



## **Summary & PowerPoint**

# **Robotics-based Packaging Systems are Simpler than You Think**

While robotic automation can offer several benefits to bakery producers, there is a widespread perception of complexity of robots and the technologies that control them. Historically, robotic packaging systems included two separate control systems - one for the robot and one for the machine control functions. The general feeling amongst bakery producers has been that you have to be a robot programmer to run a robotics-based packaging system. That's quite the opposite these days. Machines are now simpler, smarter and require much less operator interaction. Robot motion is no longer programmed and the current generation packaging systems decrease the electrical footprint of the system, reduce the amount of hardware required, minimize changeover time and require less spare parts. All making your packaging system more productive, safer and easier to operate.

### **Learning Objectives**

- Understand how next generation robotic packaging systems are truly simpler, smarter and easier to operate
- Understand how increased uptime and overall production of their bakery packaging line can increase using robotic automation
- Calculate the payback (ROI) of packaging automation

### **Presenter**

Craig Souser, JLS Automation

### **Presentation Time**

Tuesday, February 26, 2019

12:45 pm - 1:20 pm

### **Session**

Breakout 6



## Robotics-based Packaging Systems can be Simpler than You Think

Craig Souser  
President  
JLS Automation



### Agenda

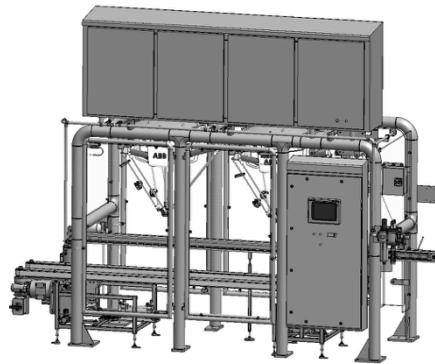
- The problem – complex robotic systems
  - Pain Points
  - The Dilemma
- A Case Study – Fully Integrated Machine Control
  - Objectives of the design
  - Results
- New support technology
- Summary – Questions & Answers

## The Problem

- Robotic systems are highly desirable, but .....
- Bakeries continue to struggle to find labor
- Problem with robotic installations are often the integration not the robot itself
- Robot control versus Machine Control
- Technical Support resources are in short supply
- Ease of use is a major concern
- Access to support is a constant concern

## A Case Study Integrated Machine Control

Examine a vision guided robotic based system

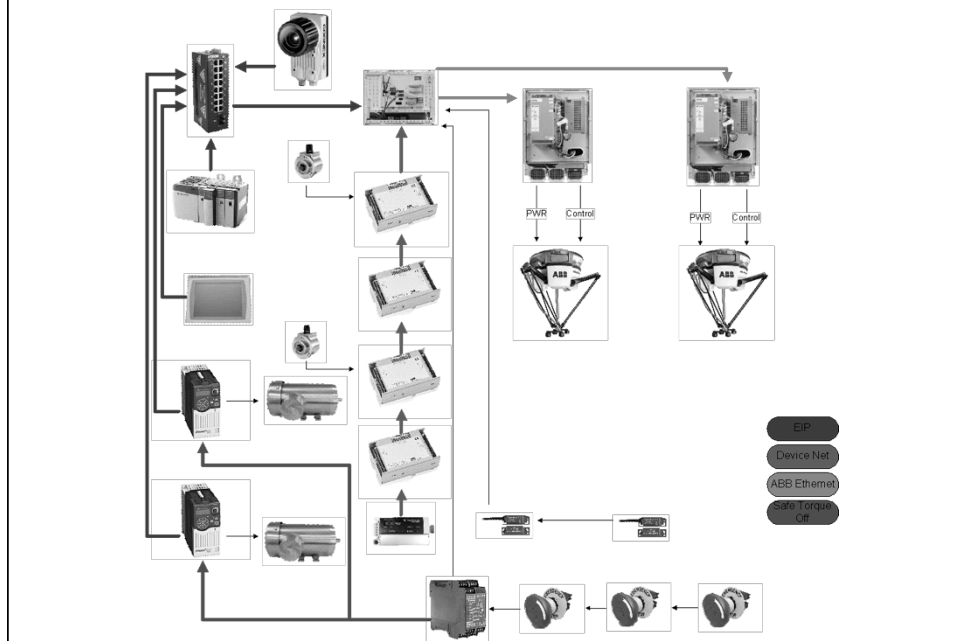


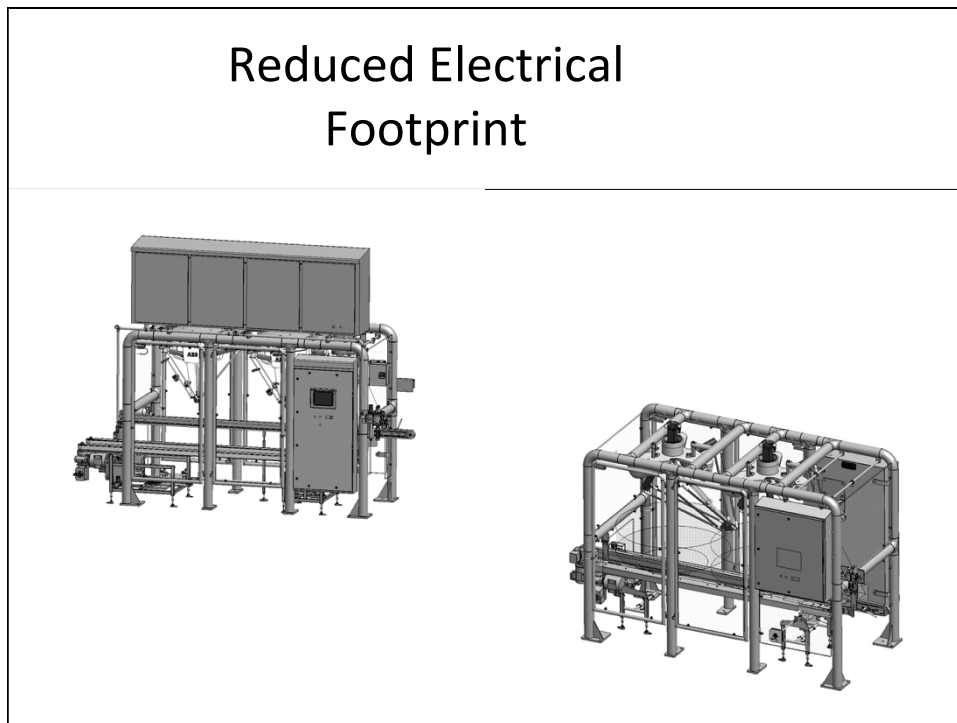
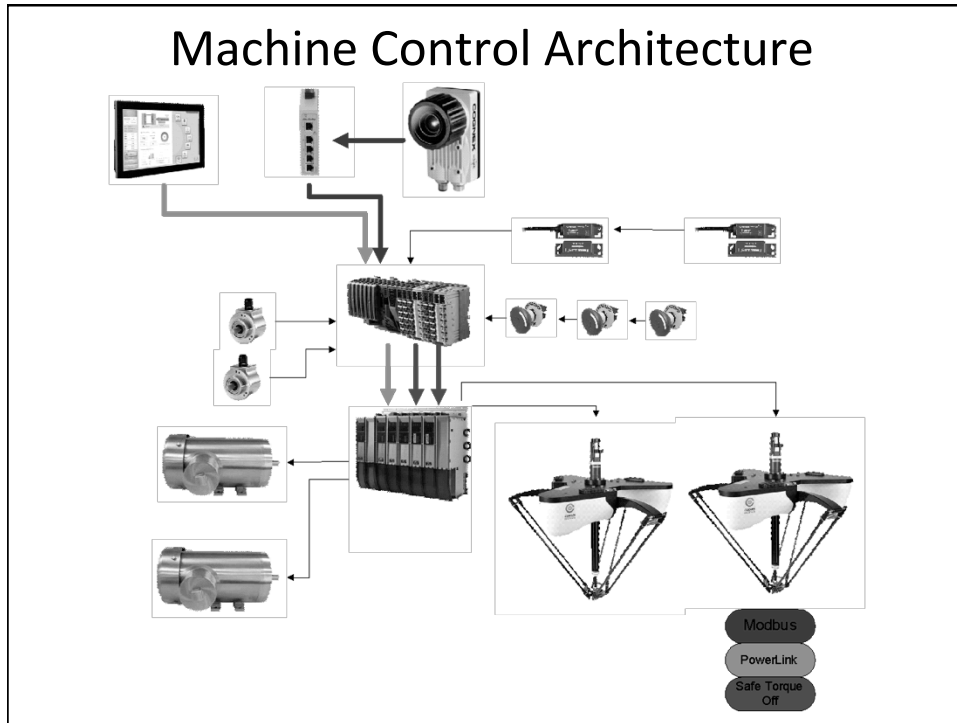
## Integrated Machine Control

### Objectives:

- Reduce complexity
  - Fewer components
  - Fewer interfaces
- Ease of Use
  - Operations
  - Changes
- Reduce Electrical Footprint

## Classic Control Architecture





## HMI vs Teach Pendant

- Intuitive Interfaces – HTML based
- Elimination of the Teach Pendant
- Reduction or elimination of robot programming

## Using Technology to Simplify Support



## Summary

- Robotic based automation is in high demand
- Concerns with robust controls integration
- Moving to a true machine control eliminates many potential issues and reduces complexity
- AR based remote support technologies from Microsoft and Google are enablers to help deal with the growing technology gap
- Questions ?