

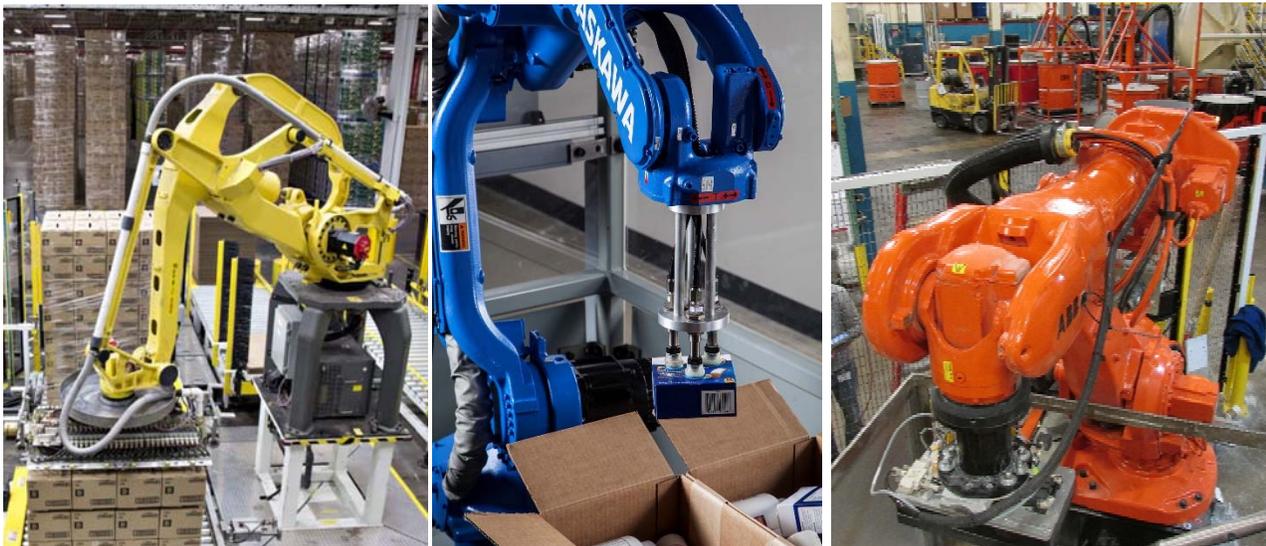
## IF YOUR ROBOT ONLY HAD A BRAIN...

### Problem Solved:

**Neocortex Software “it is the brains your robot application deserves”. It is a Retrofit application for any existing Robot that will Improve its Usefulness, Speed, and your Productivity!**

#### The Problem:

A major heavy equipment manufacture installed an industrial robot with a 3D sensor to pick and place a range of service parts from inventory totes to outbound cases, based on daily orders. The company maintains an inventory of thousands of different parts. The parts presented to the robot randomly. In practice, the solution required hours of off-line programming to create the appropriate path planning for each part. When new parts were introduced, which is normal in every application, additional off-line programming was required. This created a continual cycle of develop, test and release demanding the retention of a full-time roboticist. They were necessary for the robot to remain functional as products demands changed, diminishing the return on investment. Due to the specialized skill of this roboticist, there was always a long punch list of reprogramming, causing the robot cell to run at an impaired capacity. As a result, the company had to continue to maintain a manual process line, which is just the opposite of what was intended in the purchase. The sunk capital costs were compounded by more re-programming, making the expected financial metrics nearly worthless.



#### The Solution:

Universal Logic analyzed the existing robot, the desired workflow and the company’s inventory part characteristics throughout the supply chain to determine the most adaptable sensor array for the job. The existing robot and tool kinematics were loaded into Neocortex so the software would understand the physical configuration of the machine. The new sensors were spec’d to accommodate resolution, field of view, and



throughput speed. The Neocortex fanless, industrial PC was integrated into the existing PLC and robot controller. A selection of parts, representing the scope of size and weight, were shipped to Universal's factory for optimization on an equivalent robot. After a factory acceptance test with the client, the software, sensors, and computer were shipped to the existing robot cell. The computer was networked to Universal's cloud service, allowing for nearly instant service access when required 24/7. A Universal technician installed the solution, conducted a go-live and acceptance test, and trained the employees.

The robot is now automatically capable of handling the vast part variability without human reprogramming or intervention. That includes the onboarding and integration of new parts going forward. The upgrade, including the Neocortex yearly subscription agreement, allowed the customer to truly maximize their prior robot investment, redeploy eight laborers to other duties, and exceed an extremely fast return on investment for both the original robot and the upgrades.

If you have an underperforming robot, a robot that has been taken off-line due to its lack of adaptability or a robot that you would like to be re-purposed, Universal Logic has got the brain power you need!

CONTACT: [sales@universallogic.com](mailto:sales@universallogic.com) 615-366-7281