

PROMAT'S LATEST & GREATEST



PROMAT 2015

McCormick Place South | Chicago
March 23-26, 2015
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Session 108
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ISC CHARTER

- Integrated Systems & Controls (ISC) members are leading suppliers of integrated material handling equipment, controls, systems & services. They supply systems to virtually every major manufacturing & logistics sector worldwide.
- ISC provides voluntary standards for the mechanical, structural and electrical design of integrated systems – & formulates guidelines for proper use, operation & maintenance.

32 ISC MEMBERS

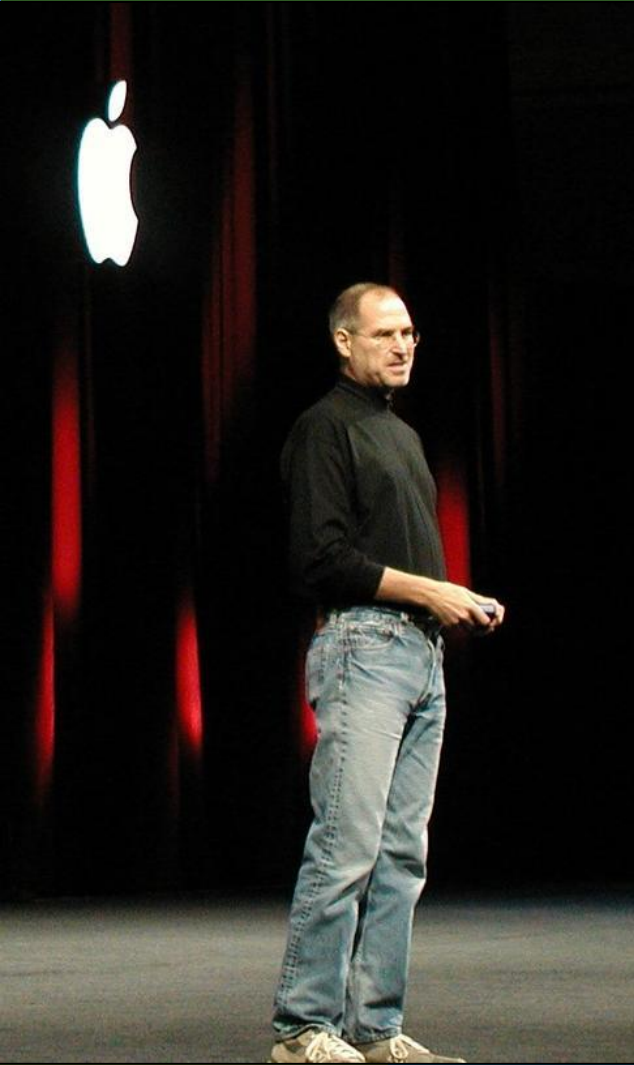


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Steve Jobs 1955 - 2011



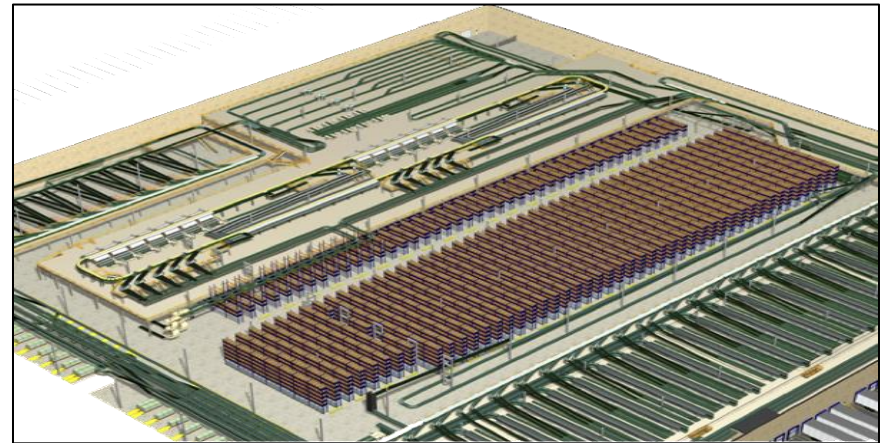
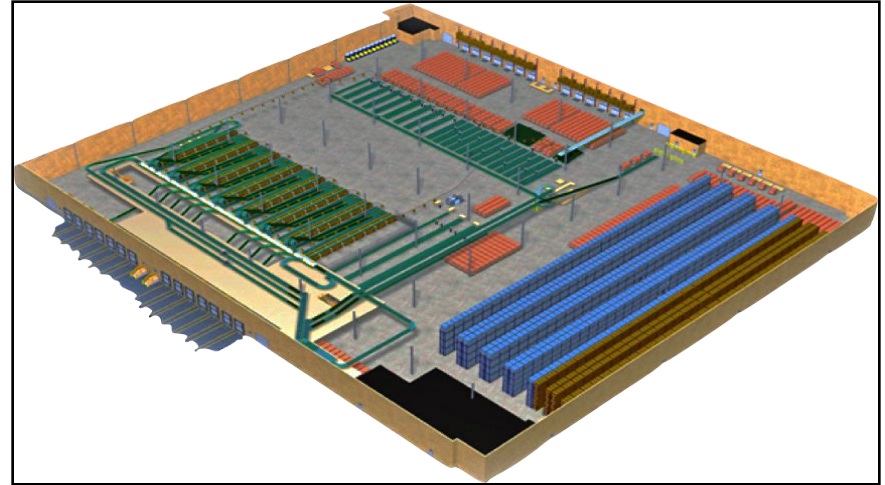
"A lot of times,
people don't
know what
they want until
you show it to
them!"

The Latest & Greatest Line-Up

- Engineering & Consulting
- Automated Storage Systems
- Conveyors & Sortation
- Controls
- Sensors
- Automatic Identification
- Software

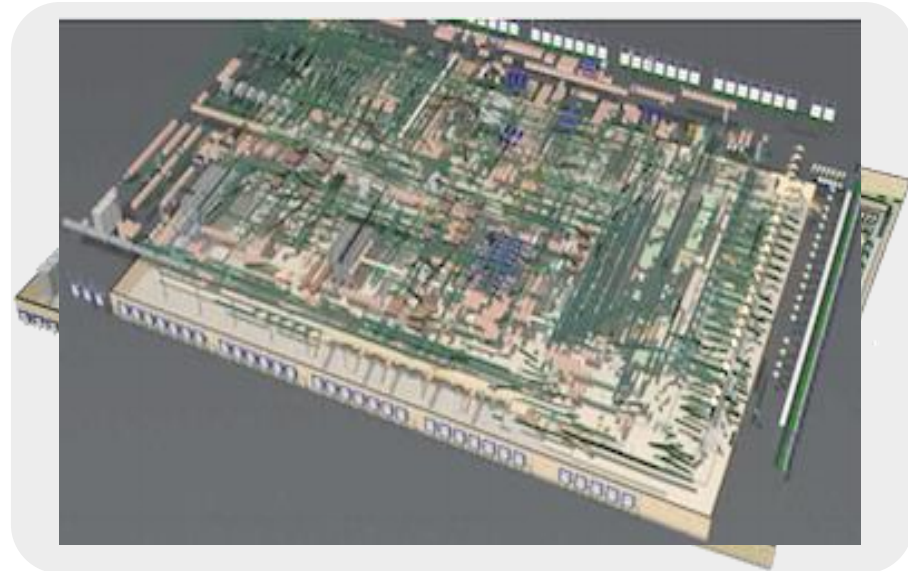
Latest & Greatest: Engineering

ISC engineering and consulting members fine-tune supply chain strategy, focusing on integrating people, processes, handling equipment and systems; optimizing networks and facilities; rationalizing inventory deployment; and, modeling, designing and deploying solutions that meet client requirements.



Latest & Greatest: Engineering

Conflict Interference Avoidance tools integrate new and modified facility architectural, mechanical, HVAC, electrical, plumbing and material handling contractor drawings into three-dimensional models that facilitate detection and correction of design and layout flaws before facility construction or retrofit begins.



Conflict & Interference Avoidance Modeling

Latest & Greatest: Engineering



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Conflict
Interference
Avoidance

Automated Storage & Retrieval Systems

- AS/RS machines are used as production buffers, work-in-process storage systems and distribution systems. They provide storage, staging & transportation using such storage media as totes, trays and pallets.
- AS/RS are often backed by a robust software suite including solutions for: WCS, WES, WMS, LMS (WFM), OMS and TMS.
- The software can operate as a stand-alone solution for manual or conventional operations or integrated with automated material handling equipment.

Latest & Greatest: AS/RS

AS/RS Benefits

- Reduced labor costs up to 50-70%
- Decreased building footprint up to 40-50%
- Improved order and inventory accuracy



Latest & Greatest: Conveyors



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High-Speed Sorter for Small Packages & Flats

Latest & Greatest: Conveyors



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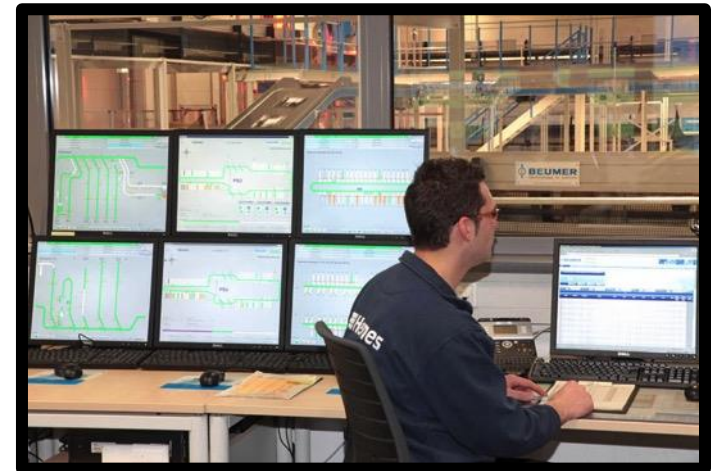
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Sorter Controls

- *Sorter Control* systems manage and control every function related to the material handling equipment. It executes each of the control commands for all of the mechanical components of the sorter and its peripheral equipment (induction units, dimensioning and weighing devices and scanners), and processes the signals from in-line sensors and monitoring units.
- High-efficiency order consolidation systems and software provide the ability to process orders quickly and accurately with minimal labor costs.

Sorter Control Benefits

- More efficient and adaptable sort logic:
 - Order selection using linear optimization algorithms
 - Flag-based sort logic configuration
 - Destination attributes
 - Work Zones
- Enhanced user communication and interaction:
 - Real-time dashboards
 - Mobile devices for operations and maintenance staff
 - Improved production efficiency reporting



Human Machine Interface (HMI) USB Accessories

- USB accessories are designed to expand the selection range of user applications by offering value added and differentiated HMI solutions.
- Applicable for all types of material handling equipment, these innovative USB accessories can be easily installed and operated with HMI's.
- USB accessories increase the functionality and capabilities of the HMI. Standardized USB Accessories are easy to connect, easy to program, and easy to use further enhancing the operator experience and simplifying material handling systems operations.

HMI USB Accessory Benefits

- Time & money savings with no wiring required for linking accessories to HMI with USB.
- Ability to add fingerprint reader for access control, tower light for signaling, illuminated USB switch for display & acknowledgement of alarms or physical buttons, plus USB Keyboard for alpha-numeric or function key functions
- Remote connectivity via mobile app for monitoring and controlling machines



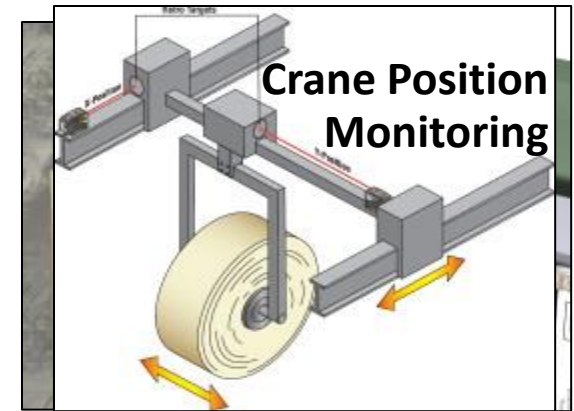
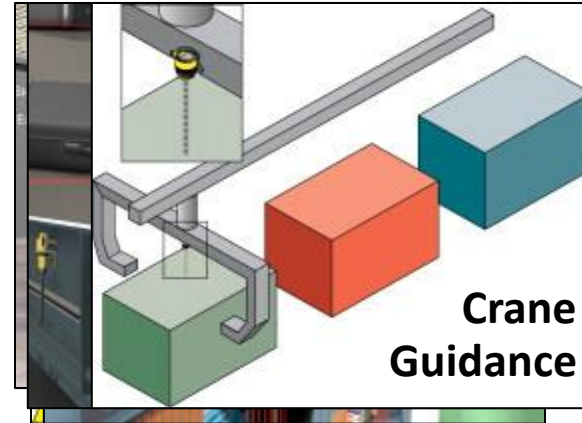
Latest & Greatest: Sensors

APPLICATIONS

ISC members continue to refine photoelectric, ultrasonic & vision sensors and systems for material handling control in plants, warehouses, distribution centers and transportation.

Benefits include:

- Improved accuracy
- Reduced errors
- Increased throughput
- Lower labor costs



Latest & Greatest: Sensors

Cartons on a conveyor pass through three pairs of light curtains, which measure height, length & width at ranges of up to 4 meters. The total number of beams blocked for each curtain pair provides dimensions, which are sent to a controller for inbound carton storage location selection, picked carton sortation control and shipment trailer loading.

In addition to lower labor costs, **benefits** include improved throughput and warehouse and outbound trailer capacity utilization.



LIGHT CURTAINS

Latest & Greatest: Automatic ID

Static & in-motion dimensioning & weighing systems for flats to small parts, cartons, pallets & oversized & irregularly-shaped items.

These products & software provide the cube & weight data essential to optimizing storage utilization, packaging & cartonization in warehousing, freight handling & transportation applications at stationary & mobile work stations or on conveyors running at speeds up to 600 fpm.



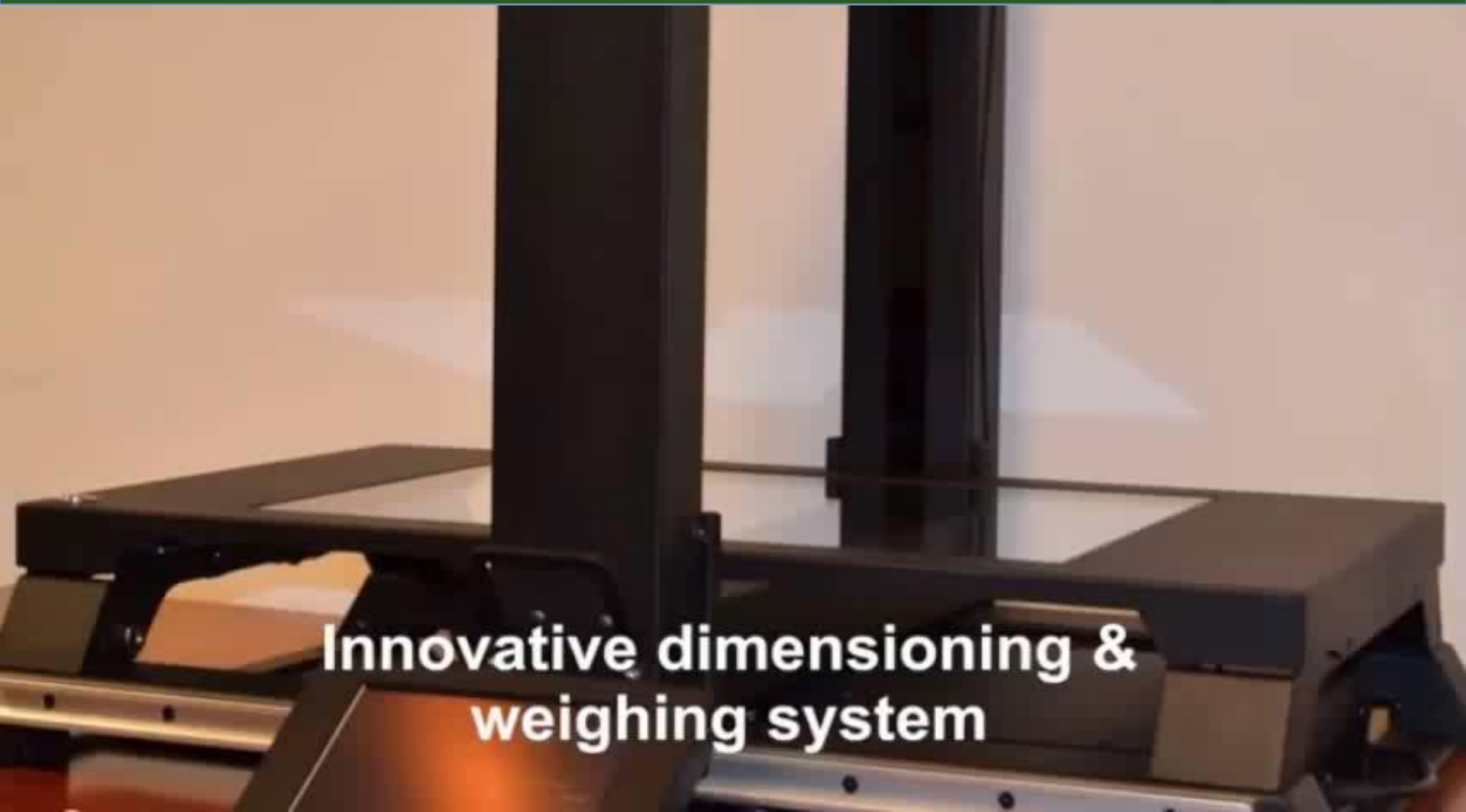
Latest & Greatest: Automatic ID



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Innovative dimensioning & weighing system

IMAGE-BASED CODE READERS

Imagers are rapidly gaining traction as alternatives to traditional laser scanners. This device, for example, handles a wide range of code positions and item heights with a large field of view and dynamic focusing. It identifies packages on conveyors running at up to 4 meters per second to enable material handling automation and provide end-to-end traceability in the supply chain.

Applications include:

- Automated sorting systems
- Tire identification
- Serial number, lot code & manufacturing date tracking



Latest & Greatest: Automatic ID

Dual Sided Packing Slip / Shipping Label System.

The shipping address is printed on the top label; the packing slip, on the label liner. Packing slip is accessed by tearing a zipper strip.

- Printed simultaneously, shipping & order detail guaranteed to match
- Packing slip hidden behind label
- Need for separate packing slip & plastic sleeve eliminated
- Increased throughput
- Reduced labor, materials & waste



Latest & Greatest: Automatic ID

SHIP TO:
 FOX IV Technologies, Inc.
 6011 Enterprise Drive
 Attn: Shipping Dept
 Export PA 15632-8969

PA 156 9-10

UPS 2nd DAY AIR
 TRACKING # 1Z 1X7 621 02 2204 9017 **2**

Billing PIP

REF #1: TL
 REF #2: BOX

TEAR HERE FOR PACKING SLIP
 Access to all information is available at www.ups.com
 ©2014 UPS of America, Inc. Pat. RE 39,100 - Patent Pending.

SHIP TO:
 FOX IV Technologies, Inc.
 6011 Enterprise Drive
 Export, PA 15632
 ATTN: Shipping Department

BILL TO:
 FOX IV Technologies, Inc.
 6011 Enterprise Drive
 Export, PA 15632
 ATTN: Accounts Payable

Sales Order #: 123456
 Purchase Order #: FX123444
 Order Date: 02/23/09
 Ship Date: 02/23/09
 Ship Via: UPS

Part #	Description	Shipped
PF22-001-00	FOX IV Operators Manual	1
PF22-002-00	No 3010S Label Printer Applicator Photocopye	2
PF22-003-00	Label Design Software	1
PF22-004-00	Cable - 6 foot	2
PF22-005-00	3010S Label Printer Applicator	2
PF22-006-00	Thermal Transfer 100,000 Labels 4" x 6", 18" OD, 3" ID	24
PF22-007-00	Wax Ribbon 4" wide, 1478 ft	24



Dual Sided Packing Slip / Shipping Label System

Latest & Greatest: Software

Using a wide range of intelligent sensors, **Package Analytics Software** enables retailers to validate package content, size and integrity to reduce losses in manufacturing, warehousing and transportation.



Package Analytics Software

Toolkit for real-time monitoring/detection of material handling system problems through image capture and analysis.

Using intelligent sensors & code readers, the software enables users to validate package content, size & integrity to reduce losses from unexpected shipping charges, damage, returns or fraud.

Benefits

For Operations or Maintenance

- Access images or receive alerts for reviewing images of problem packages and investigating reasons for no-reads, multi-reads, oversized packages, etc.

Compliance Labeling

- Capture & send high-resolution images of non-compliant labels (content, location, etc.) to vendors.



Receiving

- Create images to report damaged packages to shippers and carriers.



Customer Service

- Retrieve date & time-stamped images for customer orders to validate that correct items were shipped.

Supply Chain Management Software

- Software solutions enable more efficient and agile operations. The broad range of Supply Chain software solutions includes Demand Planning, Order Management, Warehouse Management, Labor Management and Transportation Management.
- Covering multiple domains, ISC Software providers address a wide variety of applications, including:
 - Dock Scheduling, Receiving, Storage, Cross-Docking & Inventory Management
 - Replenishment, Picking, Kitting, Packing & Shipping

Supply Chain Management Software Benefits:

- Improved productivity
- Improved asset utilization
- Increased inventory accuracy
- Reduced errors & damage
- Lower freight costs
- Improved customer service



ISC's Show Locations



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The floor plan shows the following company locations:

- AGILE BUSINESS MEDIA, LLC** (top left)
- BANNER** more sensors. more solutions. (top left)
- BEUMER** (top center)
- CS** CARTER CONTROL SYSTEMS (top center)
- CUBISCAN** (top right)
- DEMATIC** Creating Logistics Results (top right)
- egemin** (middle left)
- fives** (middle left)
- FOX TV Technologies, Inc.** (middle center)
- ISD** INTEGRATED SYSTEMS DESIGN (middle center)
- Intelligranted** (middle right)
- intralox** (middle left)
- JBT Corporation** (middle center)
- Jda** (middle center)
- KNAPP** (middle right)
- Lenze** (middle right)
- MHI & I** MATERIAL HANDLING & LOGISTICS (bottom left)
- MIAS** (bottom left)
- Muratec** MURATA MACHINERY USA, INC. (bottom center)
- OS** (bottom center)
- Retrotech** A SIMON COMPANY (bottom right)
- Rockwell Automation** (bottom left)
- Schneider Electric** (bottom center)
- SI SYSTEMS** (bottom center)
- SICK** (bottom center)
- SpanTech** (bottom right)
- St. Onge** (bottom right)
- swisslog** (bottom left)
- SYSTEM Logistics** (bottom center)
- TRANSBOTICS** (bottom center)
- viastore. systems** (bottom right)
- Westfalia** (bottom right)



ISC's Latest & Greatest

For More Information:

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www.mhi.org/isc

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