

ACTIV Systems

Simplify Drum Handling Storage and Improve Safety

Saab needed an efficient, cost effective way to handle the 55-gallon drums they used to store paint inventory required for their automobiles. In 1985, they selected an ACTIV System to solve this need, and today ACTIV is still meeting Saab's needs to simplify their drum handling storage and retrieval operation.

First developed in Finland and used primarily in Europe, ACTIV is a high density/dynamic system capable of high product throughput. **Retrotech, Inc.** holds the exclusive license to design, build, and install ACTIV Systems in the United States and Canada.

With ACTIV, product loads are not actually *stored* in the system, rather they are moved through it via a *dynamic* path. Each product load arriving at the input conveyors is assigned a unique ID with product and packaging information. Using this ID, ACTIV tracks the loads internally.

Load data is matched with data in a host computer and a barcode label is printed with the date, product information, and final product destination. The ACTIV software interface allows inventory and order processing control to be executed by a host computer or managed by the ACTIV System.

ACTIV's software selects routes and tracks loads within its system. It is able to locate an internal load at any given time. A route solving algorithm determines the most effective use of all ACTIV components and establishes the most efficient path for matching a product to an order.

Inventory control is accurately maintained by load data entry information, which can be entered either automatically via barcodes or manually via a terminal keyboard.

In Saab's system, forklifts deposit incoming paint drums onto a chain input conveyor, which moves the drums through weighing and visual checking stations. At a visual checkpoint the

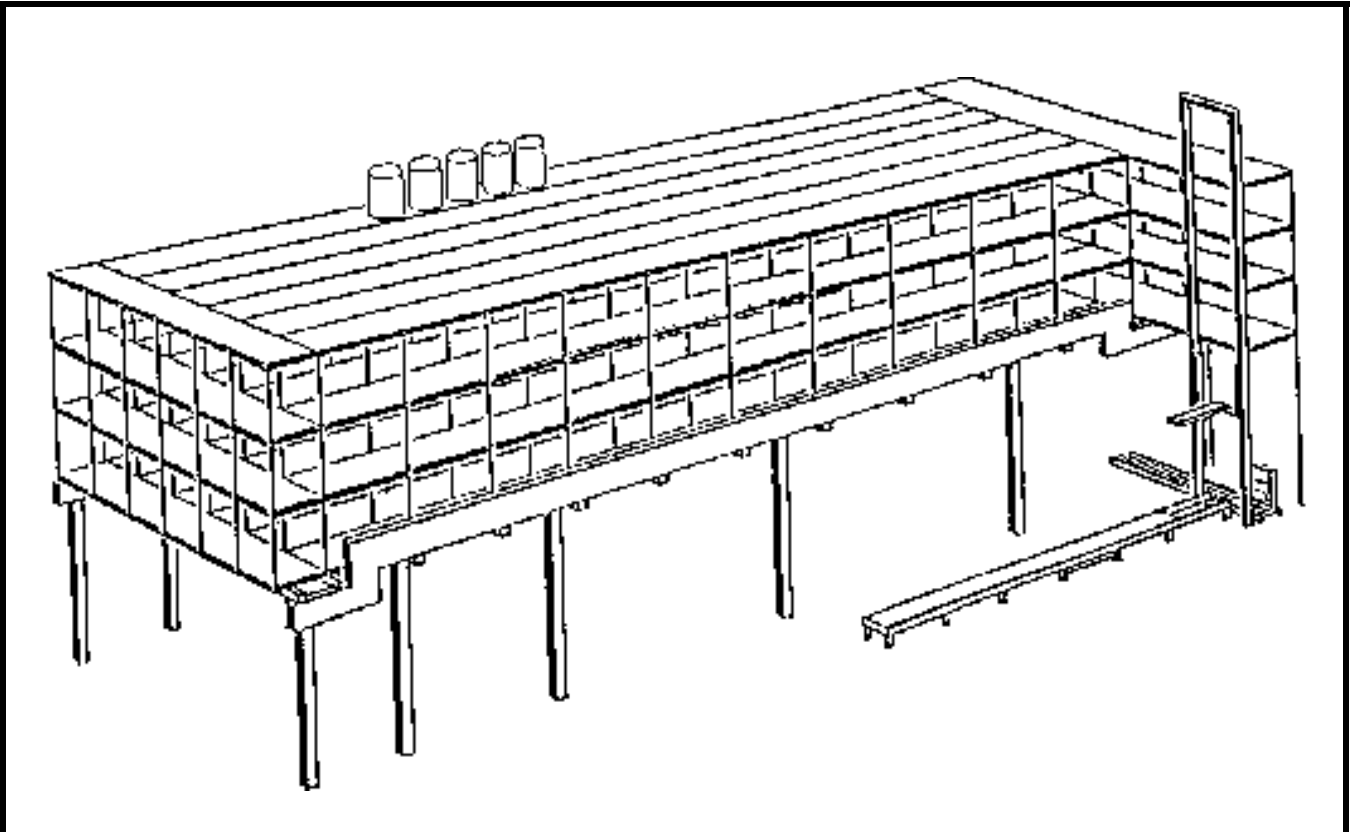
operator uses a barcode scanner to enter load information into a computerized inventory system, which assigns a storage lane to each drum. The drums are then transferred by an ACTIV Vertical Transfer Lift (VTL) to their assigned storage lanes. To override order processing and retrieve a specific drum, the operator need only enter the request into the computer and ACTIV does the rest—automatically bringing the requested drum to an output point for forklift pick-up.

ACTIV simplifies both the storage and retrieval of Saab's drum handling operations, and improves drum storage safety.

The ACTIV advantage for Saab includes:

- **Increased safety factor**—no electrically powered equipment (motor drives) run outside the rack system thereby reducing the danger of explosion or fire.
- **Increased storage capacity**—four levels, each with six storage lanes, provide a total storage capacity of 792 drums in a space that would otherwise be wasted.
- **Increased space utilization**—the storage portion of the system is located above floor level, thereby permitting the space underneath to be used for Saab's paint pumping operation.
- **Computerized inventory tracking**—Saab's 80-item inventory of paint drums can be easily tracked. Twenty-two different colors and five types of solvents are used in the plant. For each color there are 2 to 3 mixtures, which the control system keeps separate.
- **Simplified system maintenance**—the majority of the ACTIV components that might require periodic inspection and maintenance are located outside the rack structure area.

Saab's Drum Handling Storage Racks.



Saab's ACTIV Automatic Drum Handling System.