

FALKENHAHN AG:  
INNOVATION BY TRADITION

100% QUALITY GUARANTEE  
THROUGH 100% CONTROL

FOUR TYPES OF WORLD EUROPALLETS  
FOR YOUR NETWORKED QUALITY LOGISTICS



Falkenhahn AG has been manufacturing nothing but euro-pallets for more than 20 years. A pioneering spirit, controlled processes and consistent innovation characterize the family-owned company as a reliable supplier and partner.

- Production and storage capacity of 10 million pallets per year ensure purchasing and supply reliability
- Price leadership through automated production, clear quality philosophy and ultimate efficiency
- Award from German Association Materials Management Purchasing and Logistics e.V. (BME)
- Authorized Economic Operator (AEO)
- Member of GS1 Competence Center for Returnable Transport Packaging



#### Company history

- |            |  |
|------------|--|
| 1933       | Josef Falkenhahn founds a joinery  |
| 1991       | The company moves to its present premises                                      |
| 1992       | Start of euro pallets production   |
| until 2000 | Continuous growth and expansion of production capacity                         |
| until 2008 | Systematic development into a powerful pallet manufacturer                     |
| 2006       | 100% quality guarantee of suitability for high-rack stacking                   |
| 2008       | Certification according to DIN ISO 9001:2008                                   |
| 2008       | Start of the "WORLD" euro pallet production                                    |
| 2012       | Introduction of the first RFID pallet  |
| 2013       | Participation in German Packaging Award "First exchange wooden euro with RFID" |
| 2015       | Market launch of ThermoLog pallet  |
| 2016       | Market launch of ShockLog pallet   |



**WORLD europallets** – 800 x 1.200 mm according to DIN EN 13698-1 are manufactured in a fully automated and continuously controlled process without any manual labor. The WORLD Trademark is known for standardized, quality-controlled and reusable pallets.\*

**Complies with quality standard type 1.** The design, quality and stability of WORLD europallets has been granted by TÜV Rheinland with the TÜV Certificate.

**100% quality guarantee through 100% internal control** Consistent automated controls throughout the entire production process: All WORLD pallets are suitable for handling with machines, conveying systems, and high-rack stacking – guaranteed.

**Quality management system DIN ISO 9001:2008** – production process and sales of WORLD europallets are certified according to ESC Cert No. 36419/01-14.

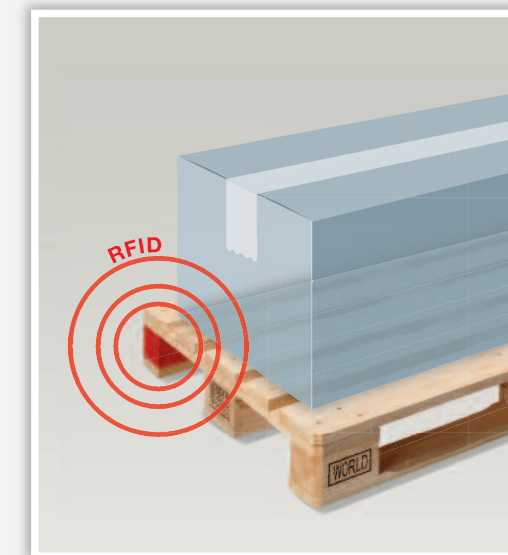
\* As technical work equipment according to BGR 234 and according to the German Equipment and Product Safety Act, where applicable

FALKENHAHN AG



Stand 10.2015

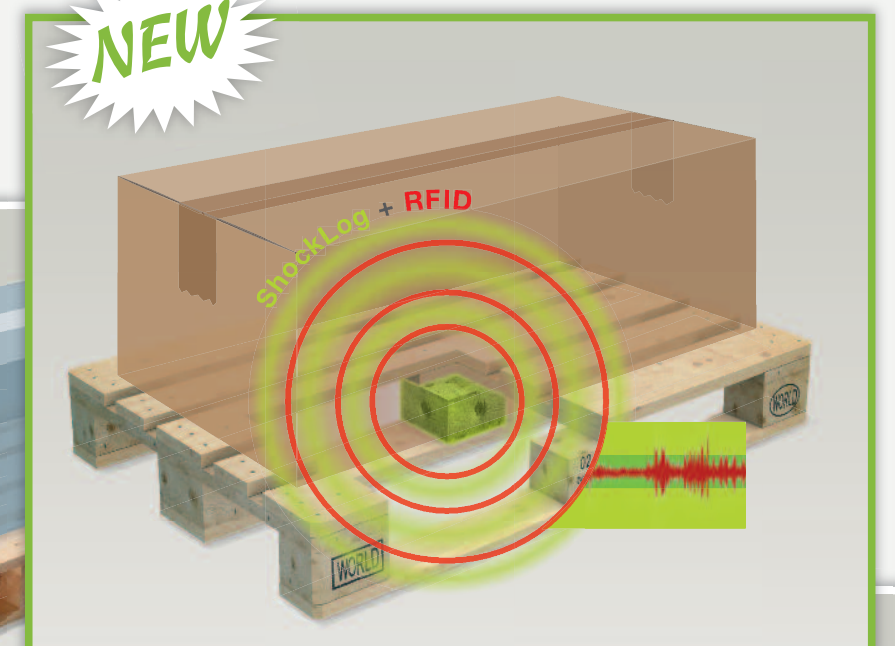
#### WORLD RFID pallets



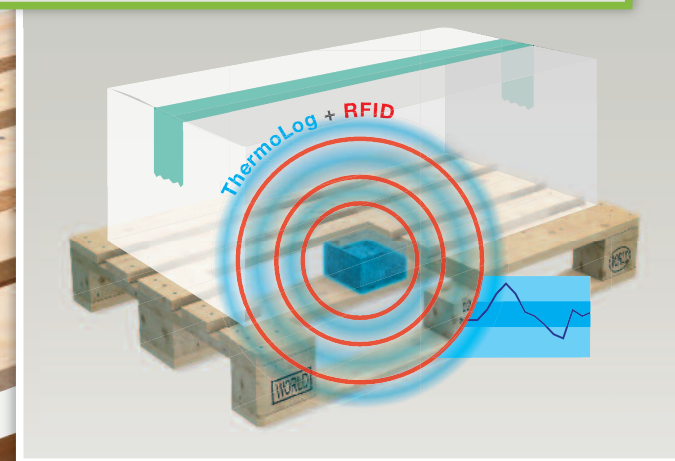
#### WORLD europallets



#### WORLD ShockLog pallets



#### WORLD ThermoLog pallets





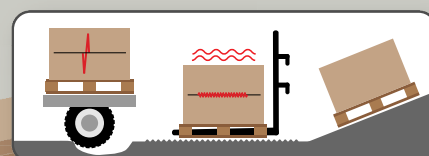
NEW

## WORLD ShockLog pallets

**For the impact-monitored quality logistics for electronic equipment, artwork, pharmaceutical products and foodstuff**

Tamper-proof data loggers document acceleration forces, impacts, tilting and inclination angles. The loggers are integrated into identifiable WORLD RFID pallets.

- For goods that are sensitive against mechanical stress during transportation
- No effort for installing and returning a logger included in the package
- Data control / reading via RFID with unlimited operating time
- Timestamp when thresholds are exceeded



**Saving additional data**  
about impacts for a period of two to three years.

### Technology of the RFID shock event logger

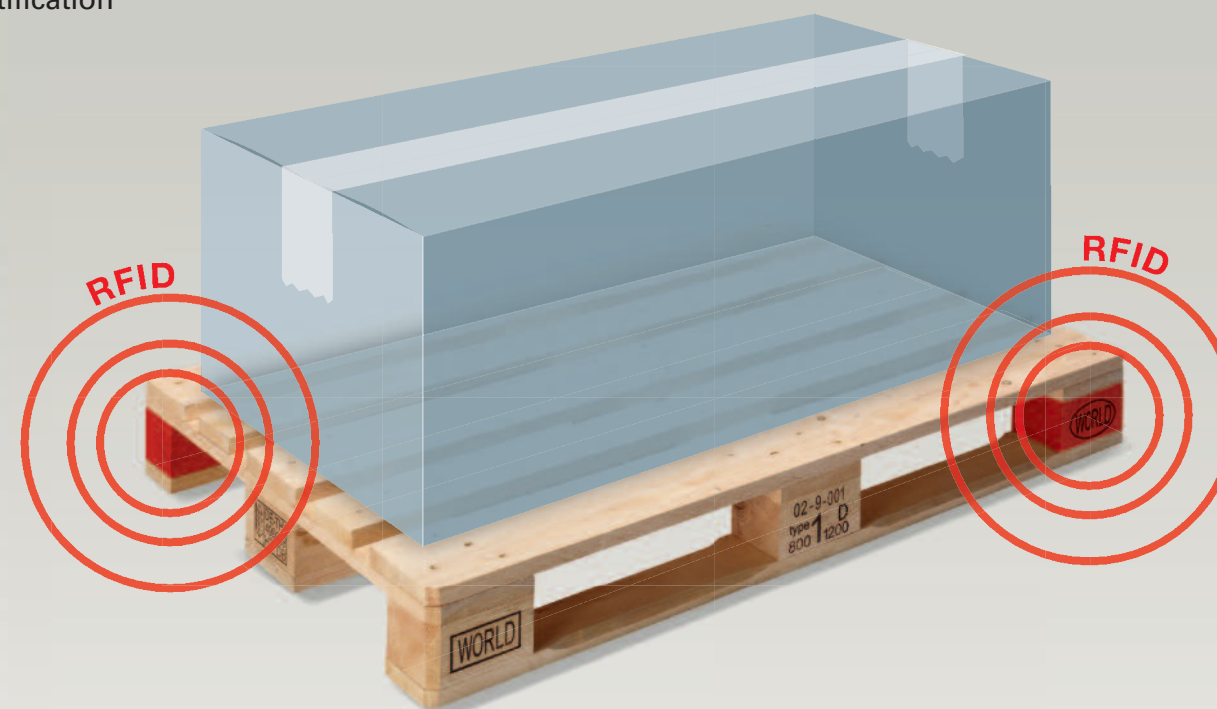
- Communication in accordance with ISO 18000-6c / EPC Global G2
- Unique ID programmable
- X/Y/Z axes and limits programmable (range of 2g, 4g, 8g)
- Sampling rate 12.5 ... 400 Hz
- Inclination 0 ... 30°, resolution 0.5°
- Memory size: max. 32 sequences
- Operating modes: Event, Stop full
- Extensive analysis software

## WORLD RFID pallets

**Your cargo's memory for logistics 4.0**

The first wooden returnable pallets fitted with RFID as standard. Smart carriers for cost-effective and RFID-monitored intra-logistics, store logistics and partner logistics.

- Automatic positioning
- Automatic tracking
- Automatic inventory management
- Clear identification



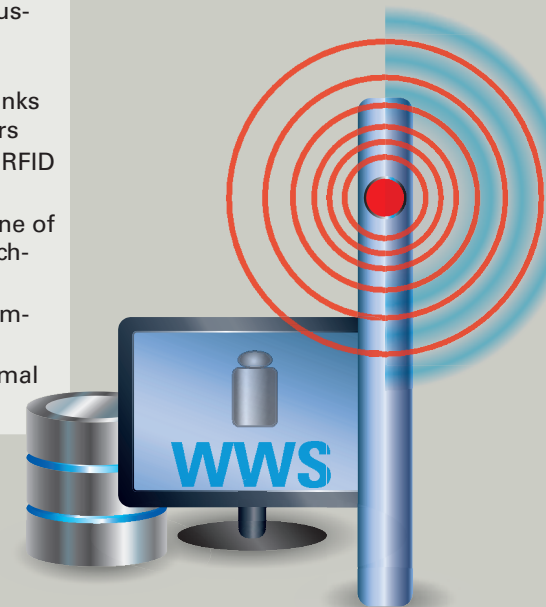
**Saves data relating to**  
Identity, cargo, consignor, consignee, logistics stations, forwarding agents, etc.

### Transponder technology

- Two transponders are hidden in diagonal corner blocks in accordance with guideline GS1 RTI
- UHF frequency range
- Transponders are user-programmable/writable
- Transponders are readable up to 5 m (depending on reader hardware)
- State-of-the-art read/write electronics (customizable)

**The benefits of RFID pallets**  
as compared to pallets with optical identification (e.g. barcode, 2D-code):

- Tamper-proof through encoded, customer-specific data
- Resistant to soiling, safeguarded against damage and wear-free thanks to internal, protected transponders
- Extremely high load resistance of RFID pallet and transponder
- Independent from unobstructed line of sight thanks to radio frequency technology
- Simultaneous reading and programming of several pallet stacks
- High storage capacity within minimal space

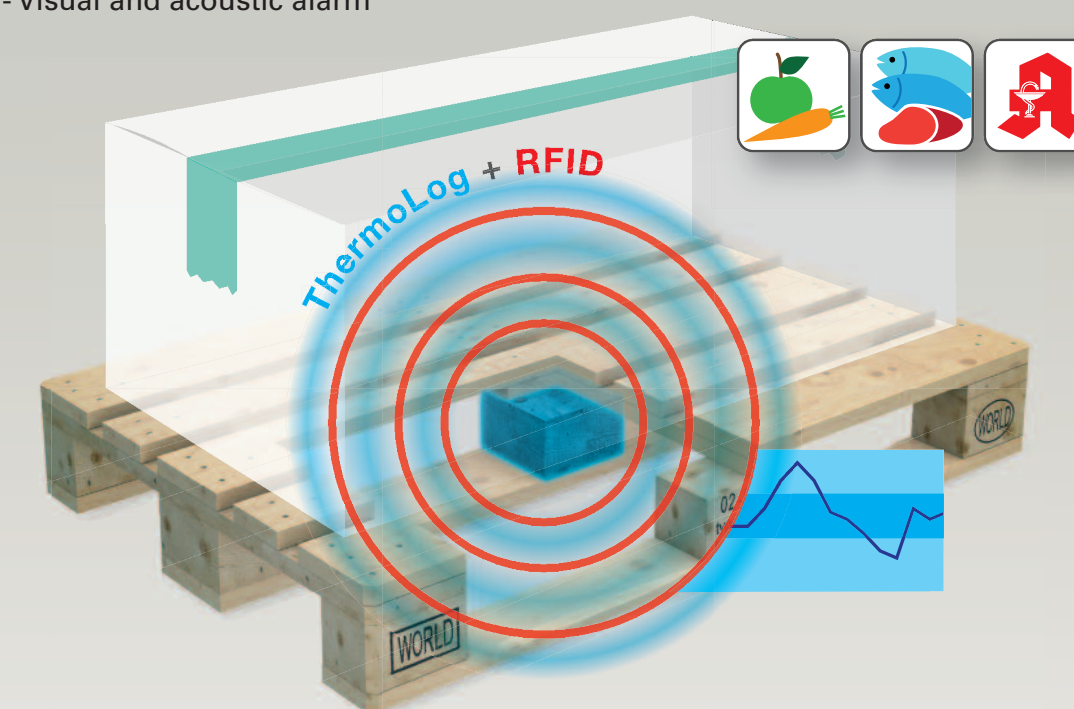


## WORLD ThermoLog pallets

**Monitoring units for temperature-controlled logistics**

Tamper-proof temperature monitoring plus identification of WORLD RFID pallets

- No effort for installing and returning a logger
- Sensors are located close to cargo
- Data control / reading via RFID
- User-selectable log intervals
- Visual and acoustic alarm



### Saving additional data

Temperature curves and thresholds can be saved for periods of up to six years.



### Thermologger specifications

- Temperature range: -35° C to +85° C
- Measuring intervals: 1 min to 24 hrs
- Memory size: 2,000 data records
- Operating modes: Limit watch, Stop full or Roll-over
- Extensive evaluation software

