

PERI Pave

The production pallet for the paving industry

Product Brochure – Issue 04/2019



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Important Information

All current safety regulations and guidelines applicable in those countries where our products are used must be observed.

The images shown in this brochure feature construction sites in progress. For this reason, safety and anchor details in particular cannot always be considered conclusive or final. These are subject to the risk assessment carried out by the contractor.

In addition, computer graphics are used which are to be understood as system representations. To ensure a better understanding, these and the detailed illustrations shown have been partially reduced to show certain aspects.

The safety installations which have possibly not been shown in these detailed descriptions must nevertheless still be available. The systems or items shown might not be available in every country.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required for any deviations from the standard design data.

The information contained herein is subject to technical changes in the interests of progress. Errors and typographical mistakes reserved.



PERI Pave

The better solution

One of the key objectives in the production of concrete pavers and blocks is to produce products of consistent high-quality efficiently, including with large throughput volumes. Key factors are, in particular, long-lasting production pallets and trouble-free operations.

This is where the current PERI Pave generation with integrated separating effect comes into its own. The advantage: concrete adhesion and sticking of stone sealing agents are significantly reduced due to the special coating of the panel.

Since the end of the 1990s, PERI Pave has been ensuring reliable production results around the world. The combination of extremely stable Multiplex panels with a highly resistant surface coating is firmly established. The production pallets are equally convincing in terms of load-bearing capacity, surface hardness, abrasion resistance and vibration behaviour while, at the same

time, having a relatively low own weight.

These characteristics make PERI Pave ideal for heavy concrete goods and products with high requirements as to evenness. Pave is also the right solution when used in conditions with a high level of humidity – for example, in air-conditioned chambers or with washed products.

In particular, PERI Pave with its integrated separating effect is a technological innovation which has great savings potential for the sustainable management of concrete block and paver production.

PERI Pave – the sophisticated production pallet

- Highly resistant surface with integrated separating effect
- Multiplex hardwood core for long-lasting dimensional stability
- Economical element in concrete paver and block production



Highly resistant surfaces with integrated separation effect

Concrete residue on production pallets and deposits of stone sealing agents lead to downtime in the production process. Cleaning, especially of hard-to-remove acrylates, takes time, increases the risk of surface damage and ties up personnel. Preventing such problems altogether was the idea behind the current generation of PERI Pave.

The proven coating of the PERI Pave has been further developed and optimised through the addition of innovative additives so that concrete products with a high w/c ratio are also less likely to stick.

The surface coating on both sides protects the concrete products from leakage of wood substances and the wood core against any mechanical damage.

In addition, the joint-free design ensures flat and smooth rear sides of the stones without the use of any withdrawal plates.

The coating consists of high-tech plastics specially developed based on polypropylene. The modified plastic is tougher and more impact and abrasion-resistant than the starting material, making it ideal for robust use in concrete block and paver production facilities.

Through the integrated separation effect, PERI Pave is even more valuable and able to accommodate the latest requirements in every respect. As a result, the innovation allows significant savings to be achieved in the material and manufacturing costs.

PERI Pave - the surface

- High-tech plastic coating
- Joint-free surface on both sides
- Integrated separation effect
- Smooth, clean and permanently flat surface of the reverse side of the stones



Multiplex hardwood core

for long-lasting dimensional stability

Hard and solid wood from Scandinavian birch trees forms the multiplex core of the PERI Pave. Thereby, several wood veneers in individual layers are glued crosswise one above the other. This results in the highest level of homogeneity in the production pallet itself.

The compact, solidly-joined construction is extremely resistant to bending and distortion and reliably supports almost any load. Furthermore, PERI Pave is also comparatively light, thus simplifying all handling procedures in the production facility. In addition, compared to conventional production pallets, the panel thickness can normally be reduced.

Highly dimensionally stable concrete products can be produced on the strong and absolutely flat production pallet as the vibration energy is uniformly transferred to the fresh concrete. This ensures minimal tolerances within the layers of stones across the entire surface. The almost loss-free transfer of vibration forces leads to highly compacted concrete paver and block products. As a result, savings can often be made on raw materials whereby vibration forces are reduced and cycle times shortened.

PERI Pave production pallets are individually dimensioned for the respective application. For the bonding of the veneer layers as well as the coating on the face veneers there is a warranty for the entire service life.

PERI Pave Technology

- Multiplex hardwood core
- Extremely resistant to bending and distortion
- Very high load-bearing capacity
- Excellent level of sustained transfer of vibration forces
- Low own weight
- Water and boil-proof bonding according to EN314-2



Economical element

in concrete paver and block production



PERI Pave – economic efficiency

- No withdrawal plates required
- Less cleaning effort
- Reduction of release agents and chemical cleaning substances
- Durability of the production pallet
- Increase in productivity
- Consistently high quality of the stone products and less scrap
- Savings potential for raw materials and energy

The long service life and the consistently good technical characteristics of the PERI Pave production pallet make a decisive contribution to ensuring a smooth production process in the concrete block and paver plant.

In order to make optimum use of the special properties of wood, moisture must be able to circulate. As a result, the pallet edges of PERI Pave permit the diffusion process. Compared to a completely closed coating, the wood is therefore allowed to breathe. The moisture can thus continuously diffuse outwards and the wood core does not absorb large amounts of water uncontrollably.

Consequently, PERI Pave production pallets are also ideal in conditions with a high level of humidity, e.g. when used in air-conditioned chambers or with washed products.

The permeable edges and the Multiplex construction also ensure consistent bending stiffness of the PERI Pave – for permanently level stone products.

In addition, Multiplex constructions have proven their worth time and again through countless applications. With this design, PERI Pave ensures a uniform transfer of the vibrating energy over the long term, which saves energy as well as raw materials and minimises wear in everyday production operations.

Technical data

PERI Pave – facts and figures

- Pallet thickness: 24 mm – 53 mm
- Size: max. 1,500 mm x 3,600 mm
- Weight: approx. 740 kg / m³ with approx. 12 % moisture content
- Bonding of the veneers as well as the coating according to DIN EN 314-2, water and boil-proof
- Edges twice sealed with breathable acrylic varnish
- Tolerances in accordance with DIN EN 315
- Suitable for every type of machine due to individual CNC processing of the pallet edges



Maintenance and cleaning with PERI Pave Brush



Regular maintenance and cleaning extend the service life of the production pallets. Maintenance requirements for the PERI Pave are relatively low and can be easily carried out by hand. We recommend brushes with plastic bristles in order to remove any concrete adhesion quickly and thoroughly.

Thanks to the modified coating, stickings are significantly reduced and the use of release agents can be largely saved.

Practical tip

In order to reduce mechanical damage and, thus, help to ensure a long service life, we recommend a regular inspection of the feed pawls and pushers. In addition, a maximum increase in the area surface during conveying operations is useful.



PERI Pave Brush

The brush consists of reinforced nylon bristles and ensures careful cleaning of the production pallets. For easy and quick assembly, the brush is comprised of two half-shells which are mounted onto a shaft. This results in only minimal costs and downtime when changing brushes.

No water absorption and, thus, maximum dimensional stability:

- Nylon brushes
- Brush diameter: 2.0 mm
- Brush height: approx. 40 mm
- Material of the body: PP 20 % GF
- Maximum number of revolutions: approx. 259 - 300 rev/min.

Easy and simple repair of damage with the PERI Pave repair kit

Individual instances of mechanical damage to the surface of the pallet can be easily and quickly repaired with the repair kit.

The kit consists of a router with corresponding tools as well as matching repair patches made of original PERI Pave material. Specially milled repair pieces for edge damage caused by the feed pawls are available which likewise can be used with the repair kit.



Comprehensive quality control with PERI Pave IT

Production pallets pass through the entire production cycle and stay with the concrete blocks and pavers throughout the whole manufacturing process. They are therefore ideally suited for monitoring product quality.

On request, PERI Pave production pallets can be identified by means of integrated RFID chips. As a result, production data and quality characteristics which are determined by the system on the wet side can be clearly assigned to the respective production pallet and, in turn, to the concrete stone products.

In particular, a connection between the wet and dry sides is created so that transparent traceability of the production is possible.



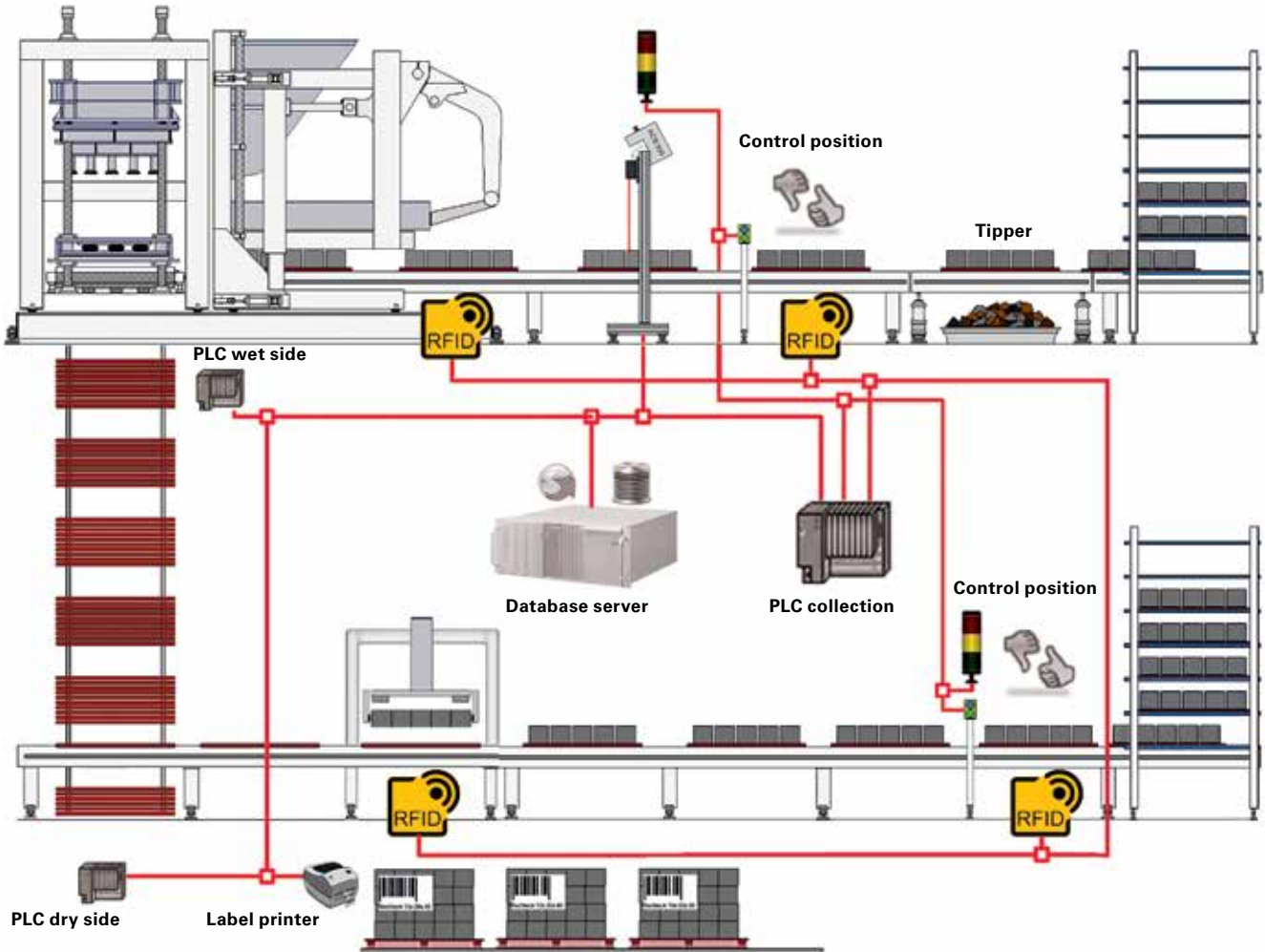
The installation of RFID chips in the PERI Pave production pallets can also be done later using the repair kit.



RFID tags for installation in the production pallets: the tags have a permanent unique number which can be used for clear identification of the pallet.

Your advantages with PERI Pave IT

- A complete flow of information from the wet to the dry side
- Immediate detection of quality deviations
- Documenting of cycle times and service intervals of the production pallets
- Reduction in the number of complaints
- Evaluation of performance data
- Continuous quality management



Our partner for PERI Pave IT

The integration and connection to the control system is carried out by R & W Industrieautomation GmbH, Hachenburg, Germany.

Competent network in all wood-related matters



PERI Pave production pallets are produced in Finland by UPM Kymmene Oy, a leading international manufacturer of plywood products. Fabrication takes place at the very highest technical level using state-of-the-art produc-

tion facilities and quality monitoring systems. In addition, the entire manufacturing process is ISO certified. This guarantees consistently high quality of the production pallets.



Wood specialists in research and development ensure that every single product meets the high demands. PERI Pave was ultimately also developed as the result of close collaboration.

PERI is a specialist in wood-related matters and has been using this material on a daily basis since 1969 in a wide range of applications. Company founder, Artur Schwörer, recognised that wood is ideally suited for correct and professional use in formwork technology.

At the beginning of the 1970s, Schwörer developed a formwork girder featuring a lattice construction which carried significantly higher loads with its lower weight than the solid web girders had managed

so far. In a modified form, the original product from PERI is still a globally important product in the company's portfolio. Over the years, numerous new wood-based materials and applications have been added. This includes plywood formlining and formwork girders for both commonplace and highly ambitious construction projects.

The raw material wood has many useful properties. Among other things, it can adapt to suit different climatic conditions within a very short time. The only condition for this is the absorption

and release of moisture. PERI brought all of its experience and expertise in wood-related matters into the design of the production pallet for the concrete block and paver industry. For example, the pallet edges of the PERI Pave permit the diffusion process. Compared to a completely closed coating, here the wood is allowed to breathe.

PERI Pave – a sustainable product

Responsible use of wood resources



Das Zeichen für verantwortungsvolle Waldwirtschaft



PERI Pave is essentially a sustainable product. The birch wood used to produce the Multiplex pallets is robust and very durable, which means the use of resources can be minimised. In addition, the hardwood comes exclusively from certified growing areas where

proven sustainable forestry practices are operated and controlled logging with reforestation takes place.

Not only the renewable raw materials and a long service life contribute to sustainability. Energy-efficient produc-

tion and the optimised use of raw materials are our highest priority. And the waste products, which nevertheless occur in the production, are completely recycled.

Certification

Wood is a renewable natural resource with the best premises for a sustainable use in the construction sector as well as in concrete block and paver production. The ecological benefits are obvious: fossil energy sources are not required for production, only the natural energy of the sun. Wood in the form of trees and forests also fulfils important functions in the ecosystem. It binds the

harmful CO₂ greenhouse gas in high quantities and is therefore a fundamentally important climate stabiliser.

Both PERI and the manufacturer UPM are PEFC and FSC-certified. Both certificates meet the criteria set by the European Commission and place high requirements in particular on the environmental compatibility of forest management, quality of work and the

social competence of forestry companies. In addition, the certification ensures that the supply chain can be completely tracked back along the process.

The Segment PERI Panel Products

Competent. Versatile. Efficient.

In the space of around 30 years, PERI has become one of the most successful providers of wood-based materials and plywood formlining in the world. The product portfolio is tailored to meet our customers needs worldwide.

Expert advice

PERI customers are looked after by experienced PERI sales staff and engineers. Our experts render competent advice and provide practical recommendations and solutions for precisely your area of application - from the conception through to implementation and product maintenance. At the same time, our regional contact persons ensure fast results in the shortest way possible.

Versatile set-up

Our customers come from a wide range of industries. As a result, our product portfolio today extends far beyond the construction industry into many other industrial sectors. These include numerous concrete block plants and precast concrete component production facilities, vehicle construction and the packaging industry. We have also established a good reputation for ourselves thanks to versatility and competence in the international arena.

Globally networked

We offer our products in every country at an attractive price-performance ratio. We can do this because we maintain well-run supplier partnerships with leading international manufacturers and deliver more than 10,000 containers a year. Our logistics operations in combination with the sales network and regional material storage depots ensure reliable and punctual deliveries.



Plywood and panel products

Extract from the PERI product portfolio

Products from PERI are available as standard in many qualities and designs. In particular, panel thicknesses, sizes and coatings are tailored to suit local market requirements. In addition, we offer CNC-machined and individually tailored solutions on request. Our experts advise and assist you in choosing the right product.

Coated plywood



With a smooth coating

Type of wood

Hardwood and softwood from various countries of origin (e.g. European, Asian, South American)

Coating

- Phenolic resin coating
- Melamine resin coating
- MDO coating



With a structured coating

Type of wood

Hardwood and softwood from various countries of origin (e.g. European, Asian, South American)

Coating

- Different non-slip structures



With a special coating

Type of wood

Hardwood and softwood from various countries of origin (e.g. European, Asian, South American)

Coating

- Polypropylene (PP)
- Fibre-reinforced (GFRP)
- UCP coating

Uncoated plywood



Type of wood

Hardwood and softwood from various countries of origin (e.g. European, Asian, South American)

Wood-based materials



Type of sheet

3-ply sheeting, hybrid sheets

The PERI Group

Formwork. Scaffolding. Engineering.



PERI is one of the leading international manufacturers of formwork and scaffolding technology. Since its founding in 1969, the family-run company has continued to set new standards in the development and production of innovative products and systems.

Headquartered in Southern Germany, we ensure the greatest possible proximity to our customers and their projects worldwide thanks to an international network of currently more than 70 subsidiaries and over 130 efficiently managed logistics locations. We see ourselves as our customers' partner in realising mutual success.

The segment for the concrete block and paver industry and the panel products business activities make an important contribution to our corporate success. In addition to production pallets, our portfolio also includes plywood formlining for all PERI formwork systems. Furthermore, we provide products to many sectors of industry such as vehicle construction or the packaging industry.



Hand-in-hand for the best solution

The core business of our company are high quality formwork and scaffolding systems. Designed to handle the tough day-to-day working environment, our developments have to prove themselves on a daily basis. However, we do not just see ourselves as a provider. Instead, we focus on the value creation potential of our products and systems and on ensuring the success of our customers. We see ourselves in the role of the provider of ideas and support. Together with our customers, we develop the best individual solution.

Behind all of this are values that have been firmly anchored in the guiding principles since the very first days of our family business: open and respectful behaviour towards each other, recognition of the potential for success, along with the pursuit of excellence and outstanding performance. All of this is modus operandi at PERI worldwide.

Two headquarters in Germany

PERI has been based in Weissenhorn since 1969. Here, south of Ulm, lies our main formwork production plant together with the research and development department. In 2017, a new production facility for PERI UP scaffolding technology started operations in the neighbouring town of Günzburg. An important growth spurt and a clear commitment to the company's second field of activity: scaffolding technology.

**The optimal System
for every Project and
every Requirement**



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



Industrial Scaffold



Access



Protection Scaffold



Safety Systems



**System-Independent
Accessories**



Services



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