

*"We have taken a radically different approach to design systems which are smaller and more reliable."*



I have worked in the pallet making industry for 35 years. First in repairing then with my own company making 4 million pallets per year and more recently as a consultant in the industry.

For many years the pallet repair industry has been dominated by tough manual labour. Broken parts have been removed with hand tools or bandsaws in an industry with many reasons to be concerned about the health and safety of its employees. Yaskawa has demonstrated its innovative approach to this market by developing robotised pallet dismantling systems.

Around 250 million standardised pallets are repaired in Europe every year and until recently this has been a dirty, dangerous manual process. It is difficult to recruit, train and retain good personnel and the quality of the work done is often poor. This is an application for an automated solution which Yaskawa has now developed with its pallet dismantling systems. Applying expertise gained in the very demanding car and truck manufacturing industry Yaskawa has brought pallet repair into the twenty-first century.

*Paul Davidsson*  
Yaskawa Product Consultant

Yaskawa is a world-leading manufacturer of inverter drives, servo drives, machine controllers, and industrial robots. For almost 100 years, the company philosophy has been based on the principle of highest quality. This philosophy has helped Yaskawa become one of the top global companies in the field of electrical drive technology.

Its strong focus on research and development has yielded innovations that have contributed significantly to the success of many industries, among them machine construction, mining, machine tooling, automotive construction, packaging and semi-conductors. As supplier of MOTOMAN industrial robots, market leader Yaskawa is also the world's biggest robot manufacturer.



[www.motoman.eu](http://www.motoman.eu)

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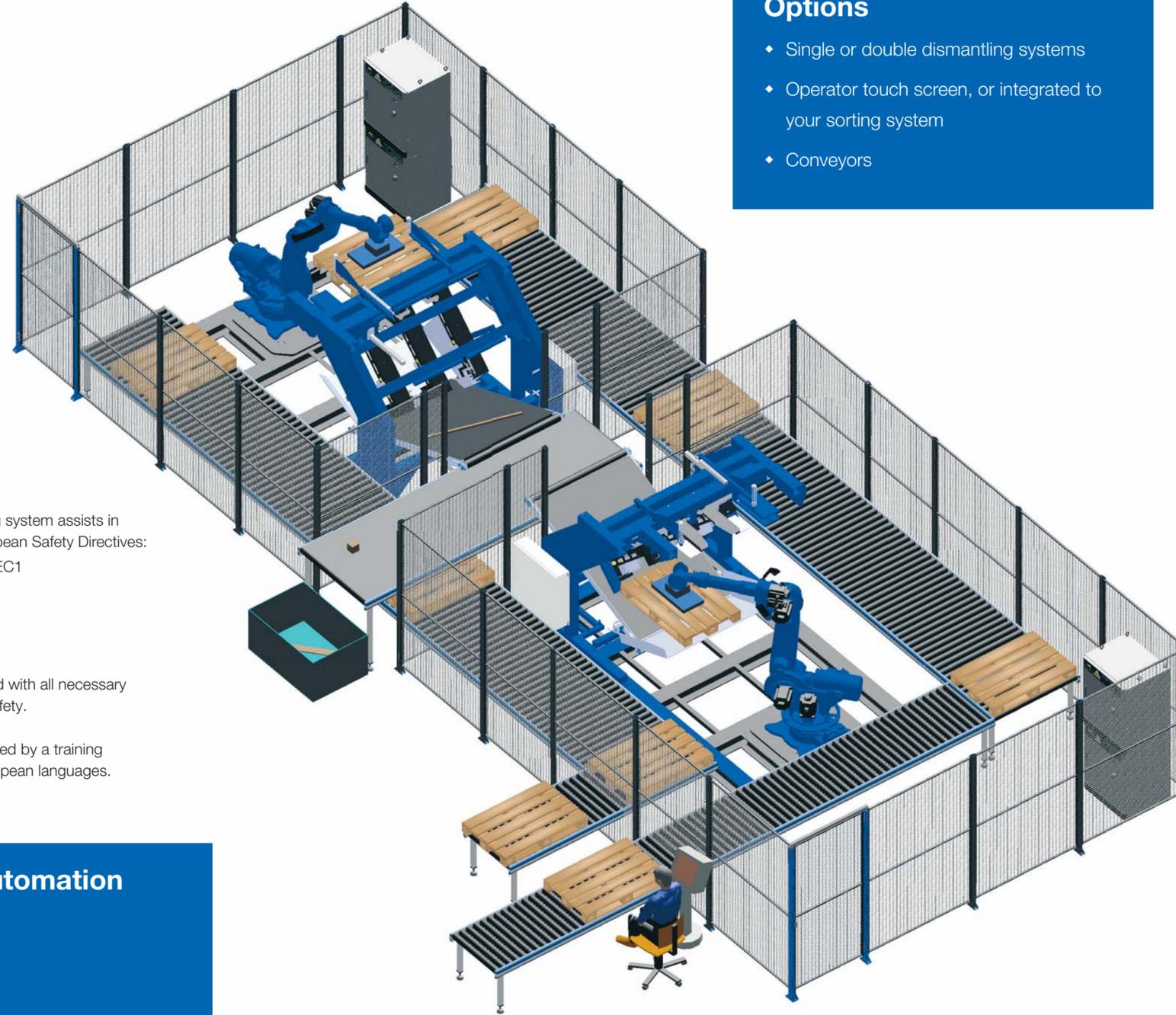
## WOODEN PALLET DISMANTLING



## AUTOMATION BY ROBOTS = INCREASED PRODUCTIVITY

Robots to handle the repair of pallets ensuring both high quality and recycling of materials. Investing in a robotized pallet repair or production system increases productivity, flexibility and profitability as well as reducing hazardous and heavy lifts for the personnel.

The Yaskawa range of MOTOMAN robots is easy to handle, use a small amount of space and are dependable. Investment cost is low, in line with traditional solutions for pallets, and time for ROI is short.



### Options

- ◆ Single or double dismantling systems
- ◆ Operator touch screen, or integrated to your sorting system
- ◆ Conveyors



### Safety

The Yaskawa pallet dismantling system assists in compliance with four key European Safety Directives:

- ◆ Manual Handling 90/269/EEC1
- ◆ Noise 98/37/EC
- ◆ Vibration 2002/44/EC
- ◆ Dust 90/394/EC

MOTOMAN robots are supplied with all necessary guarding to ensure operator safety.

MOTOMAN robots are supported by a training package available in most European languages.

### Benefits of automation

- ◆ Consistent quality
- ◆ Increased efficiency
- ◆ Reliable output
- ◆ Better working environment



The robot and dismantler system are mounted on a steel platform, which means that it can be easily relocated if the needs of the business change.



Elements are simply selected for removal from a touch screen at the inspection station before passing into the robot cell.



The MOTOMAN robot picks up the pallet and puts it in the dismantler in the correct position for removal of the parts identified in the inspection.



A combination of hydraulic knives cuts and separates the blocks and boards. The waste material falls to a belt conveyor to be disposed of outside the robot cell.



Robots can also be used in other parts of the production, e.g. for sorting pallets according to type.

### Complete solutions

Yaskawa are developing solutions for the complete repair of pallets including sorting, replacement of broken parts, chamfering, branding and corner cutting. Details are available on request.