

Two year ROI forecast on robot installation at CED Thurrock

Submitted by: Armitage Communications

Tuesday, 21 June 2016

CED Stone Group (<http://www.ced.ltd.uk/>) based in Thurrock in Essex, has experienced a number of improvements to its palletising process since upgrading its robot installation to an ABB Premium Refurbished IRB6640 model. The IRB 6640 has the ability to stack the 25kg sacks of aggregate quicker and higher than its 25 year old predecessor, resulting in an average of 1,680 bags palletised per day.

The supplier and manufacturer of natural stone products had a 25 year old ABB IRB 6000, sold by a non ABB System House, installed at its site for the past five years. The initial decision to automate its packing and palletising process was made when CED won a large contract with Steintec Paving Systems, whose prominent projects include paving the O2 arena in London, the European Investment Bank in Luxembourg and the historic Jaffa Road in Israel.

Since that time, the original model had broken down and with no parts available to replace it, CED contacted ABB Robotics UK for an alternative solution. The company has a historical relationship with ABB as Byron Griffiths, System Service Account Manager, installed a robot at the CED Scotland site 15 years ago.

Given this experience, Byron was called in to help with the Thurrock project, which involved a number of challenges, not least transporting the robot and its associated peripheral equipment to the site. Byron explains, "The biggest hurdle we faced was the remote location as the process takes place in what's essentially a shed in a quarry. Transporting all of the heavy equipment there was difficult but luckily there was a power supply in the shed already."

Howard White, Southern Area Manager at CED said, "There were initial teething problems with the light guard as we chose to use this part from the original equipment with the brand new system. We expected this to happen but ABB resolved the issue straight away. In fact, the whole installation only took a week. I expected about three weeks of messing about and settling in, but in the end there was hardly any downtime."

The project also included adding a new safety circuit to meet the latest regulations, as well as a new controller, the IRC5, which combines flexible, high-level programming with basic features and functionality.

Howard White explains, "With visual-input diagrams, it's much easier to understand."

Furthermore, the manual workers who took over whilst the original robot was out of operation were relieved to be returned to their usual roles at the site. The CED staff had hand stacked a total of 4,000 bags over a period of seven months which the robot alone can now achieve in less than three days.

This boost in productivity has surprised Howard White. "We originally estimated that the return on investment would take around five years, but the versatility of the robot combined with its speed has meant the payback should take no longer than two."

When asked about the possibility of automating any other processes at CED in the future, Howard says:
“We have no plans at the moment but we would consider building another bagging plant with a robot if we got another large order. We would highly recommend and use ABB again.”

To find out more, please email robotics@gb.abb.com or call 01908 350300 ref. ‘CED Stone Group’.