



**impro** technologies®  
ACCESS CONTROL

Complete control in manufacturing  
**QUALITY**

 **impro** technologies®

[www.impro.net](http://www.impro.net)

ACCESS CONTROL



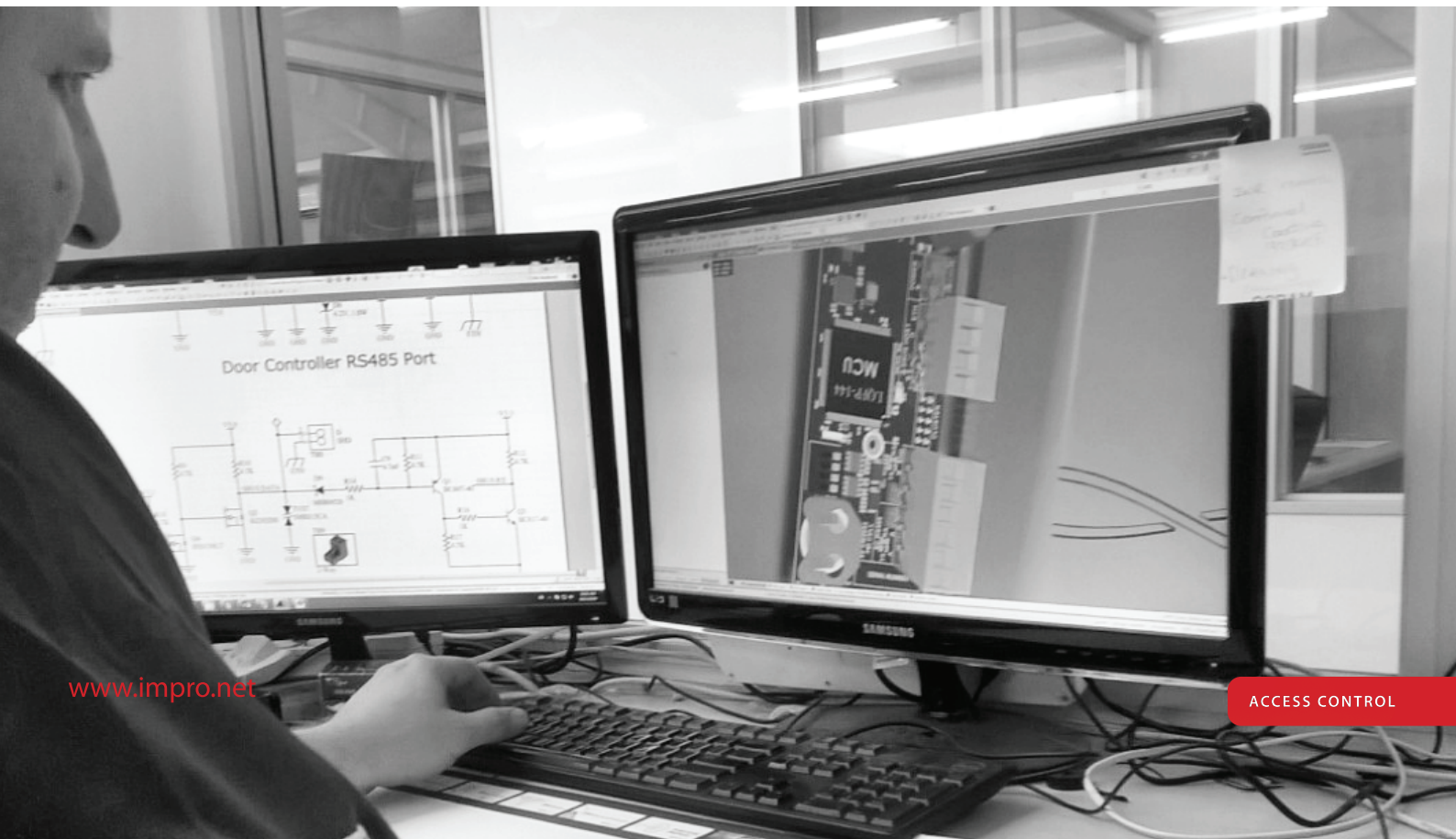
impro technologies®  
ACCESS CONTROL

**A key advantage of Impro Technologies is our in-house research and development, design and manufacturing facilities. This provides us with the ability to provide customers with rapid delivery times, custom development and a quality assurance that comes from some 30 years in the industry.**

## Pioneering **SOLUTIONS**

Every product begins as an idea. Our engineers and developers in R&D design craft this into a product, system and solution that will meet the needs of our customers around the globe.

However, as with everything, testing is key and our manufacturing process is no different. Once the prototypes have been concluded, a phased approach incorporating extensive in-house testing and international accreditation is undertaken. This includes environmental testing chambers to ensure that our products will continue to operate in extreme environments.







impro technologies®  
ACCESS CONTROL

## Component **PLACEMENT**

Once the prototyping and testing is concluded, we're ready for production. The first process is the surface mount technology, where the electronic board is populated with components by the pick-and-place machinery. Part of the process includes the machine verifying the correct placement of each and every component, as an automated quality check.

Thereafter the boards move into a soldering oven, where the temperature ensures the bonding of the component onto the circuit board. In addition to providing a high quality bond, our process is RoHS compliant, which means that no harmful lead is used in the process.

Another visual quality check is undertaken, to ensure the product adheres to our standards, before moving further in the process.

The next step is the hand placement of larger components, with manual soldering, to conclude the population of the board and another quality inspection is undertaken, before the product can move to the next process.

## Protecting the **BOARD**

All the components have been placed on the board, the solder has been concluded and now it's time to protect the "brains" of the product. This is done with conformal coating, which provides protection from water and insect ingress, to ensure a longer life for the product.





impro technologies®  
ACCESS CONTROL

## Final **ASSEMBLY**

The board is now complete and ready to be placed in the exterior housing, ready for packaging. This is done by hand, as this is the most efficient method given the different mix of products produced each day.

Another visual and full operational test is concluded at the end of the process, to ensure the product is able to perform as designed.

This is a significant and important component of the manufacturing process, as our customers are assured that every single product we manufacture is tested prior to being shipped. We believe this is a more thorough and comprehensive method, compared to the more common batch-sampling where a single sample is pulled from a batch of manufactured goods.

## Packaging for the **WORLD**

The unit is now a fully operational product. The final stage is to place the device into the relevant packaging, along with all the necessary supporting documentation such as user or installation manuals, and place this into our finished goods store, ready for shipping to customers.

The logistics division is then responsible for shipping these finished goods around the world, to meet our customer order requirements.

## A global **PLAYER**

The final product is exported to over 60 countries, spanning four continents. As part of our manufacturing process, we also ensure that international safety and accreditation standards are exceeded for each of our markets.



[www.impro.net](http://www.impro.net)

ACCESS CONTROL