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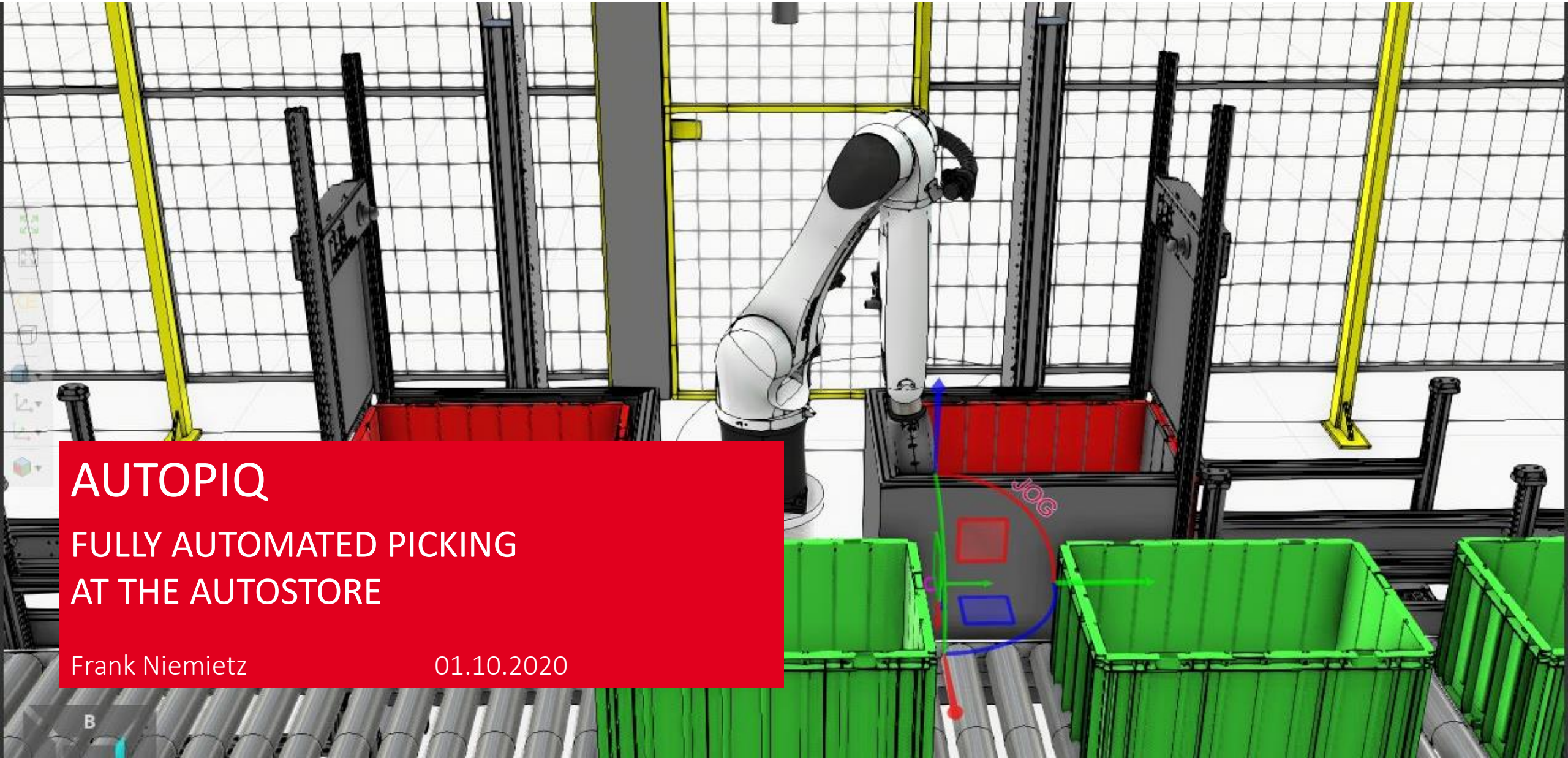

AUTOPIQ

FULLY AUTOMATED PICKING AT THE AUTOSTORE

Frank Niemietz 01.10.2020

swisslog

WE SHAPE THE FUTURE OF INTRALOGISTICS BY INTRODUCING A NEW ERA OF ROBOTIC, DATA-DRIVEN AND FLEXIBLE AUTOMATED SOLUTIONS THAT CREATE EXCEPTIONAL CUSTOMER VALUE

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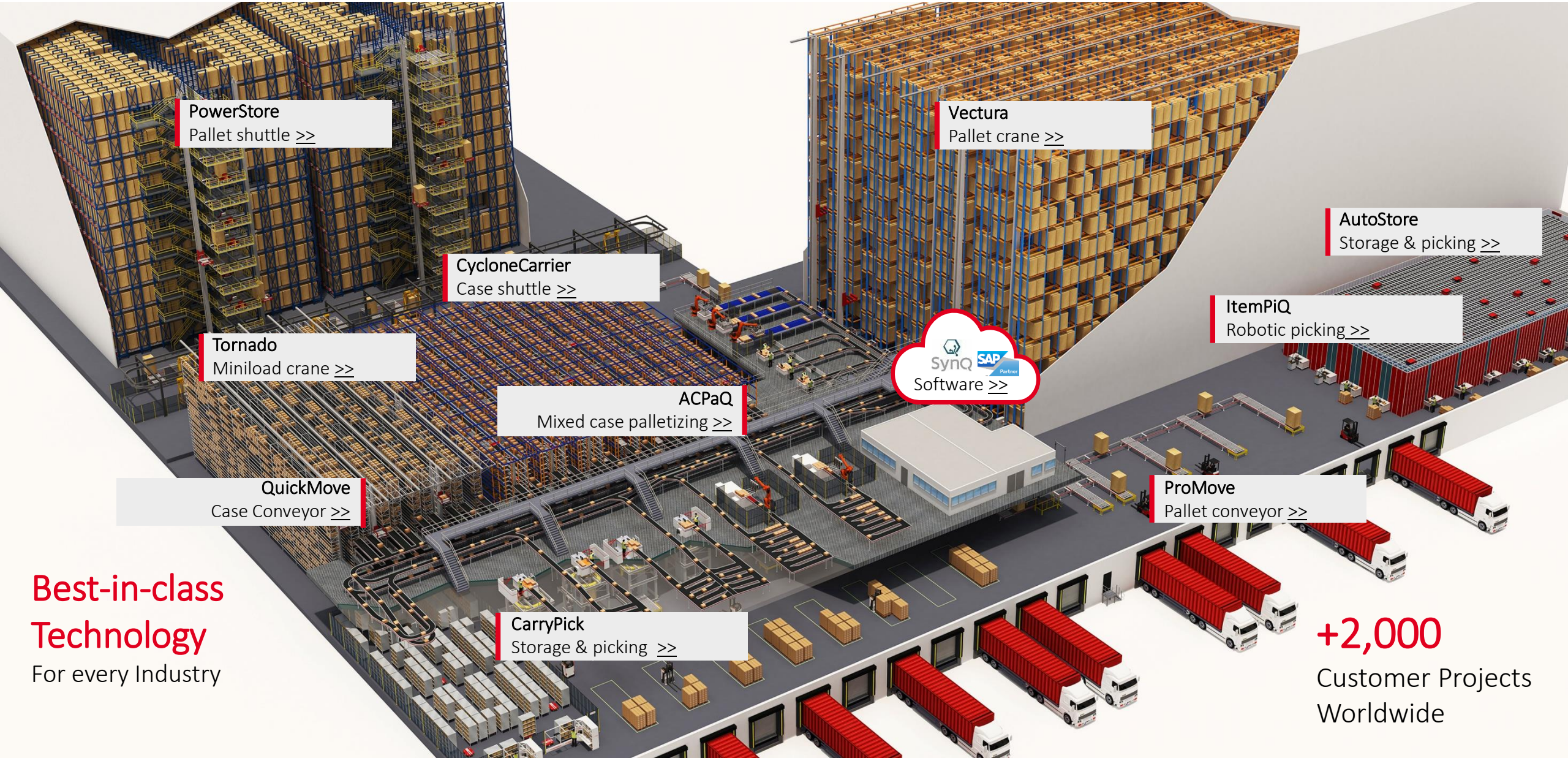


Best-in-class Technology

For every Industry

+2,000

Customer Projects Worldwide

swisslog

DREAM TEAM

swisslog

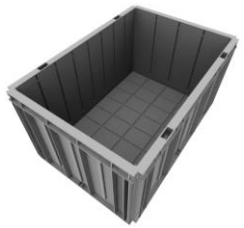
AUTOSTORE POWERED BY SWISSLOG

AutoStore

Five key components

Robot

The hard workers that dig, organize and transport the bins.
Remote Controlled
Battery Powered
8 Wheels



Bin

The standard inventory container of AutoStore. There are two Height Options available.

Grid

Self-supported aluminum grid with robot rails. Erector set construction. Modular concept.

Ports

Where put away and picking is performed. Different options available.

Software

The brains of the system.
A standard warehouse management software designed by Swisslog for AutoStore solutions.

Space saving storage and picking system

Meeting the most challenging requirements

AutoStore

Do you want to store a large number of small parts while increasing storage density and remaining very flexible? AutoStore is a highly efficient robotized storage and order processing solution that integrates easily into existing buildings.

1. Density — 60% reduction of space

2. Scalability — Scale whatever you need

3. Flexibility — Build around obstacles

4. Energy efficiency — 10 robots = 1 toaster

SWISSLOG ITEMPIQ

Main components

ItemPiQ comes with high-end software & hardware

Robot Agilus 1100

High performance robot with 1,100 mm reach

Controls

Standard KUKA Controls Cabinet

Multi-functional gripper

Unique gripper allows picking of a wide range of products of different shapes and sizes.

Intelligent Vision System

3D vision technology for object recognition.

Software

The brain of the system.
SynQ Box for machine & fleet learning

ItemPiQ robot cell

Facts & figures

Robot reach
1,100 mm

Standard
interface to
any WMS

max. 1,5 kg

Up to 1,000
picks/h

Max. bin/carton
dimensions
650 x 450 x 400 mm

Product dimensions
25 x 20 mm

DREAM TEAM

ItemPiQ

Makes sure the right products are assigned to the robot

AutoStore
Director

ItemPiQ

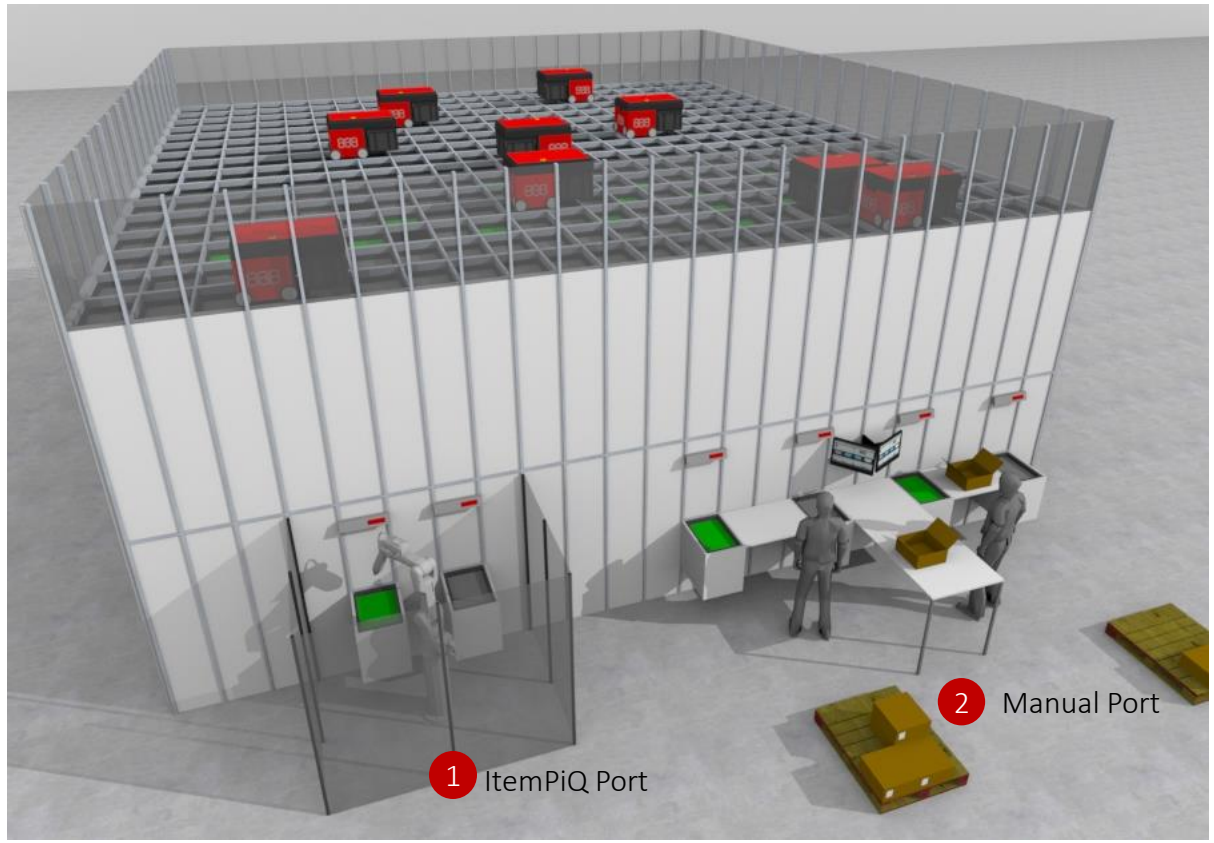
Products that need to be picked manually

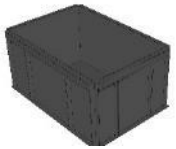
ItemPiQBox

Products that the robot can pick

ItemPiQ & AutoStore

Example Solution – Process Description



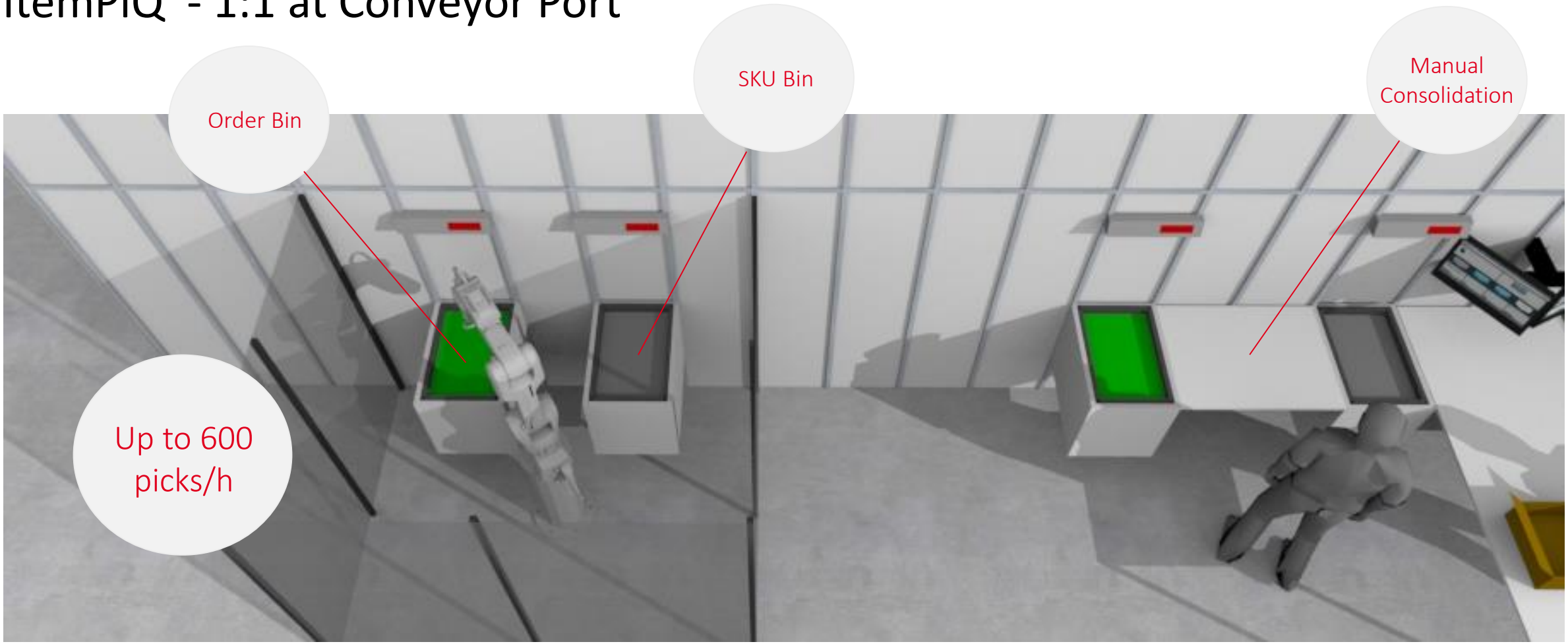


Grey Bin = Storage Bin

Green Bin = Order Bin

1. Green Bin (Order Bin) is sent to the ItemPiQ Robot Station
2. Robot is picking orderlines from Grey Bin
3. Green Bin is sent back to AS for temporary storage
4. Green Bin is brought out for Consolidation/Packing

ItemPiQ - 1:1 at Conveyor Port



Value proposition of the Port to Port solution

Customer Benefits & USPs

Benefits for the customer

- Extension of the working time without additional human work force
- The pre picking (at night) could influence the needed # of AutoStore robots (additional savings) (break the peaks of a day)
- Integration in AutoStore workflow
- No additional transport system needed
- Small footprint
- Retrofit possible
- Easy set up

Swisslog USPs

- All in SynQ (one Software fit's all technologies)
- Long term experience of AutoStore
- Fast and reliable robot

KUKA
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Swisslog shapes the future of intralogistics with robotic, data-driven and flexible automated solutions that achieve exceptional value for our customers.

www.swisslog.com

Swisslog is a member of the KUKA Group, a leading global supplier of intelligent automation solutions.

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