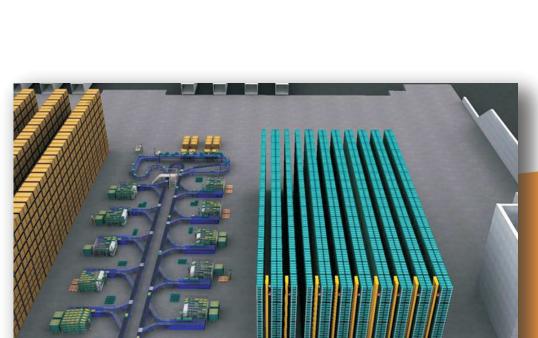
## Engineer Design Build







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### **HISTORY**

abco automation grew out of its partner company, ABCO Storage Solutions, a premier garment warehousing and industrial supply company since the 1930's. As a result, abco automation benefits from combined industry knowledge and experience of over 50 years. In fact, ABCO Storage Solutions worked side-by side with abco automation's key executives to design and install distribution automation for the garment industry.

abco automation was formed to bring European intralogistics knowledge and efficiencies to the North American market. Very quickly, abco automation's reach extended internationally from the US to Canada, Mexico and Europe. Now, we can represent US, Canadian and Mexican companies that have European interests as well as European companies that have US, Canadian and Mexican interests.

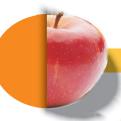
## Product-to-person Picking Systems -> Hyper-efficient Distribution

## "Best-practice" vs. "Best-system"

"When you have a hammer, everything looks like a nail."

There are dozens of system integrators from which to choose. Unfortunately for distribution centers, most only offer solutions that have been around since the 1980s. Why? Their goal is to provide the industry best practice; not the best system. In doing this, they miss the true mission - to create a competitive edge for their client with a custom-designed, hyper-efficient distribution operation by applying contemporary technologies, software and business practices.

### What Makes Us Different?



abco automation brings technologies to its mission is fairly approach, delivered by an product-to-person

abco automation seeks products and solutions investment; not simply automation, our partner distribution solutions to middle-market clients. partners in search of a true competitive edge, that offer real value and high return-onwhat everyone else is already doing. At abco

best-of-breed "product-to-person" distribution

straightforward: Through a consultative sales

expanding US and Mexico client base. Our

American company, we offer best-of-breed

companies are not satisfied with "bestpractice;" they require the industry's best-system - at least a 30% improvement on "best-practice."

abco automation's offers a competitive edge with the lowest cost-per-unit-shipped.





### The Genius of Mr. Pareto

Italian economist Vilfredo Pareto first observed in 1906 that 80% of the land in Italy was owned by 20% of the population. Years later, business-management thinker, Joseph M. Juran, developed the 80/20 principle and named it after Pareto after observing that 20% of the pea pods in his garden contained 80% of the peas.

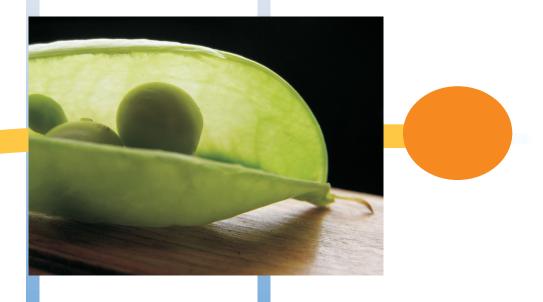
### The Point: Only 20% of your SKUs make up 80% of your volume!

Balance is not always good! Instead, leveraging the natural imbalance of the Pareto principle is an opportunity to drive tremendous benefits for your company. Single-technology distribution systems assume that all products should be handled the same way. Mr. Pareto would disagree. His principle suggests that applying different technologies to the 20% of SKUs that generate 80% of your business than those applied to the rest. In other words, we need to apply multiple technologies to optimize the efficiency of different "bandwidths" along the Pareto Curve.

abco automation does the analysis for you, categorizing all the SKUs in your warehouse to provide the most efficient solution for your needs.

## Product-to-person Picking Systems > Hyper-efficient Distribution

Class SKU	SKU Cumul	SKU, %	SKU, %	OL/ Day	OL/ Day	OL/ Day,%	OL/ Day	Units/Day	Units/Day	Units/Day	Units/Day
JIG35 JKU	GIVO GUIIIUI	3KU, 76	Cumul	OL/ Day	Cumul	OL/ Day, 78	Cumul, %	Units/ Day	Cumul	%	Cumul, %
AA 215			2.00%	535	535	17%	17%	548	548		17%
A 1,932			20.0%	1,396	1,931	45%	62%	1,418	1,966		61.9%
B 1,610			35.0%	507	2,438	16%	78%	512	2,478		78.1%
C 3,220			65.0% 100.0%	498 192	2,937 3,129	16% 6%	94% 100%	503 194	2,981 3,175		93.9% 100.0%
Totals 10.732		100.00%	100.0%	3.129	3,129	100%	100%	3.175	3,175	100%	100.0%
10(415   10,732	• [	100.0076		3,123				3,173			
3,800 3,600 3,400 3,200 3,000 2,600 2,400 2,000 2,000 1,400 1,400 1,200 1,000	6% 646 864 864 1076 1076 11.50		2011 326 33% 3426 3426 343% 3438 3656	36% 3,871 38% 4,086 4,086 4,301 4,301 4,301 4,301 4,301 4,301 4,301 4,301		5.806 56% 56% 58% 60% 6.451 6.451 6.451					100% 95% 90% 85% 80% 75% 65% 66% 65% 60% 55% 40% 15% 10% 50% 10% 50%



## Customer Benefits of Automation -**SALT**

- Space
- Higher space-utilization, smaller footprint
- Higher accuracy
- Less product damage by machines
- Labor
- Far lower labor cost
  - Higher-quality of labor
- Less training required
- Throughput
- Extend the range of transportation assets and grab more business
- Deliver better sequences remove labor out of stores

## A-Movers - "Pull the weeds!"



The principle of efficiency is to concentrate the fast-moving, frequently-touched SKUs in a single area. The idea is to "pull the weeds" – eliminate all slower–moving SKUs, so you can efficiently service the 20% of your product base that generates 80% of your volume.

#### Technologies to consider:

- Automated picking systems (A-frames)
- Put-to-light or batch-picking systems
- Pick-to-light
- High-volume or automated replenishment systems





## Product-to-person Picking Systems -> Hyper-efficient Distribution



## B-Movers – Right box, right place, right time

These SKUs represent the next 35% of your SKU base. Your B-movers are typically medium volume products, or lower volume products that have high cubic-velocity.

To optimize your B-movers, you need to focus technology on order selection, quickly moving order containers to pick locations and automated replenishment.

#### Technologies to consider

- Use mini-load crane systems to create static- and dynamic-pick locations
- Concentrate picking into a smaller space so only today's active SKUs need a pick face
- Zone-bypass conveyor systems that route orders past zones without selection requirements
- Pick-to-voice



### **C-Movers Product-to-Person**

C-mover SKUs represent the bottom 45% of your SKU base; they only generate 20% of your volume or less. In this slow part of your distribution, 80-85% of a selector's time is spent traveling to the pick location; not picking.

Unconventional distribution systems focus technology on moving these products to the picker, rather than the person to the product.

#### Technologies to consider:

- Multi-shuttle product-to-person technology
- Zone-bypass conveyor systems that routes orders past zones without selection requirements



## Product-to-person Picking Systems -> Hyper-efficient Distribution



## Conveyor & Sortation Systems

Conveyor and sortation systems are the glue that holds any operation together. **abco automation** partners with the best conveyor and sortation supplier in the world. Dematic's market-leading range of conveyors offers more than just transportation; they can merge intelligently and facilitate a number of functions that add value to products, such as packing and weighing.

Dematic began designing and building conveyor systems more than 70 years ago under the Rapistan brand. Since then, they have pioneered numerous industry developments, providing all types of conveyors for assembly, manufacturing and distribution applications.

## Automated Storage & Retrieval Pallet Conveyor System

Automated storage & retrieval systems, or ASRS, should be considered for all new building application because they are extremely reliable and can save millions of dollars in building, labor and shrinkage/damage costs.

**abco automation** designs both freezers and ambient automated systems of all sizes

#### Technologies to consider

- Unit-load crane systems
- Mini-load crane systems
- Technologies manufactured and supported in North America
- GMA pallet-handlers

# Corporate Management Jack Lehr Managing Principal

abco automation Co-founder and Managing Principal Jack Lehr is a 30-year veteran of the material handling industry. An industrial designer by degree, Jack began his career in New York City at Jennings Company, a boutique material handling engineering firm. He joined W&H Systems in the early 1990's, first as a project manager, then as a sales engineer, and finally as the founder of Novare Solutions, a Material Handling Consulting group. In 2005, Jack was hired by SI Systems, a publicly traded material handling firm, as Managing Director and Vice President. In 2009, Jack was named Vice President of Sales for North America by SSI Schaefer, the largest material handling company in the world.

## Product to-person Picking Systems > Hyper-efficient Distribution



### Seth Weisberg Principal

abco automation Principal Seth Weisberg grew up in the material handling business. After graduating from Northeastern University, he worked for his father's material handling business, before joining PricewaterhouseCoopers as a Project Manager. After working at PwC for 6 years, Seth returned to the material-handling business to help his father [Michael Weisberg] run the family business.

After only 12 months, the company doubled in size. In another five years, Michael Weisberg retired and Seth took over the responsibility of running the business. Four years since, the company has doubled in size a few times over.

Seth's partnership with **abco automation** expands the 80-year-old business even further; morphing what was once a simple storage solution supplier into a full, turn-key system provider.

## Cory Flemings Principal

**abco automation** Cory Flemings graduated from the U.S. Military Academy at West Point, earning a degree in Applied Mathematics and Mathematical Modeling. After graduation, Cory was awarded the prestigious Olmsted Scholarship to the Hochshule St. Gallen in Switzerland, where he completed two years as a guest graduate student in International Relations & Economics.

A fluent German speaker, Cory's tenure includes VP Sales & Marketing for Knapp Logistics & Automation in 2001 before becoming the Executive Sales Manager in 2004 at Schaefer Systems International. Over the past 10 years, Mr. Flemings has successfully spearheaded sales efforts in automated system sales culminating in several sales efforts valued at \$100 million.