

SCP SCHAEFER CASE PICKING

Automatic selection and palletization
of mixed full-case orders



Winner of the MM
Logistic Award 2008

Schaefer Case Picking: New boundaries are defined



A New Paradigm in Full-Case Picking

The SCHAEFER Case Picking system (SCP) is a fully-automatic case-picking system that can handle almost all of your SKUs, and automatically select, palletize and stretch-wrap stable, cube-optimized, mixed-case pallets.

The SCP is suitable for any retail distribution process that must deliver mixed, full-case pallets directly to the store; even in the most demanding environments – grocery, food service, consumer electronics and footwear. The SCP's simple linear process, ability to manage customer specific pallet parameters, small footprint and highly-efficient picking process promise a strong competitive advantage over modern conventional systems.

Defining new boundaries

- Reduce order cycle-time through an entirely automated process; “rush orders” can be the next pallet processed
- Dramatically reduce manpower requirements and increase accuracy by replacing many warehousing tasks with an automated workflow
- Minimize product damage & shrinkage – and their associated costs and customer returns – through computer-controlled automated product processing and handling
- Reduce transportation costs by boosting outbound pallet density with patented pack-optimizing software that statistically optimizes and builds volume-optimized, stable and family-group-related pallets with state-of-the-art robotic technology
- Reduce energy consumption and freight costs through maximizing the use of your available transport space and optimization of route planning
- Increase your throughput by palletizing your orders at 750 cases/hour per workstation
- Overall the result is a very low cost-per-case

**Faster, better, more efficient;
The new economic standard defined by the SCP**

Pallet Storage

Layer Tray Creation

Tray Buffering



Automation from Beginning to End

Seamless automation from start to finish

“Begin with the end in mind.” SSI SCHAEFER’s innovative SCP approach provides a seamless, automatic concept for mixed, full-case-pallet order selection. Beginning with the order data, the SCP system optimally designs and “builds” the order as virtual pallets by harnessing the power of our state-of-the-art packing software. The SCP then uses the output of this powerful software to call each carton to the palletizing robots in the exact sequence needed to achieve perfect use of the transport unit’s cube. SSI SCHAEFER’s unparalleled technology can automatically select and deliver the precise quantity in the exact sequence including family grouping according to your customers’ desires.

From goods-receipt to the unparalleled finesse in robotic pallet building, the SCP sets the new standard for the lowest cost-per-case, and the highest performance in the industry.

SCP concept

- Unique vision system optically recognizes products, eliminating the need for additional expensive barcode or RFID identification systems
- Automated replenishment system accommodates either manual, or automated replenishment delivery from the bulk warehouse
- Automated goods-in system de-layers manufacturer’s pallets and stores layers of individual products on a tray without human intervention
- Highly-dynamic, vertical tray buffer minimizes system foot-print and manpower while maximizing the use of cubic space by automatically buffering the trays up to 24 m high without human intervention
- Automatic case-picking system picks every product for every pallet in a perfect family-group sequence that will optimize pallet cube and stability
- High-efficiency, state-of-the-art palletizing robots automatically palletize and stretch-wrap each order for highly stable, optimized pallets or roll-cages



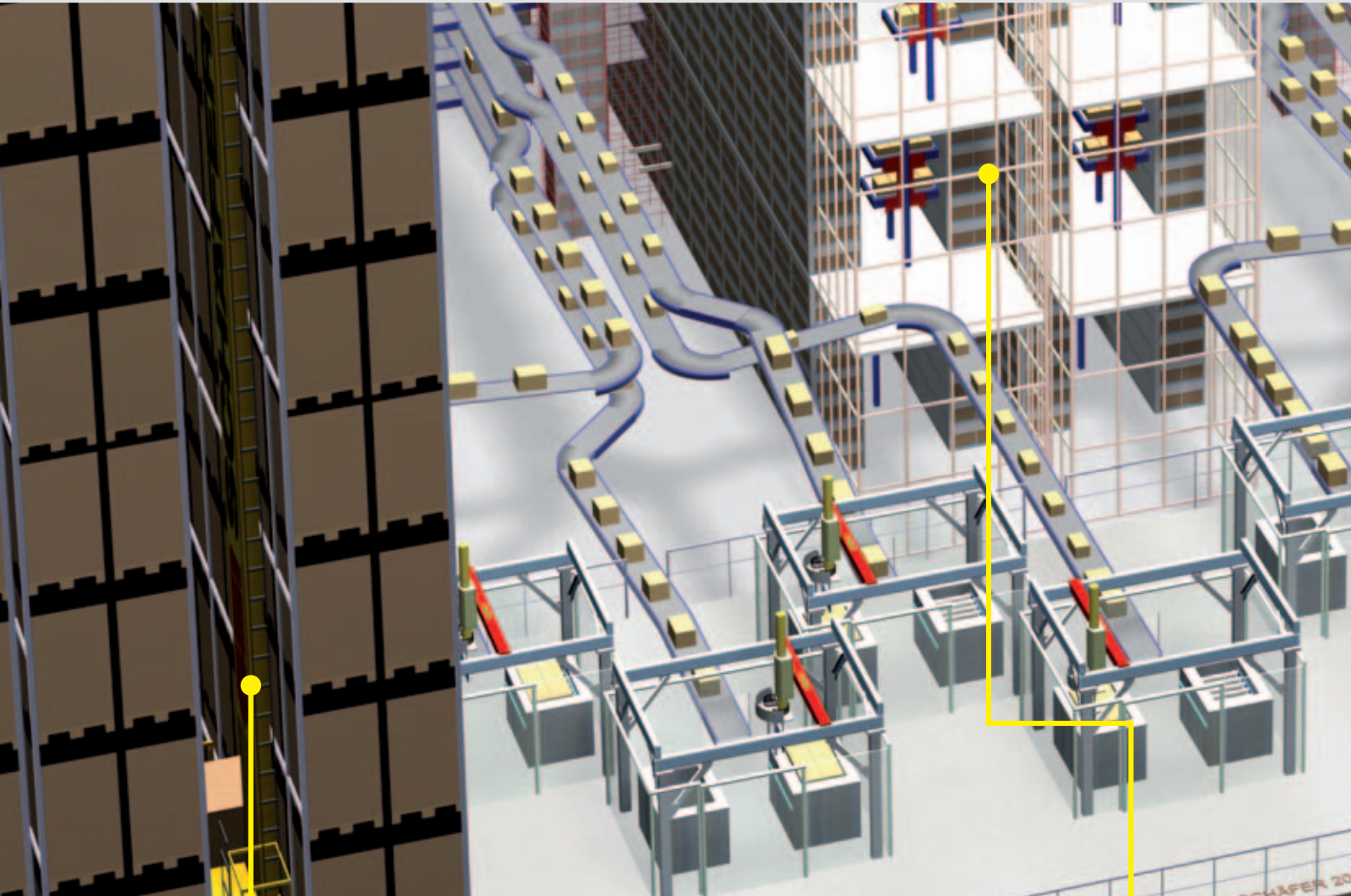
Single-case Selection
from Layer Trays

Store-specific, Family-
group-related Sequencing

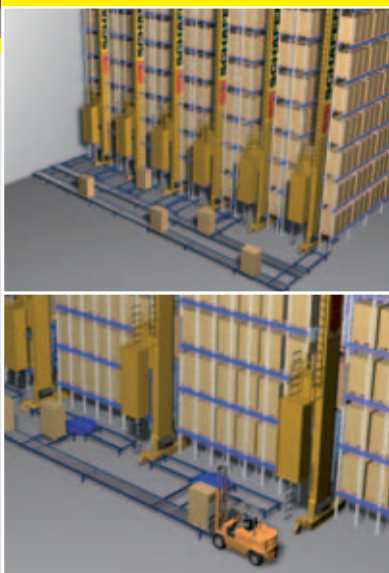
Automatic Palletizing



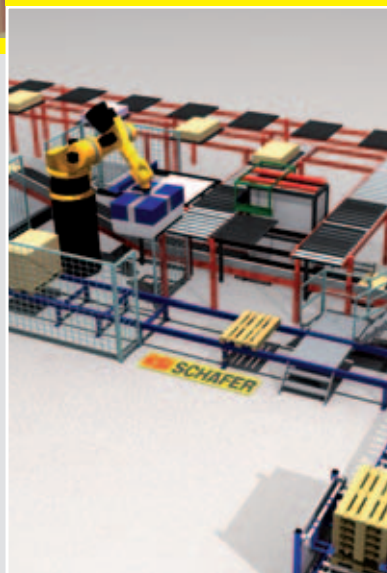
SCP: The New Paradigm in Intralogistics



Pallet Storage



Layer Tray Creation

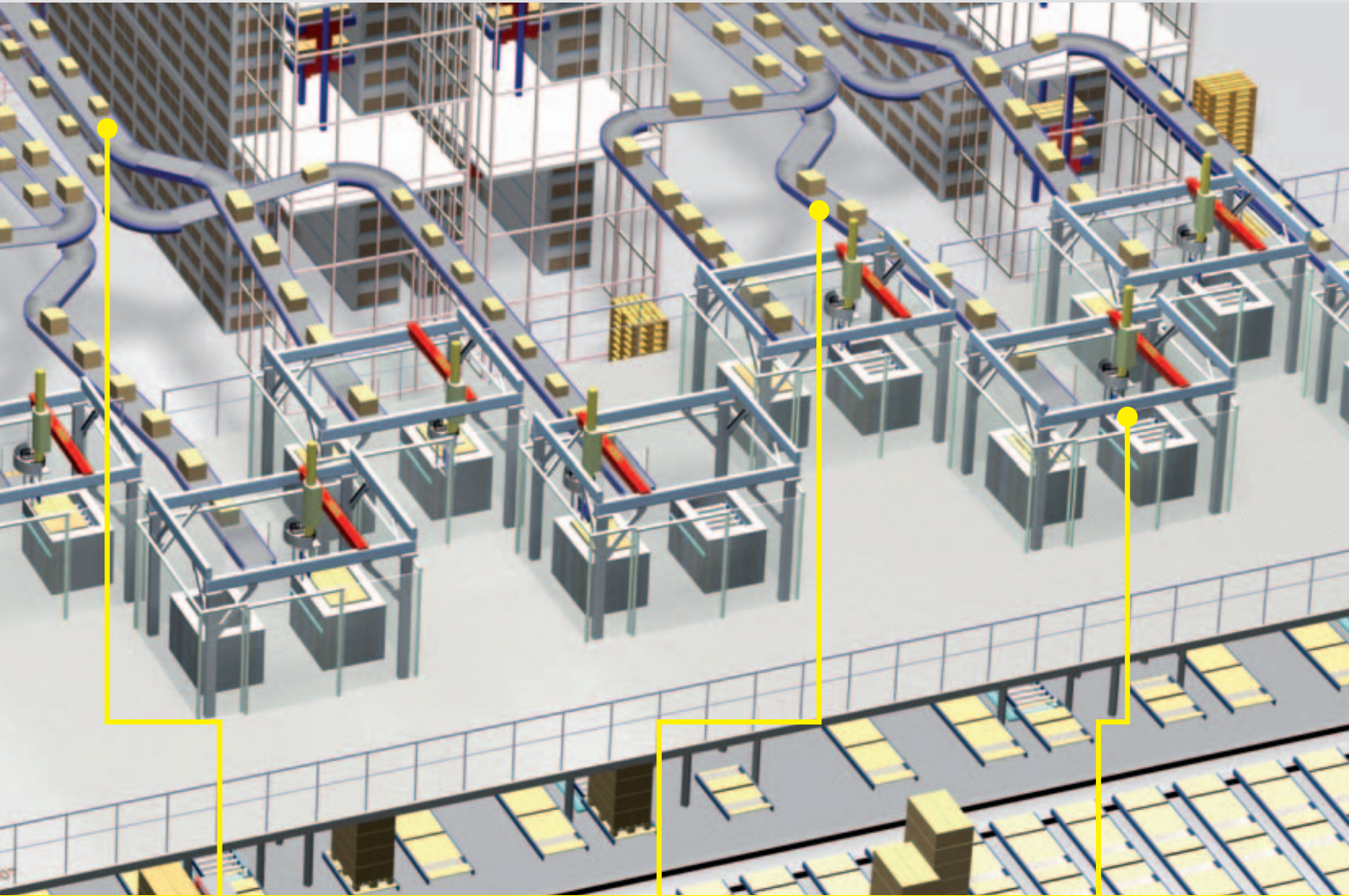


Tray Buffering



Scalable Efficiency

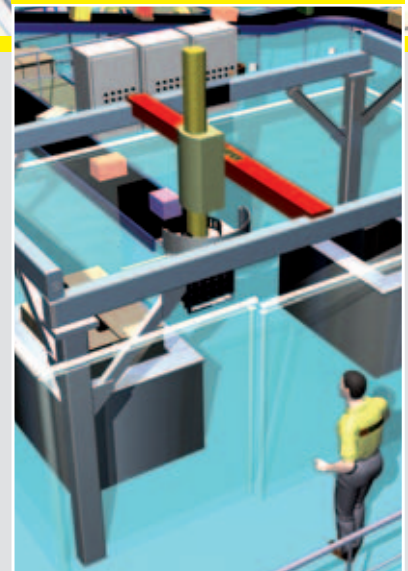
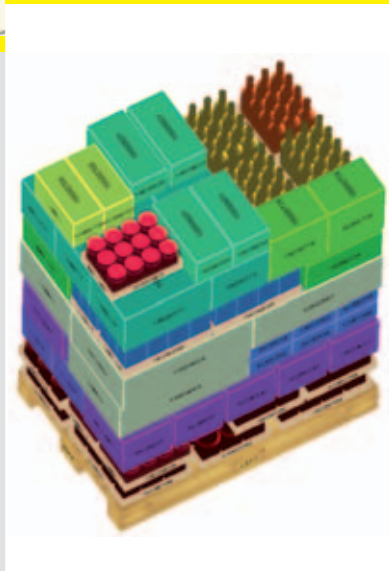
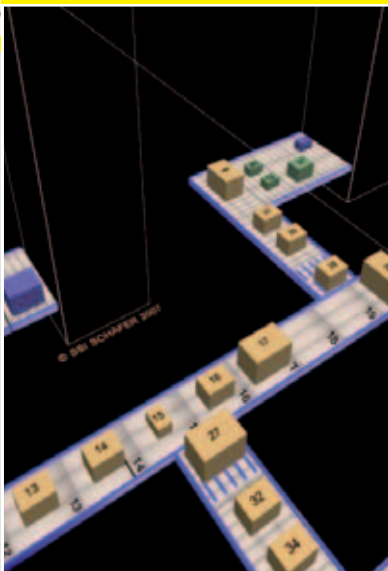
The modular design of the SCP system allows efficient solutions from 30,000 to 300,000 cases per day. Based upon a customer's unique project requirements, SSI SCHAEFER can tune system designs to meet specific customer requirements.



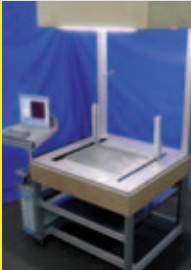
Single-case Selection from Layer Trays

Store-specific, Family-group-related Sequencing

Automatic Palletizing

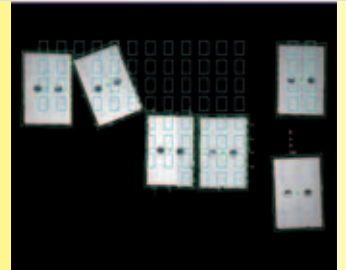


Modular System Components



Product recognition

The product recognition process is based upon a combination of a visionbased, optical-recognition system, and the physical product characteristics (weight, size etc.). All data is collected in the teach-in process, and is used by the packing software to optimize pallet stacking patterns



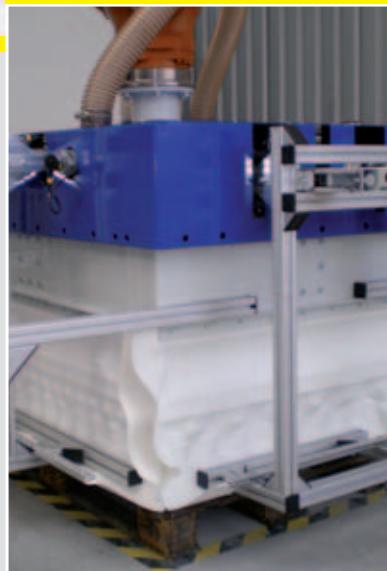
Pallet Storage



Layer Tray Creation

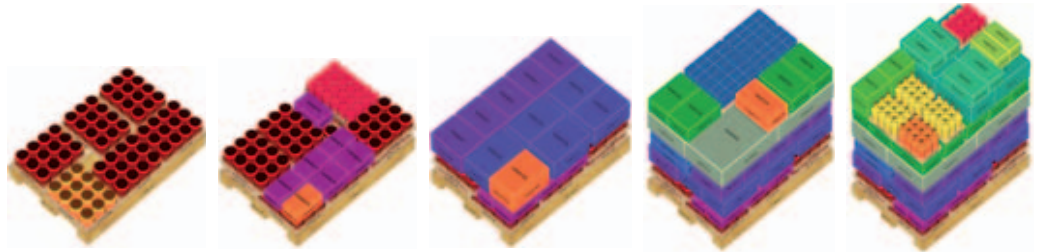


Tray Buffering



Computer-based palletizing

The packing software by SSI SCHAEFER is the basis for capacity-optimized palletizing. This results in maximum utilization of capacity with highest stability of pallet.



Single-case Selection from Layer Trays



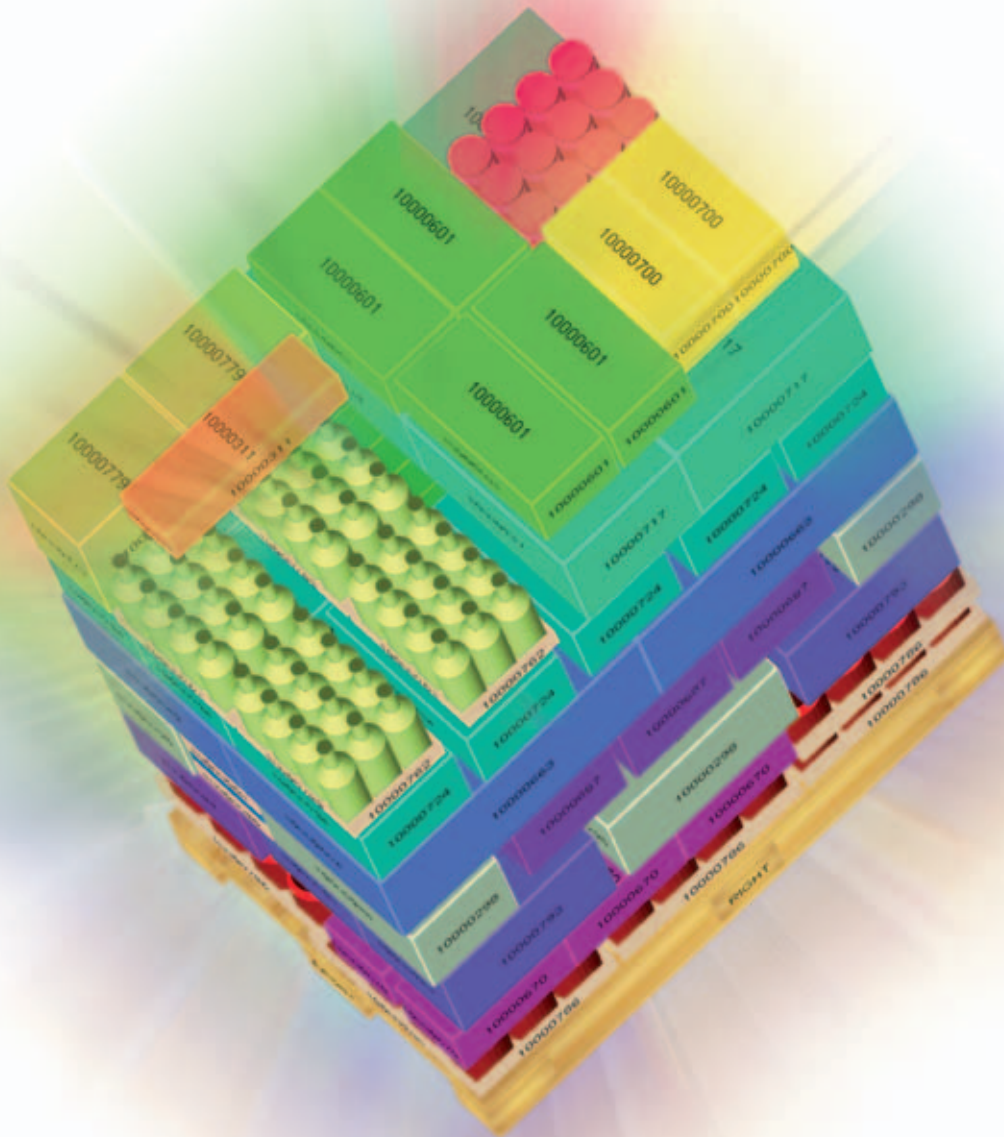
Store-specific, Family-group-related Sequencing



Automatic Palletizing



SCP: Perfection in Automation



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