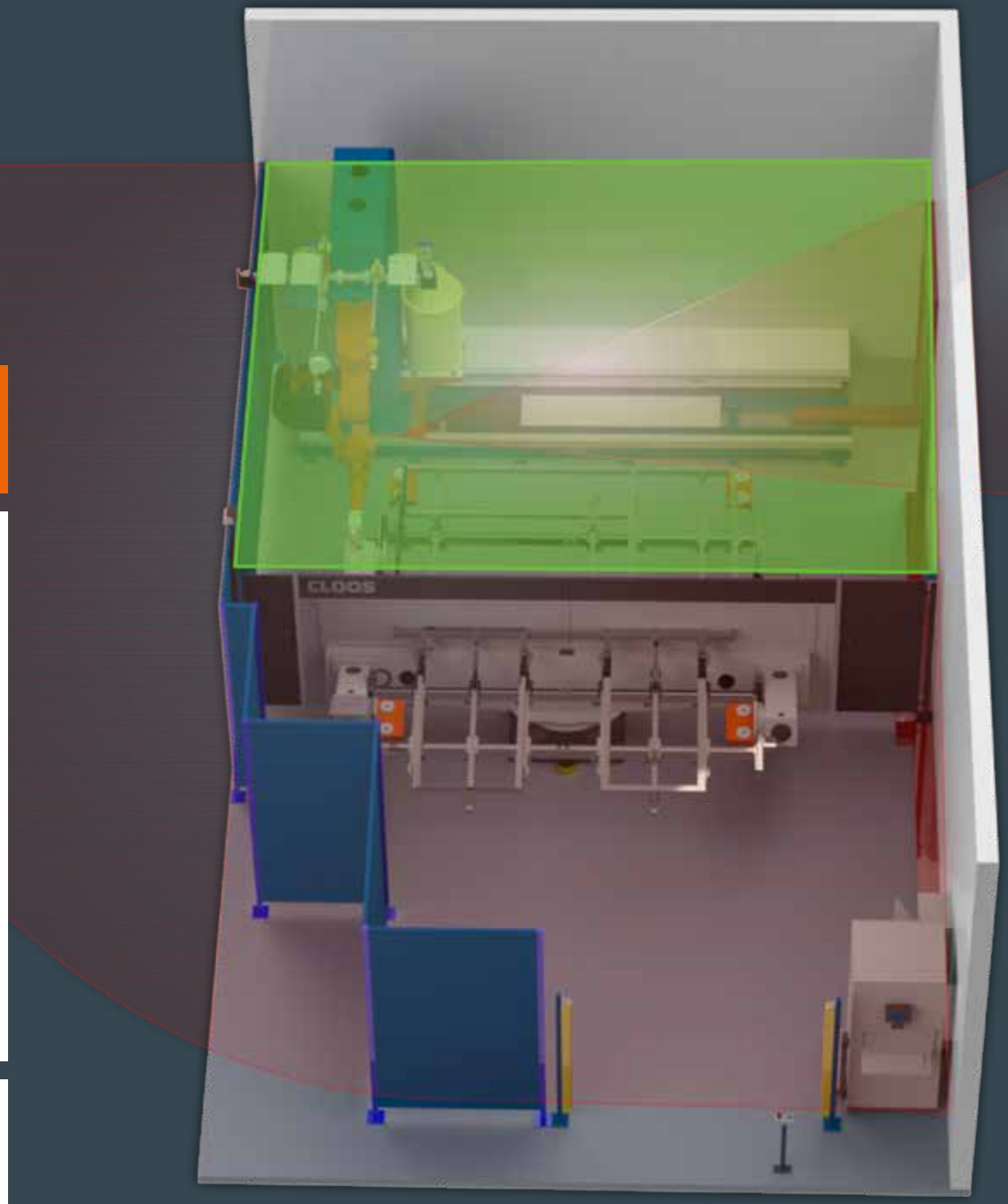
QIROX VirtualLaserZone

Programmable, virtual laser zone for QIROX robot systems with offline laser sensors



CLOOS

Weld your way.

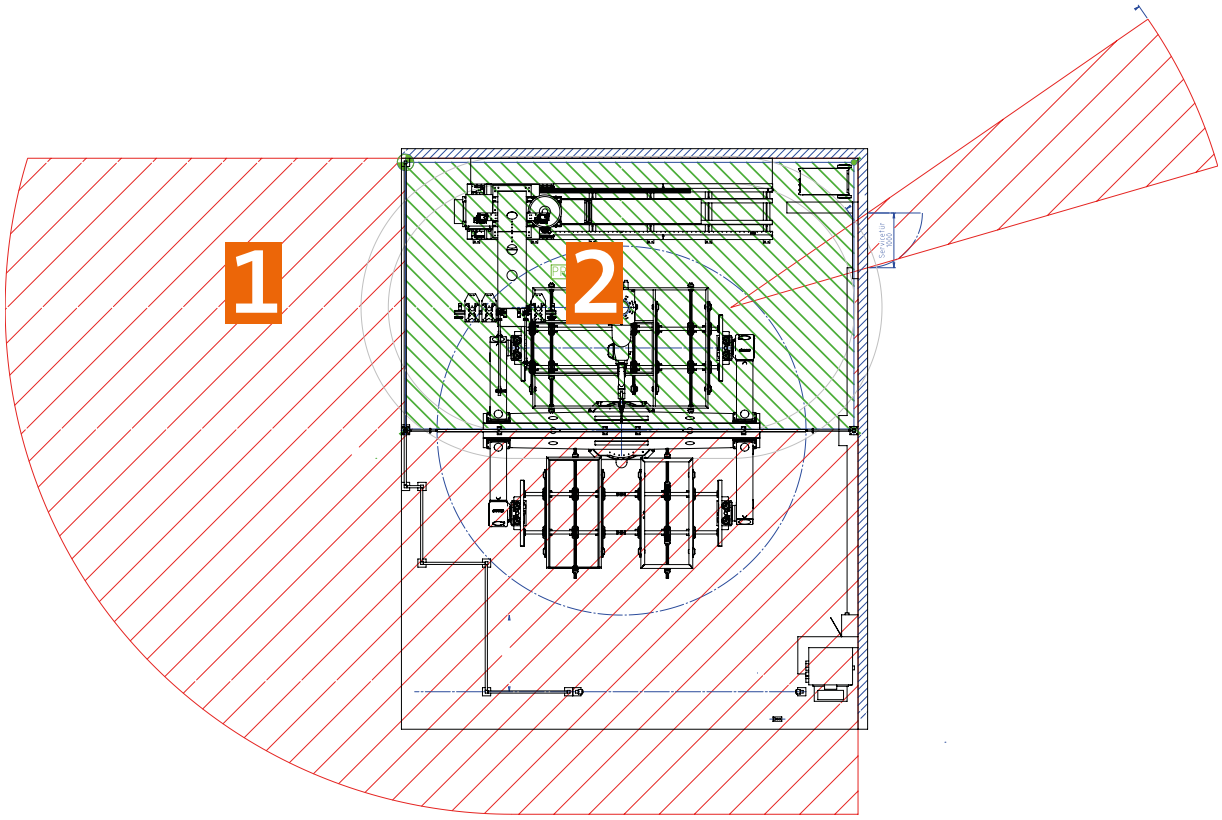
Virtual laser zone for QIROX robot systems with offline laser sensors

People in the vicinity of laser sources must be protected from the dangerous radiation. Protective walls or barriers are often associated with great effort. With the virtual laser zone developed by CLOOS, you reduce these efforts to a minimum.

- **Safe:** Protect all persons in the vicinity reliably from the laser beam of the sensor.
- **Economic:** Save by investing less in hardware security technology.
- **Compact:** Benefit from the reduced floor space of the robot system.
- **Flexible:** We simply adapt the virtual laser zone for you to subsequent changes in the system layout.

Virtual Laser Zone

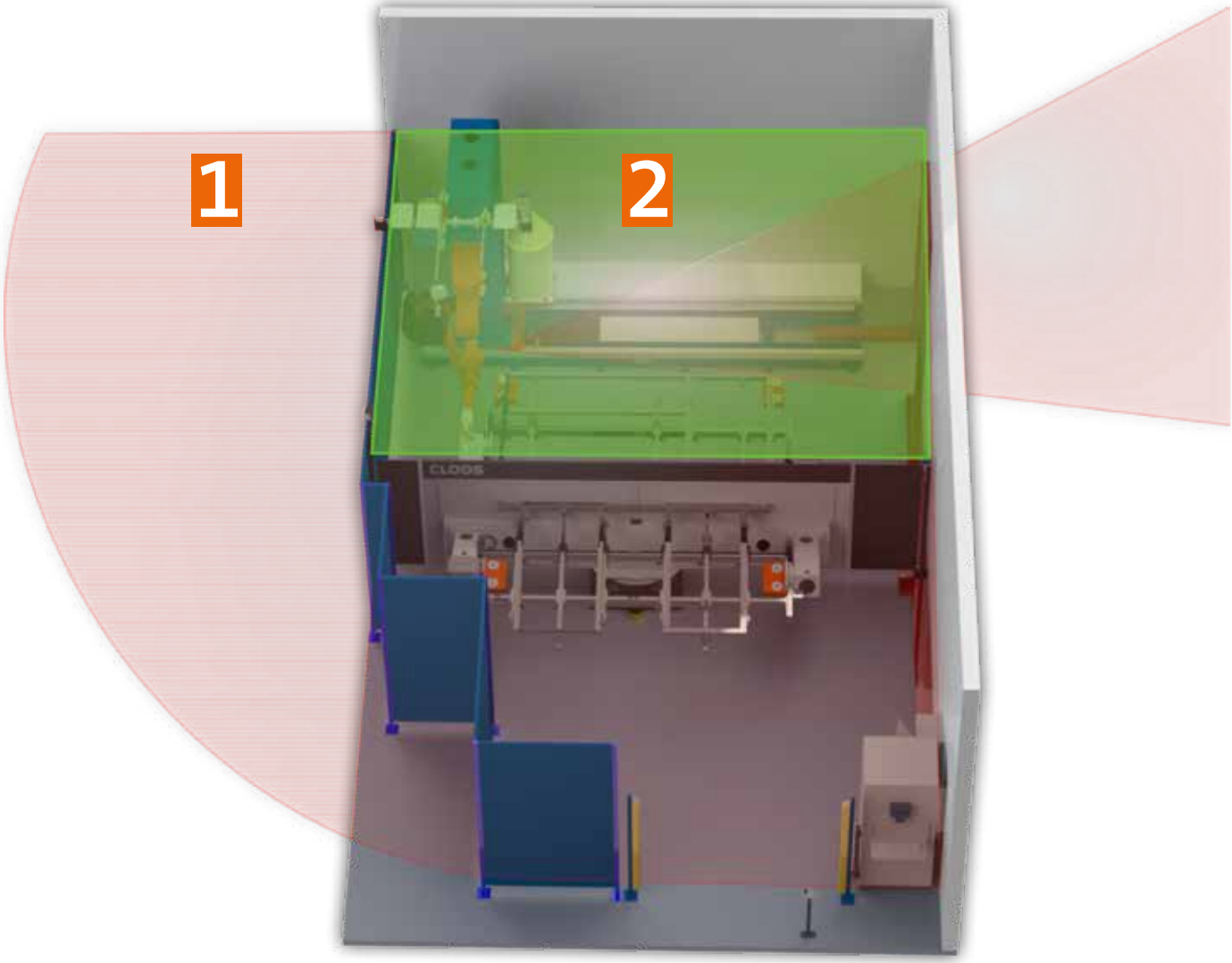
The robot controller knows the position and the beam direction of the laser. A 3D model (virtual laser zone), which defines the robot system environment with its requirements, is linked to this information.
As long as the laser beam hits parts, system components, safety equipment or hall walls of the virtual laser zone, there is no danger to persons. If the beam does not point to any area programmed in the laser zone, it cannot be activated and the sequence program continues without the laser beam. As soon as the robot reaches a position where there is no longer any danger to people from the laser beam the controller releases the laser again and the search routines take place as specified in the program. The virtual laser area is active in the automatic operation and protects people in the vicinity of the system.



1. Safety area for the laser beam of the sensor
2. Virtual laser zone

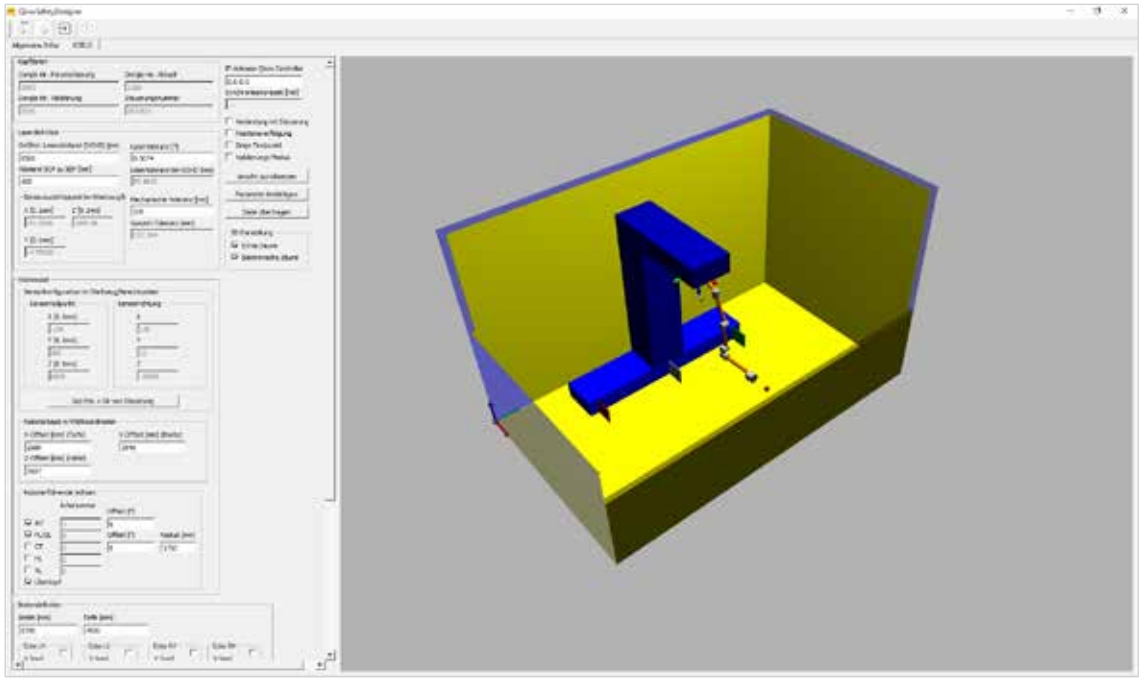
Virtual Laser Zone

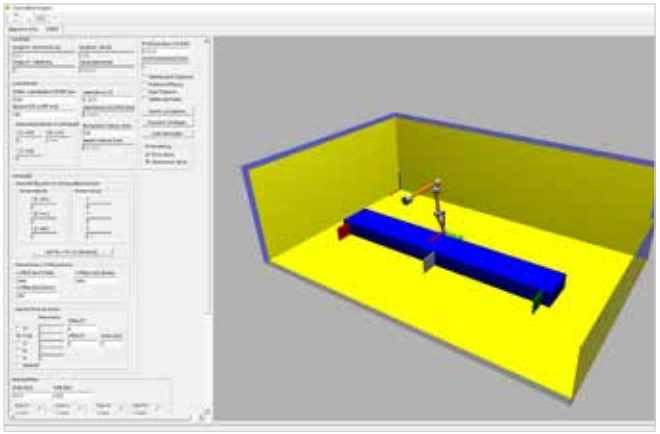
1. Safety area for the laser beam of the sensor
2. Virtual laser zone

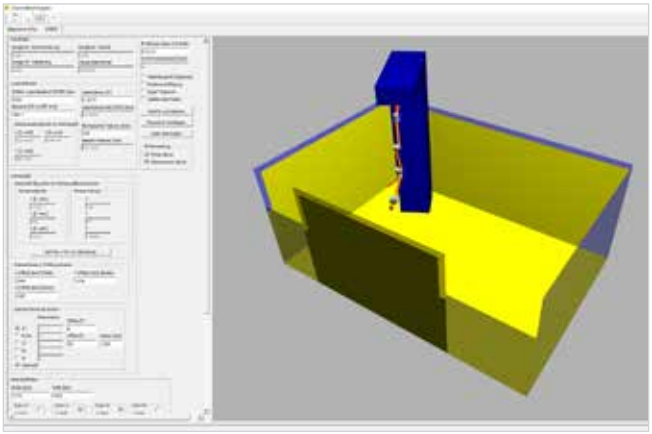


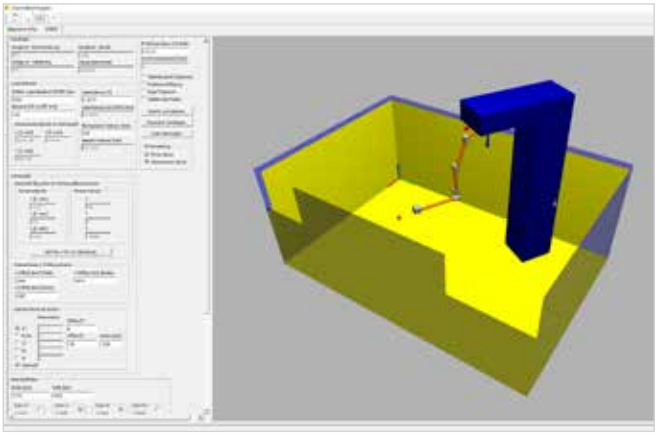
QIROX LaserZoneDesigner

The QIROX LaserZoneDesigner is a PC software that enables the programming and modification of a laser zone defined on the robot system layout. The initial programming of the laser zone is included in the delivery of the robot system and is defined during commissioning. Checking and displaying the laser zone can also be done by the customer. Modifications and validations may only be carried out by trained, competent personnel. The QIROX LaserZoneDesigner offers a self-explanatory graphical user interface.









The way ...

Consulting

With this comprehensive “pre-service”, we take care of your project from the beginning and transfer our integrated process expertise to your component..

Planning

We elaborate a solution which perfectly meets your individual requirements.

Design

Due to the modular design of our product series we develop customised solutions which meet all your production requirements.

Production

Welding machine and robot technology is our strength - including our core competence: the arc.

Commissioning

Our specialists carry out the installation step-by-step in your production hall and test your system for faultless functionality.

Training

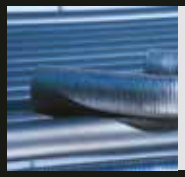
We train your employees and service technicians in programming, operation and maintenance in our modern training centre.

Service

Our competence team advices you on any extensions, modifications and retrofits of your existing robot and welding systems.

... to your success.

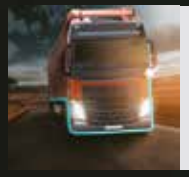
With CLOOS you weld and cut ...



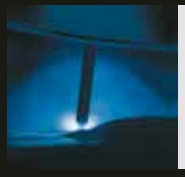
... all types of metal!

... and profit from many additional services!

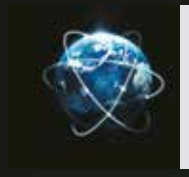
... all material thicknesses from 0.5 to 300 mm!



... in all industries!



... with innovative processes!



... all over the world!

... manually or automated, just as you need it!

... to your utter satisfaction!

... efficiently and individually!

... and benefit from more than 100 years of welding experience!

...Single source supply!

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Main office: Carl-Cloos-Strasse 1
Central warehouse: Carl-Cloos-Strasse 6
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Telephone +49 (0)2773 85-0
Telefax +49 (0)2773 85-275
E-mail info@cloos.de
www.cloos.de

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Subject to technical alterations.

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