

## **Process Management**

The goal of an AGV solution is to improve material handling efficiency and therefore reduce costs and increase profitability. With Rocla's advanced process management customers get total logistics solution with measurable performance boost.

### Implementation

- Short delivery time, typically less than 20 weeks
- Easy implementation even during full production
- Minimum modification to existing buildings
- No additional fixed structures

## Operation

- No damages to customers products, buildings or machinery
- Reliable 24/7 operation in critical applications
- Traceable, properly identified product movement
- Dramatically increased safety
- Environment-friendly technology
- Hygienic operations

# Maintenance and modifications

- Logistical flexibility easy updates and modifications
- Low life-cycle cost
- Reduced operation and maintenance costs:
  - Local maintenance through the Rocla service network
  - ♦ 24/7 global help desk













• performance boost?



# Cost Efficiency

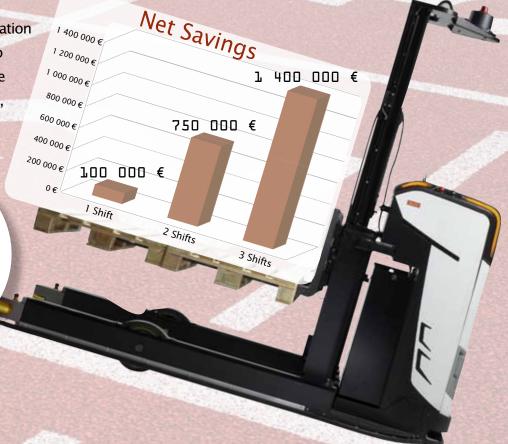
## By automating whole or part of the process

impressive cost savings can be achieved in logistics operation. The payback time of an automated system is very short, especially when working in shifts. Labor costs can be reduced, or workers can be released to more

productive tasks.

Automated system is in operation 24/7 with no interruptions to the process. It is also possible to rent an automated system, so no capital is tied up in investment.

For example, using 5 AGVs in 3 shifts results in savings of 1,4 M€ during 5 years of operation. The payback time for this investment is only 16 months.











like to



save money and time with one partner?



# Safety and Environment

AGV solution is an extremely safe system with reliable operation. With advanced safety features there are no damages to products, buildings or machinery. In addition, the work safety improves significantly on the work floor. AGV solution ensures a peaceful and healthier work environment

Warning lights

and audible

signals

which results in fewer sick leaves.

Rear bumpers or laser scanners

All of our installations are built according to the highest safety standards. Our safety solution is tailored to the customer case on the basis of a risk analysis.

All Rocla AGVs have the following safety devices, at minimum:

Safety PLC controlling all safety functions

400

Front laser scanner

Emergency push buttons in all corners

A safety edge around the vehicle

Rocla products *are all CE marked*, and our deliveries comply with the Machinery Directive 2006/42/EC as well as other applicable directives.





higher safety? .



## Customer Case

# Vilkas (III)

## Olvi Oy

The Finnish brewing and soft drinks company Olvi acquired its brewery an automated warehouse truck solution from Rocla. Olvi was looking for cost savings by automatizing the basic transfers in the storage and picking areas. The automated solution is based on innovative, internationally awarded automated warehouse truck concept developed by Rocla.

At Olvi the pallets are moved by automated warehouse trucks from automated picking to manual picking and also directly to shipping. Using automation is very cost-efficient especially in an application like Olvi has with routine transfers in multiple work shifts. Automated trucks work 24/7 and manual labour is needed only for battery exchange. The payback time of this investment is very short, less than two years.

"The trucks are always in operation using three different programmed routes. At first we couldn't believe how quiet the automated trucks are. The automated trucks have proven to be reliable and safe choice for us", tells *Mr. Timo Miettinen, the logistics manager at Olvi*. Trucks at the brewery feature brand covers according to Olvi's corporate identity.

"We had gained good experience with Rocla already from previous automation projects since 2002," says Mr. Miettinen, the logistics manager at Olvi. "We were also convinced by Rocla's fast delivery time. It took only three weeks to implement the automated solution."





#### The intelligent way to move

#### Reporting

- Reports on performance, etc.
- Knowledge of what is happening

#### **Vehicles**

**Energy Concept** 

- Batteries

manual

- Transportation of pallets, reels, etc.
- Navigation: laser, magnetic spot, wire
- Specifications and design

- Battery exchange: automatic /

- Automatic charging

#### Consultation

- Seeking the best possible solutions
- Creative and effective ideas
- Simulation / visualization

## AGV Control System

- Order assignment and vehicle allocation

- Supervision of transport tasks

- Traffic control

# Warehouse Management System (WMS)

- Transport order generation
- Operator interface
- RFID and barcodes

#### **On-Site Services**

- Commissioning
- Installations

#### **Life-Cycle Support**

- Service and maintenance
- Updates and upgrades
  - Spare parts

#### Storage of Goods

- Racks and shelves
- Storage spaces on the floor
- Load-on-load, deep stacking

#### **Additional Machinery**

- Conveyors
- Wrapping machines
- Manual trucks
- OEM equipment

You get a total logistics solution

Shall we take the first step today?