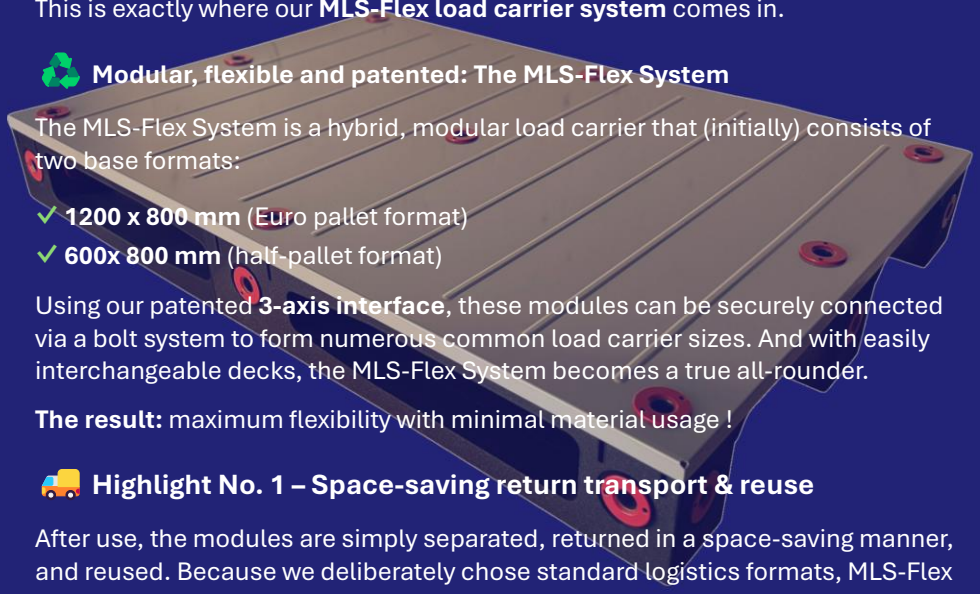
♻️ **MLS-Flex : THE** modular and flexible load carrier system for sustainable logistics !

Single-use wooden pallets are ubiquitous in industry – and a massive resource problem. Despite PPWR, **tens of millions of single-use pallets** are produced in Germany and Europe every year and disposed of after just one use.
From our perspective, this is an unnecessary waste of valuable wood resources.

This is exactly where our **MLS-Flex load carrier system** comes in.



♻️ Modular, flexible and patented: The MLS-Flex System

The MLS-Flex System is a hybrid, modular load carrier that (initially) consists of two base formats:

- ✓ **1200 x 800 mm** (Euro pallet format)
- ✓ **600x 800 mm** (half-pallet format)

Using our patented **3-axis interface**, these modules can be securely connected via a bolt system to form numerous common load carrier sizes. And with easily interchangeable decks, the MLS-Flex System becomes a true all-rounder.

The result: maximum flexibility with minimal material usage !

🚚 Highlight No. 1 – Space-saving return transport & reuse

After use, the modules are simply separated, returned in a space-saving manner, and reused. Because we deliberately chose standard logistics formats, MLS-Flex load carriers can be seamlessly integrated into **pooling cycles**, the **entire supply chain**, and **all logistics areas**.

🧩 Highlight No. 2 – Interface for logistics modules & system logistics

The **patented 3-axis interface** can additionally accommodate a wide range of logistics elements, including:

- ✓ Wheels and running gear
- ✓ Frames and tubular bracket constructions
- ✓ Load cells and RFID technology
- ✓ Load-securing elements
- ✓ Additional system components

This enables the MLS-Flex System to cover even complex tasks in **system logistics** and **intralogistics** – without expensive custom solutions.

🔄 Highlight No. 3 – Upgrade for the classic Euro pallet

Our interface is designed so that it can also be integrated into existing **EPAL- or Euro wooden pallets**. This transforms even the classic wooden pallet into a **multifunctional, expandable load carrier**.

🌱 100% recycled plastic. 100% recyclable. 100% repairable.

The MLS-Flex modules are made from **100% recycled plastic** and are **mono-material recyclable**. Thanks to the modular design, all components are replaceable and repairable – a real contribution to:

- ✓ Resource conservation
- ✓ Circular economy
- ✓ Sustainable logistics

This is our vision of modern, responsible material management !

I:P:O Konstruktionen
engineering & handling solutions

Granted patents :

National patent [DPMA]:
DE 10 2023 129 197

European patent [EPA]:
EP 4 545 435

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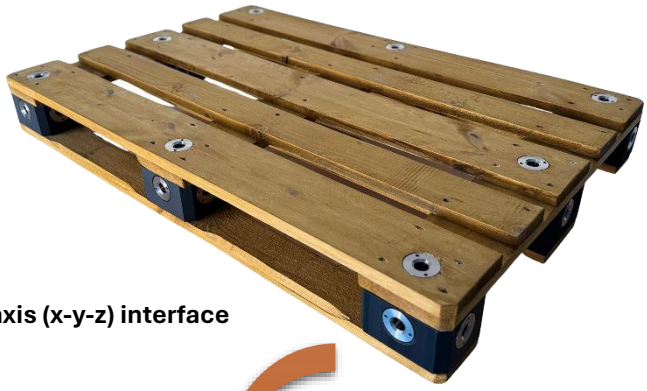
More Information about the company ?

IPO Konstruktionen
Thomas Helpap
D – 22081 Hamburg

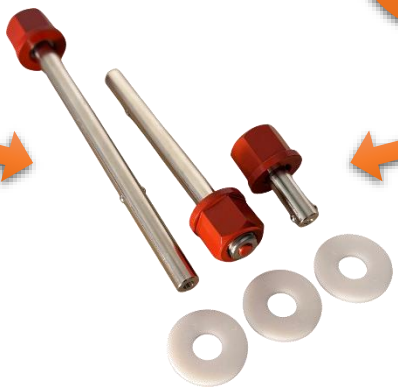
PARTNER DER LOGISTIK-INITIATIVE HAMBURG

MLS-Flex plastic base module :	
Dimension [mm]	**Weight [kg]**
1200 x 800 x 151	ca. 24,5
600 x 800 x151	ca. 14,5

MLS-Flex wood base module :	
Dimension [mm]	**Weight [kg]**
1200 x 800 x 144	ca. 22,5



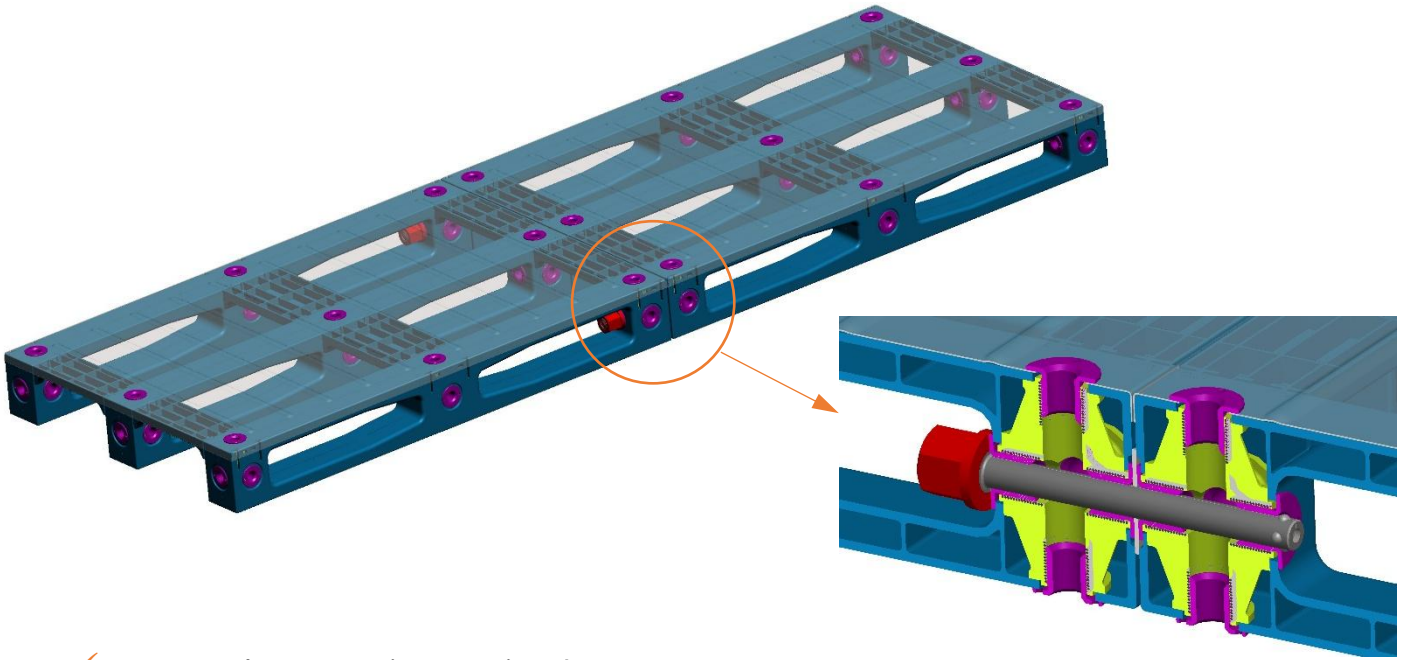
patented 3-axis (x-y-z) interface



- Internal reinforced and robust interface carrier made of recycled HD-PE
- Steel receptacle bushing / CuZn-coated
  Alternatively [weight-optimized]:
- Aluminium receptacle bushings / anodized
- Steel connecting bolts / CuZn-coated

- Pallet blocks made of recycled HD-PE or alternatively of **„ocean bound plastic“**
- Steel receptacle bushing / CuZn-coated
  Alternatively [weight-optimized]:
- Aluminium receptacle bushings / anodized
- Steel connecting bolts / CuZn-coated

MLS-Flex load carrier combinations [Examples] :		
Variant **plastic** - Dimensions [mm]		Variant **wood** - Dimensions [mm]
2400 x 800 ; 1800 x 800 ; 1200 x 1600 ; 600 x 1600		2400 x 800 ; 1200 x 1600



- ✓ **Three-axis** connection possible !
- ✓ **User-friendly, durable and quick to release** – with adjustable ball lock pin technology !

As of: 07/2026

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