Absolute unison on the water demands exact timing, speed, accuracy and efficiency. A perfect blend of these same characteristics is what makes the ACTIV System flow like a finely tuned machine. The ACTIV System is one of the most significant innovations to be introduced in the material handling industry within the last 30 years. Based on intelligent pallet movement rather than storage, it is a fully automated system that converts the flow from manufacturing into a flow ready for shipment with a more efficient use of space. It can provide superior inventory control, flexibility, reliability and lower handling costs.

ACTIV’s patented technology works like a large sliding puzzle with multiple layers. The system is comprised of four key components:

- **Deep Lane Transfers (DLT)** – Mechanical carts transport loads to a rack position within a storage lane. DLTs in each lane have steel decks with cable-lift mechanisms underneath to raise or lower a load.
- **Cross Aisle Transfers (CAT)** – Move unit loads from one storage lane to another and indexes loads perpendicular to the deep lanes.
- **Vertical Transfer Lifts (VTL)** – Lifts or lowers unit loads between levels so rows of deep lanes can be stacked vertically on multiple levels.
- **Software** – Orchestrates pallet movements in a series of short segments using route-solving algorithms. Pallets are automatically re-routed around problem areas.

**How it Works.**

Pallets input on one end are deposited onto cable-driven carts that slide along deep storage lanes. The software automatically places loads into optimal positions based on the order patterns. Fast movers are more accessible and slow movers are out of the way, so loads can be staged and sequenced for trailer loading all through the night.
Flexible
- Can be used in an existing, freestanding, or a rack-supported structure.
- System integrates seamlessly within other material handling systems.
- Versatile, modular design can be adapted to meet changing requirements by adding components, e.g. CAT.
- Suitable for high-density buffer storage, load staging, deep rack storage, flow-through, conveyor spurs, gravity spurs in picking operations or replenishment.

Reliable
- Components are located outside rack structure and operate independently to enable quick and safe repairs without shutting down entire system.
- Standard components minimize need for spare parts, repairs and downtime.
- Software monitors potential problems so maintenance can be anticipated.

Efficient
- Loads move simultaneously, on multiple levels, quickly and accurately.
- All movements tracked within system; each unit load is visible to operator.
- Helps support corporate sustainability goals by conserving energy and using cubic space more efficiently – especially within cold storage.

Cost Effective
- System reduces receiving, truck loading, dock-door time and labor costs.
- Can save significant dollars if dwell time is 15 days or less.

Retrotech is a Preferred Supplier to Procter & Gamble. This innovative world leader operates one of the largest automated systems using ACTIV technology in their Lima, Ohio distribution center. With 109,000 pallet positions, it is operating 24 hours a day and moving inventory with precision and efficiency.

Retrotech, Inc. is an industrial engineering firm specializing in the design, installation, modernization and support of automated material handling systems. We offer clients technological expertise and experience unmatched in our industry.

For more information, call 1-866-915-ASRS or visit www.retrotech.com.