of the gravities center for high-precision $\frac{1}{10}$ ring analysis
- Data transmission: RS232 and Bluetooth
- Foolproof operability of the evaluation software
- Laser without complicated encode technology
- Intelligent method to analyse the shots missing the target
- Extra long battery life, more than 40,000 shots possible
- Adjustment function, continuous operation of the laser

Services of KNESTEL

- Potential analysis, target price estimate, project management, specification of requirements, project planning, development of software and hardware; electrical, optical and mechanical construction; EMC testing, prototyping, serial production

Possible applications

- Competitions, training, biathlon, shooting galleries

