Application example
Total solution for a robotic training cell

Customer and application description
Jaguar Land Rover is a well-known car manufacturer that produces Jaguars at Castle Bromwich in UK. In the production, ABB robots are used and at the facility there is a robot cell for on-site staff training on the robots.

Problem and requirements
The training cell should allow staff to practice working and programming the robot without risk of injury. A fence surrounding the robot is required with a door allowing access. The door must be locked during operation and only allow access while the robot is standing still. Open areas into the robot need to be guarded and e-stops must be available for safe stop of the cell.

Solution
A Quick-Guard fence solution was designed with a door guarded by the Knox safety lock. The open end of the cell is guarded by an Orion light curtain and two Smile emergency e-stops are placed on the cell. All sensors are supervised by a Vital safety controller and a BT51 expansion relay is used to increase the number of safe outputs and give a safe stop signal to the robot.

In the electrical cabinet an ABB power supply feeds the safety controllers, a mini contactor relay, a mini circuit breaker and an interface relay module – all products from ABB, connected using ABB terminals.
Advantages

Highest level of safety enables the staff to focus on training task

A cost effective solution with minimum number of components

A total solution with compatible products from a single source helps speed up the project

Conclusion

With a complete range of products for robot solutions – including safety, control and connection products – ABB can offer competitive aesthetic total solutions that are cost effective and speed up your projects.

Contact us

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