

Transport eco pallets made of paper cardboard

Development status

Phase 4

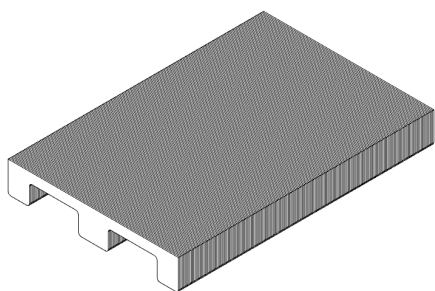
The transition from the prototype to the final and fully functional form. At this stage, the prototype is already fully tested, or the technology is certified and ready for mass deployment.

IP protection status

Utility patterns in application phase, nr.2022-39950 and nr.2022-39952

Partnering strategy

Co-development, investment, licensing



Institution

jctt Jihočeské Univerzita
a Akademické centrum
transferu technologií

University of South Bohemia in
České Budějovice

Challenge

The motivation for the development of this technology was in the main case the resonance on the development of e-commerce and the extreme need for transport pallets. At the same time, a modern approach was chosen, i.e. an approach that prioritizes sustainability and environmental friendliness, both of the production and the final product. At present, the most commonly used wooden pallets are prescribed sizes, or plastic pallets are used, which can be found in different sizes. Paper pallets are also already in use, but only 1 use is guaranteed for current paper pallets.

Description

It is an innovative concept for the production of transport paper pallets. Production is solved in such a way that the individual shape cut-outs are glued in series one after the other. This creates a two-way transport pallet that can be handled by low-lift and fork pallet trucks without limitations. This pallet is suitable for distribution logistics processes and, unlike standard paper pallets, is also intended for multiple use, having mastered at least 10 cycles during the tests. A great advantage is the possibility of easy and cost-effective adaptation of the pallet size to a specific need. These are fully recyclable transport pallets created from waste paper cardboard with a load capacity of more than 600 kg and weighing less than 20 kg. A similar concept of a cardboard transport pallet is currently not available to users on the market. This is a completely innovative approach of the use of waste paper cardboard, which would not be used in any other way and is used to make a transport pallet for several other uses. The solution is in the phase of industrial legal protection, but the fine-tuning of prototypes continues with a view to further reducing their weight and material demands of production. The basic concept is final and tested in practice, with another variant for testing in preparation.

Commercial opportunity

The solution can be used for pallet transport of goods up to about 600 kg. The advantage for the carrier is the low weight of the pallets and, if

necessary, simple adjustment to the size of the pallet.