Request for Information

RFI

This RFI is for a system that provides collision warning for ship to shore cranes in order to prevent Boom collision with a ship.

1 Technical Short Description of our Request:

1.1 Main Goal of the system:

1.1.1 Our request is for information about a collision warning system for preventing collision of the Ship to Shore Crane Boom with a ship.

1.1.2 The system shall detect any hazards obstacles in the path of moving crane boom. It shall scan the range near the perimeter of the boom on both sides and detect the objects which are at the height of the boom (water side area).

1.1.3 The system shall detect if the crane approach the ship too closely or the ship drift towards the crane.

1.1.4 The detection zones shall be programmable (adjusted) by software which shall be included with the system.

1.2 Fundamental requirements of the system:

1.2.1 The system shall be suitable for mounting on ship to shore cranes.

1.2.2 The system shall be based on a High reliability (preferred maintenance free if applicable) sensor with proven good experience in this type of protection system in port operation for over 5 years.

1.2.3 The system shall ignore any airborne contaminants, dust and any other interferences covering or obstructing the sensor.

1.2.4 The detection zones shall be programmable by software.

2 Form to fill in as answer to the RFI

General Questions:

Question	Answer
2.1. Company name	
2.2. Company address	
2.3. Company web page	
2.4. Contact person and responsible for answering this RFI	
2.5. Telephone	
2.6. Email	
2.7. Product Type and number which meets our requirements	
2.8. Description of products or services that are already delivered to customers today, and could be comparable to what is requested in this RFI	
2.9. Reference customers using comparable product including contact information.	
2.10. Locations available for delivery, if not worldwide.	

2.11. Availability of spare parts and support worldwide	
2.12. Minimum number of years for supplying spare parts to the product requested in this RFI.	
2.13. Price estimate for a complete system per one unit including system optimization.	

Technical Questions:

2.14. Type of Sensor (technology)	
2.15. Number of sensors in the system	
2.16. Max. range of detection that can be programmed in the system	
2.17. Preventive Maintenance Routine Period – in Years	
2.18. Degree of protection (IP)	
2.19. Operating Temperature ranges	
2.20. Operating Power Supply Voltage	
2.21. Power consumption	
2.22. Number of Detection Zones that can be programmed in the system	
2.23. Alarm outputs: Number of voltage free contacts (NO and NC) for each corresponding detection zones	
2.24. Does the system have a self check mechanism for detecting system failure? – describe shortly	
2.25. Does the system have a watchdog/ready signals (voltage free contact)?	
2.26. Available software for adjusting and programming the sensor	
2.27. Does the software require special licenses or dongles?	
2.28. Does the system operation mode enabled for programming by trained port personal?	
2.29. Type of memory for storing the configurable ranges (FLASH, RAM with Bat.)	
2.30. What types of communication interfaces are available from the system to the Crane PC and PLC?	
2.31. Accuracy of measuring range	
2.32. scan range cycle time	

2.33. What is the System Response time (The time from hazard getting in detection range until output contact is energized)?	
2.34. How long is the System boot time (The time from system power up until fully operational)?	
2.35. System housing dimensions	
2.36. System weight	
2.37. Does the system have a mounting platform for mounting on the far end of the crane waterside boom?	
2.38. What are the recommended locations for installing the system?	
2.39. Does the company have service personals for commissioning the system in Israel?	
2.40. Possible degree of horizontal scan	
2.41. Possible degree of vertical scan	
2.42. System integrity self check functions	
2.43. Does the system affected by weather conditions (fog, heavy rain, bright sunlight)?	
2.44. Does the system susceptible to dust or smear of grease or other contaminants covering or obstructing the sensor?	
2.45. Does the sensor needs regular cleaning?	
2.46. Resistance range to levels of vibrations and shock.	
2.47. Does the system accuracy affected by the color of the obstacle objects?	
2.48. What kinds of human safety standard and classes does the system conform to (according to International or Europe safety regulations)?	