Innovation & Technology Forum

Integrated Motion on EtherNet/IP

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Agenda

> THE EQUIPMENT

> THE LABS

> THE PROGRAM

> SHARE YOUR FEEDBACK

> START THE LAB

The Equipment

- ControlLogix® controller demo
  - ControlLogix 5580 and 5570 controllers, GuardLogix® 5580 controllers and chassis (Bulletin 1756)
  - Stratix® 5700 switch (Bulletin 1783)
  - Compact I/O™ module (Bulletin 5069)
  - PanelView™ 5500 HMI (Bulletin 2711)

The Equipment

- Kinetix® 5700 servo drive demo
  - Kinetix 5700 power supply and dual-axis module (Bulletin 2198)
  - POINT I/O™ module on EtherNet/IP (Bulletin 1734)
  - VPL motor
- Tuning Rig Demo
  - VPL motor with 70:1 load ratio
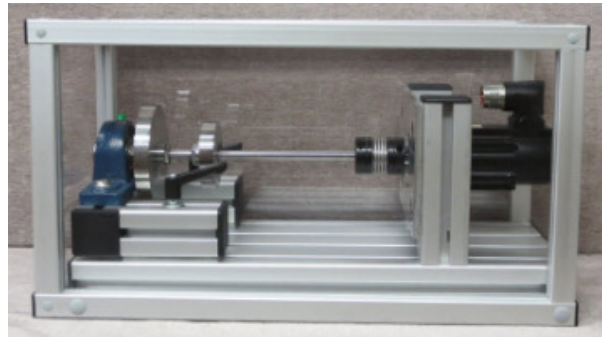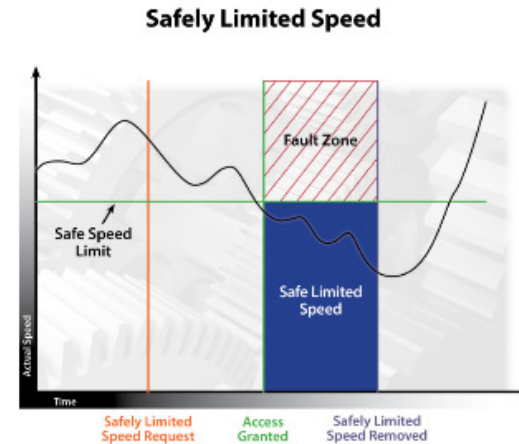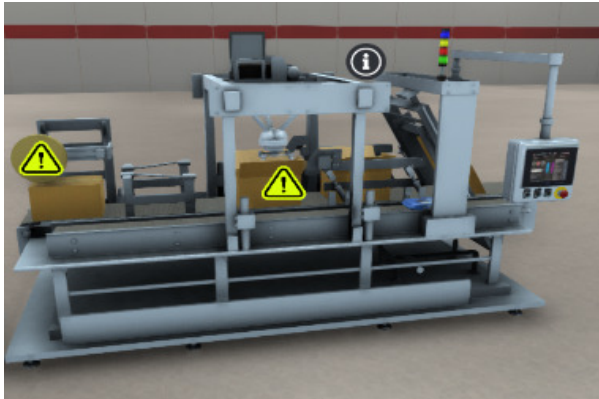
The Labs

- Tuning Techniques

  - Learn about various tuning features available in Studio 5000® design environment when paired with the Kinetix® 5700 servo drive and how they perform on the difficult-to-tune mechanical rig (70:1 Load Ratio)

  - Learn how to configure Load Observer and Tracking Notch

 - Monitor the system while Tracking Notch is running
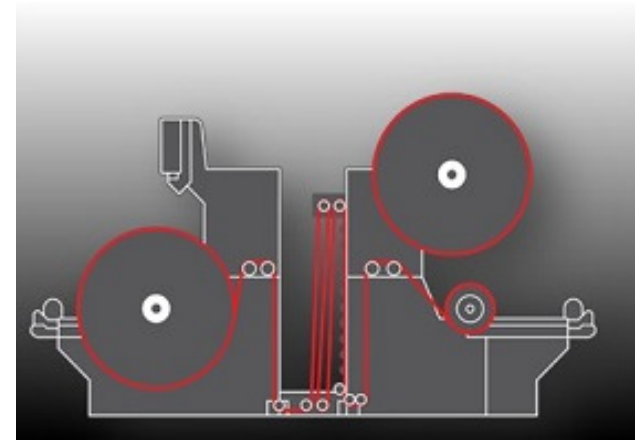
The Labs

- ## Advanced Safety

  - See how controller-based safety functions can be flexibly integrated into your machine

  - Seamless safety communications over EtherNet/IP

  - Run your machine at *Safe Speed* to allow minor machine servicing like adjustments, feeding, cleaning and washdowns without shutting down the machine
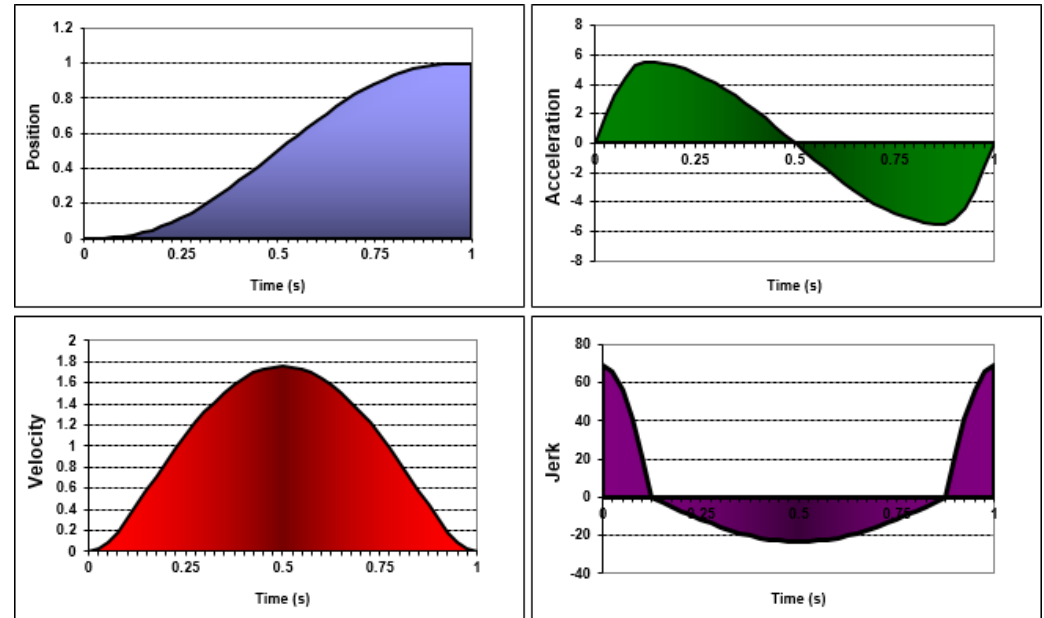

Safely Limited Speed

Stop Functions – Safe Stop 1
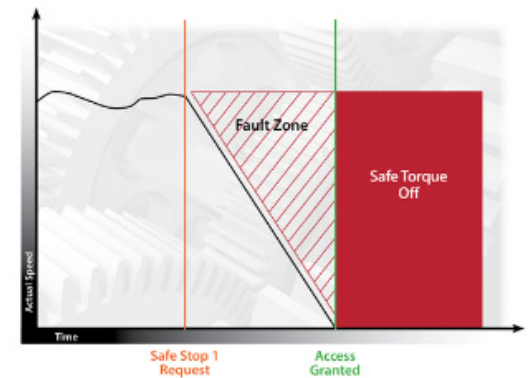
The Labs

- Motion CAM
  - See how various motion profiles influence velocity, current, and position error
  - Utilize a CAM to implement complex motion profiles
  - Create your own CAM table in Excel and insert it into Logix designer

The Labs

- ## Coordinate Motion

  - Expand your knowledge of Logix designer capabilities to command motion in Cartesian space

  - Build a coordinate system - learn about coordinate instructions and how they are used in a glue machine application


Glue Machine
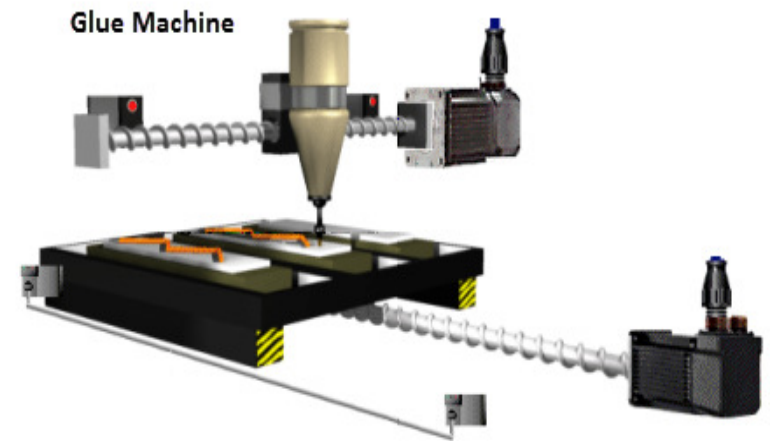
The Program

- ## Power Automation Device Library

  - The Power Automation Device Library is a tested, documented and lifecycle-managed object library providing preconfigured status, diagnostic faceplates, and Add-On Instruction sets for Rockwell Automation discrete, velocity, and motion automation devices

  - The Automation Device Objects may be used with Machine Builder, Process, and Packaged Libraries or as standalone components

- ## Machine Builders Libraries – Frameworks

  - From the ISA-88 physical model, the Unit and Equipment Module are represented in the framework

  - Both Unit and Equipment modules are provided independently as libraries, allowing the Unit module to be used by itself or with up to 31 equipment modules associated to it
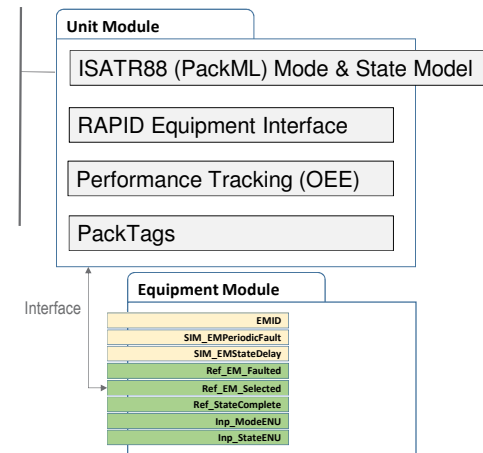
Rockwell Automation

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Thank you