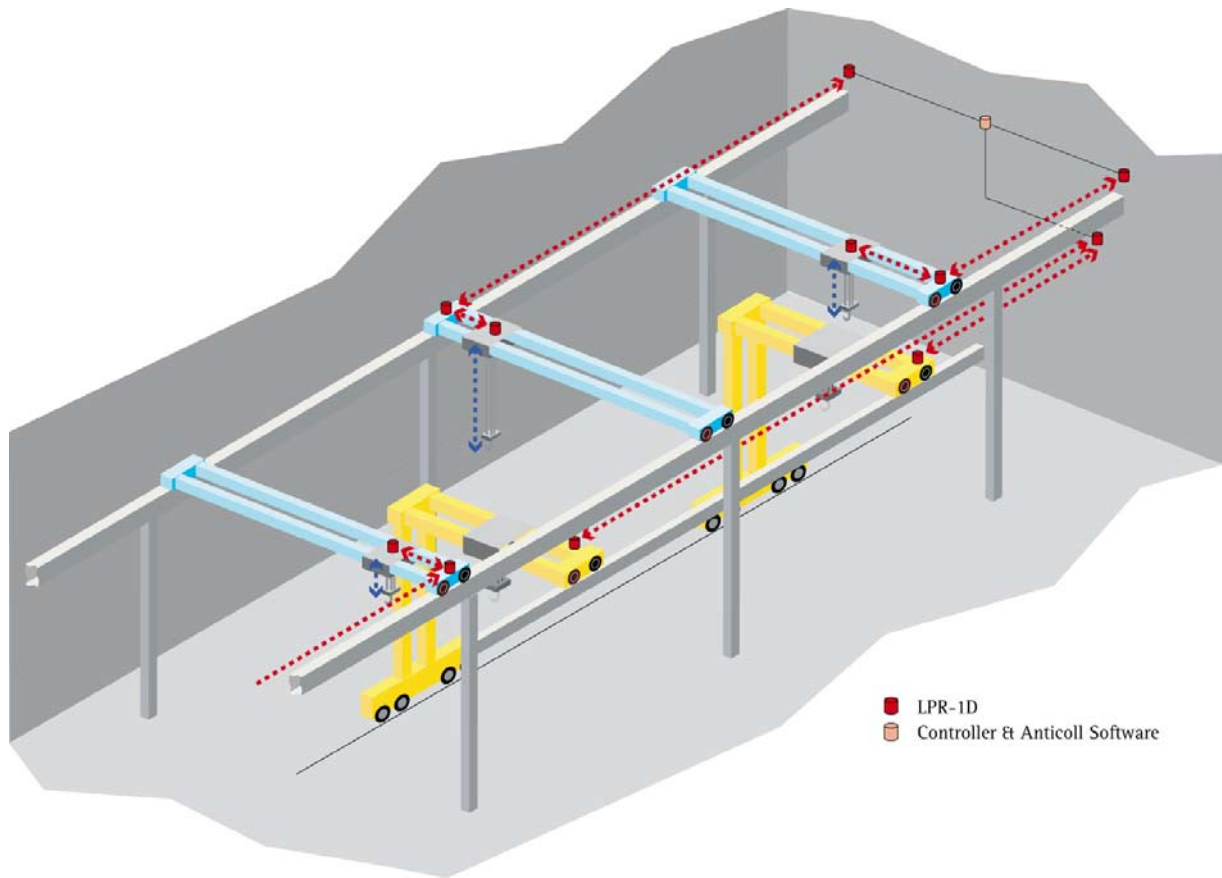


# Anti-collision and 3D Visualization for Cranes



## Symeo AntiColl Software

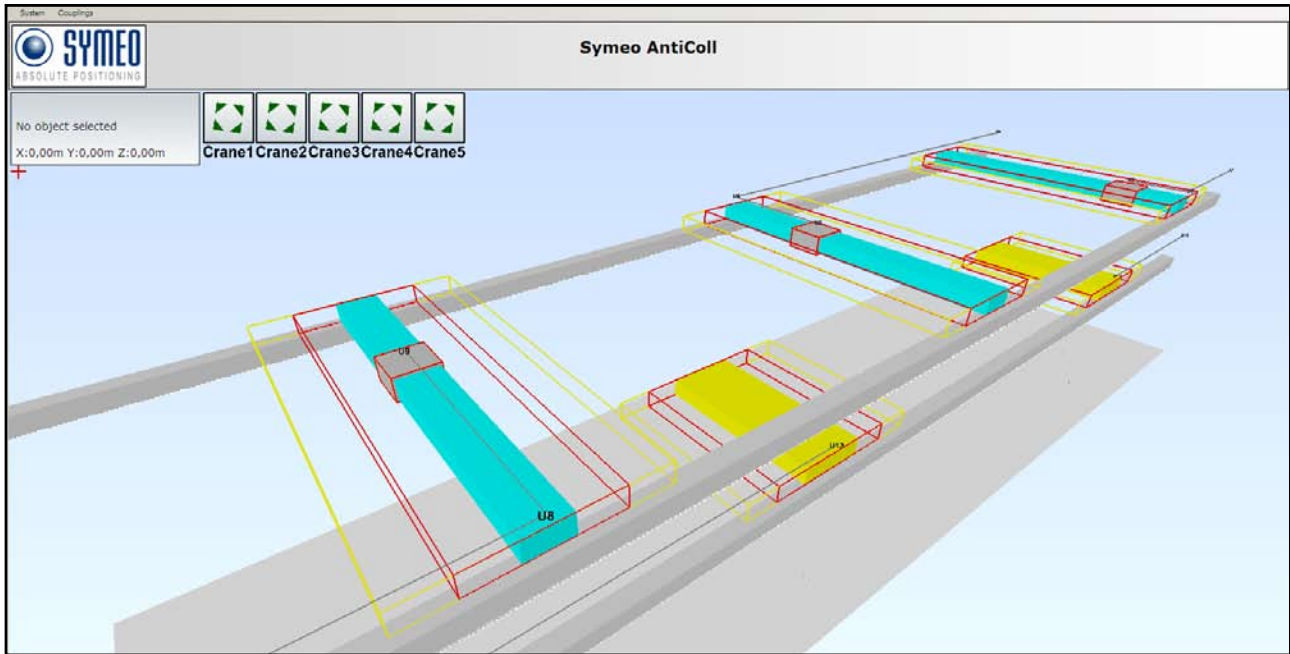
- Triggers warning and stop signals based on preset distance thresholds
- 3D-realtime visualization of crane and trolley position
- Graphic indication of preset alert parameters
- Size of objects (cranes, trolleys, no-go areas) freely configurable
- Quick installation; no programming skills necessary

SYMEO AntiColl is an assistance tool for anti-collision applications. The software allows easy parameter setting for warning and stop signals, based on the distance measured between all related devices. No-go areas can also be defined in order block access of any crane for safety reasons. The PC that runs Symeo AntiColl visualizes all crane movement in realtime with the software's 3D engine.

Highly reliable Symeo LPR-1D sensors acquire the dynamic position of cranes and trolleys. This data is transmitted through Symeo's own radio interface to the fixed LPR reference unit (typically wall mounted) and from there via Ethernet to the PC that runs AntiColl. The dimensions of visual objects are freely configurable and easy to define in AntiColl.

The software monitors the position of all objects to detect warning events and sends back signals (warning or stop) to the respective wall mounted LPR unit via the cable connection. From there, the signals are transferred to the crane units using the LPR radio in order to open dry relay contacts as an input for the crane drive control.

All position information can also be made available for further processing at a TCP/IP interface.



## Technical Data: Symeo AntiColl

<b>System requirements</b>	
Standard PC	P4 – 1,4 GHz 1024 MB RAM TCP/IP interface OS: Microsoft Windows with .NET environment
Interfaces to LPR system	TCP/IP
Number of LPR units	Unlimited
<b>Additional features</b>	
Number of cranes and trolleys	Unlimited
Number of fixed barriers	Unlimited
Number of relays addressed per LPR unit	7
Monitoring of crane hook position	Optional possible, if height sensor signal is available
Warning/Stopping zones	Size free configurable
Real-time operation	Yes
Data transmission	Via LPR radio channel
Parameterization	No programming skills necessary
Functionality of cranes / failure of cranes / failure of measurement track	SYMEO AntiColl is monitoring the functionalities
Position detection	See LPR-1D data sheets