



Clip-Lok SimPak[®]

General presentation

The Clip-Lok SimPak Group



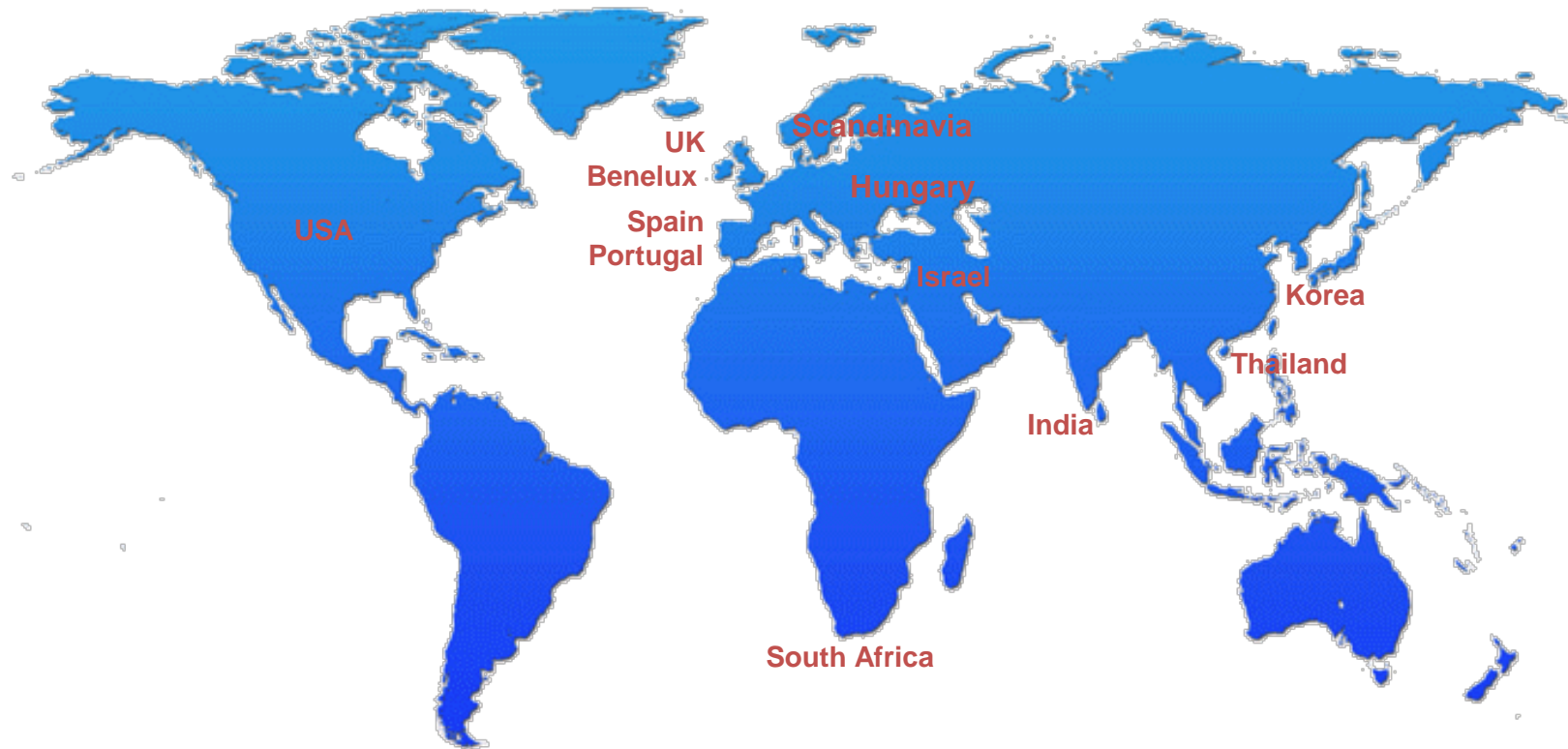
Company history

- The Clip-Lok SimPak® system was developed in Canada in 1982
- Clip-Lok SimPak® International Limited acquired the company in November 1989
- Patents and/or trade marks are now registered or pending in more than 70 countries



A global packaging group

- Production, sales and marketing on four continents – North America, Europe, Africa and Asia – so we can provide service to companies across the globe.

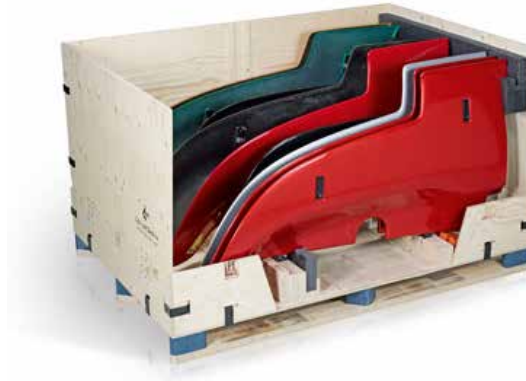


Key segments

- Defense



- Automotive



- § Aeronautics



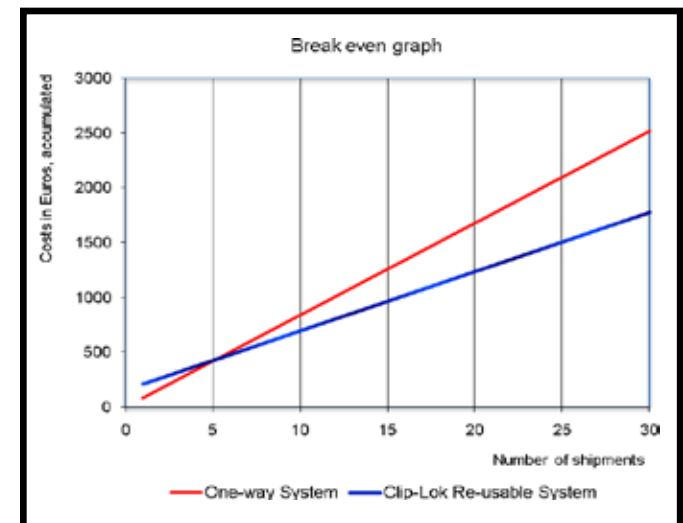
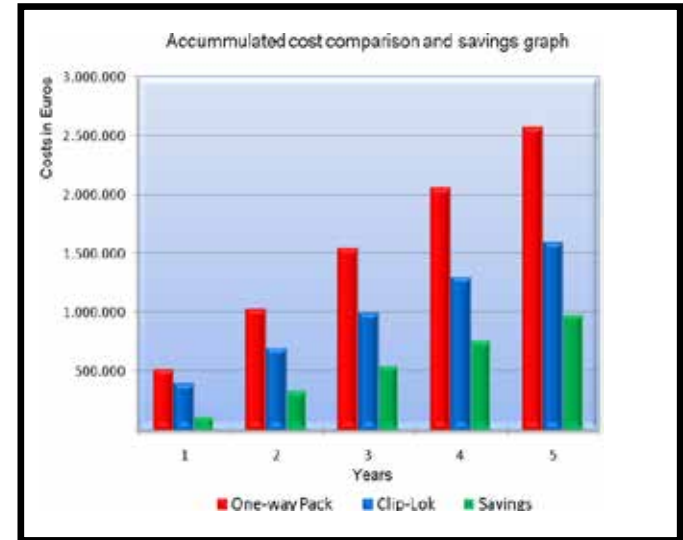
**Why have hundreds of
companies around the world
chosen Clip-Lok?**



Cost effectiveness

By choosing a Clip-Lok reusable packaging system instead of a one-way system, you can significantly reduce your costs.

- Fast return on investment - often after just three trips
- Very low maintenance costs
- Minimal return shipping and storage costs due to flat-packing
- No waste disposal costs at the end of each trip
- Custom dunnage design ensures maximum cargo protection to eliminate damage costs



Experience and support

- Over 25 years of experience
- Global support network on four continents
- International customer support at the point of dispatch and on arrival



Quality

- Extensive quality testing
- Numerous certifications
- Superior reliability and strength
- Custom design



References

ArvinMeritor



SCANIA



DAIMLER



BAE SYSTEMS



GENERAL MOTORS COMPANY



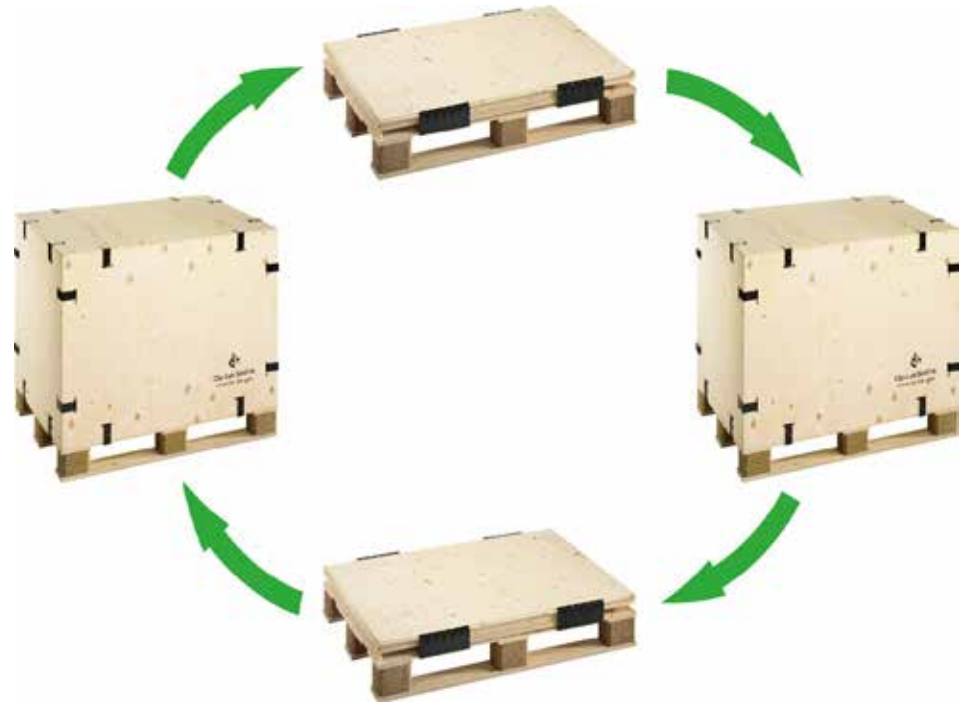
GENERAL DYNAMICS
Strength On Your Side[®]

The Clip-Lok box



Flatpackable and reusable

- From assembled to flatpacked in under two minutes
- All components of a flatpacked box are contained in one unit
- A flatpacked box is up to 80% smaller than an assembled box



Clip-Lok box material

- FCS, PEFC and ISPM15 certified plywood
- Strong and flexible
- Smooth clean surface
- Weather resistant
- Low maintenance costs - All parts can be replaced individually



The Clip-Lok clip

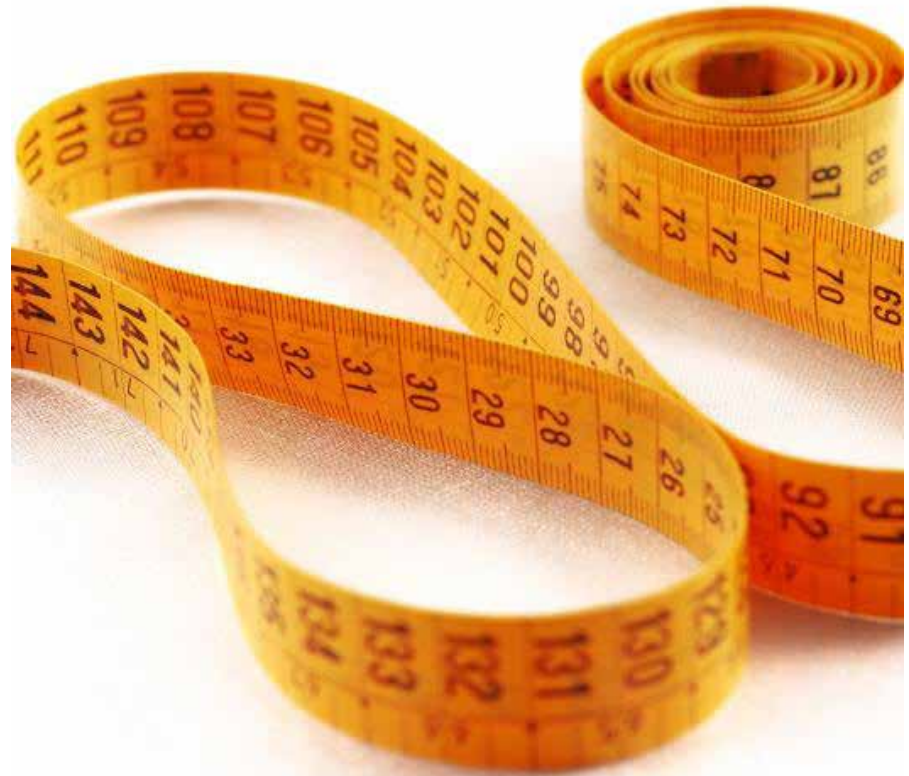
- Made of the highest quality spring steel
- 100% elastic behavior
- Tensile strength of up to 11,000 kg
- Surface protected with a high quality coating
- Can withstand a salt spray test for more than 250 hours
- Tested and approved down to -50°C for use in arctic climates
- Tested and approved for other extreme weather conditions



Custom design

Our experienced design teams will cooperate with you to meet your specific needs, including:

- Weight, volume and fragility of the product
- Loading plan
- Means and distance of transport
- Stacking requirements
- Inner shelving and other special dunnage



Ergonomic design

- Clip-Lok boxes are designed to improve working positions
- Ergonomic and easy handling
- Easy access to items



Environment

- Less environmental impact than that of comparative one-way packaging
- Made of FSC, PEFC and ISPM15 certified wood
- Non-toxic glue
- Recyclable materials
- Durability, reusability and flatpack-ability reduces costs and pollution



Tests

Clip-Lok boxes have been successfully tested by official test institutes around the world. Tests include:

- Pressure of up to 15 tons
- Transport of 1,000 liters liquid
- Stacking up to ten high when loaded
- Transport of hazardous goods
- Vibration durability
- Drop durability
- Weather resistance
- Impact durability



Certifications and approvals

Clip-Lok has obtained many international approvals including:

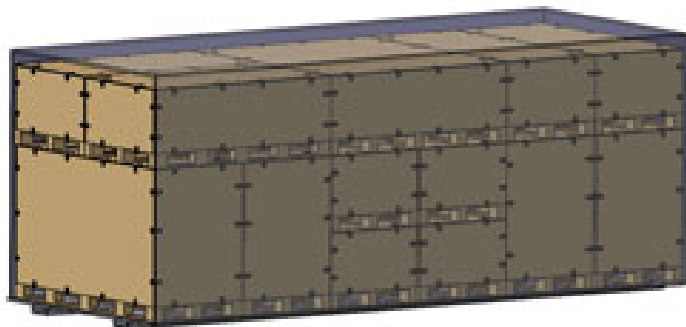
- ISO 9000 or equivalent awarded in a number of countries
- United Nations approval for the transport of dangerous/hazardous goods
- Armed Forces accreditation in a number of countries
- Our vendors are certified according to ISO 14001
- ISPM15



Transport

Custom box size can be optimized for transport by:

- Air
- Sea
- Rail
- Road



Storage and handling

- Assembled and dismantled by one person in just a few minutes
- Loaded boxes can be stacked without racking
- Empty boxes can be collapsed, flatpacked and stacked, saving up to 80% space and saving costs
- The boxes can be a part of the production line, optimizing the work flow and saving time



The Clip-Lok Standard box



Sensitive cargo

- Safely packed to protect surfaces
- Custom dunnage design optimizes space usage
- Easy access to the parts



Odd-shaped cargo

- Custom dunnage for maximum packing density
- Easy access and handling
- The cargo can be placed in several layers



Special purpose boxes

- Together with several organizations, Clip-Lok has developed a variety of special multi-functional boxes



Assembling the Standard box

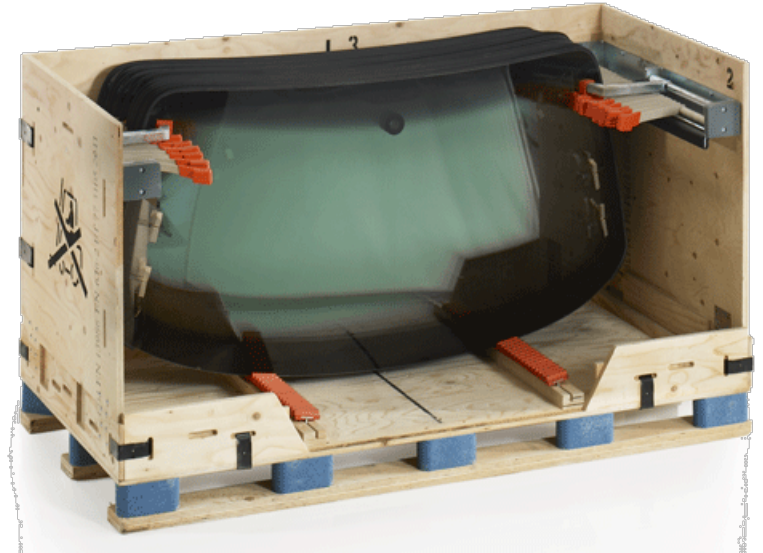


The Clip-Lok 2P box



Advantages of the 2P box

- Only two loose parts – lid and front panel
- Hinged panels and clips
- The dunnage folds into the box when flatpacked
- Fast and easy handling
- Designed for Lean manufacturing, in-sequence delivery and JIT



Heavy and bulky loads

- The 2P box can be optimized for heavy and bulky parts
- Dunnage secures the parts for safe transport and easy handling
- Designed for easy access to large parts
- The loaded box becomes a part of the production line



Extra large cargo

- A unique hinge system allows even very large boxes to be folded down to pallet size
- One person can build-up or collapse the box in under two minutes

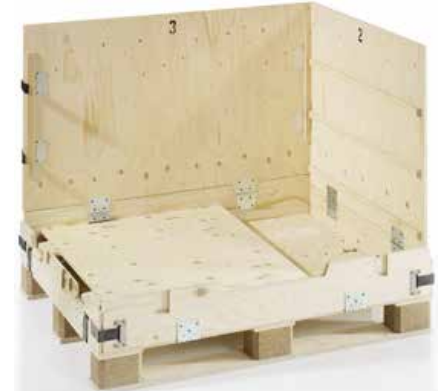


Lean manufacturing

- Easily integrated into Lean manufacturing
- Designed to optimize production flow
- No need for extra packaging
- Easy handling for one person



Assembling the 2P box



Dunnage



Clip-Lok dunnage

- Custom designed for each assignment
- Ensures safe transport of any type of item including:
 - Sensitive electronics
 - Large glass panels
 - Heavy and bulky engine parts
- High packing density – optimized space usage within the box
- Double function dunnage for Lean manufacturing



Dunnage materials

- Wide range of dunnage materials including plywood, steel, plastic, PUR and foam
- Combinations of various materials
- Chosen according to the items to be transported and the means of transport



Integrated dunnage

- No loose parts
- Reduced pack and unpack times
- All parts are contained in the flat-packed box



Other dunnage solutions

- Self-supported construction
- Supportive blocks
- Loose dunnage
- Shelving



Soft-Rack dunnage

- Optimizes packing
- No need for extra packaging
- 2P box dunnage folds into the box when it is flatpacked
- Easy access and handling

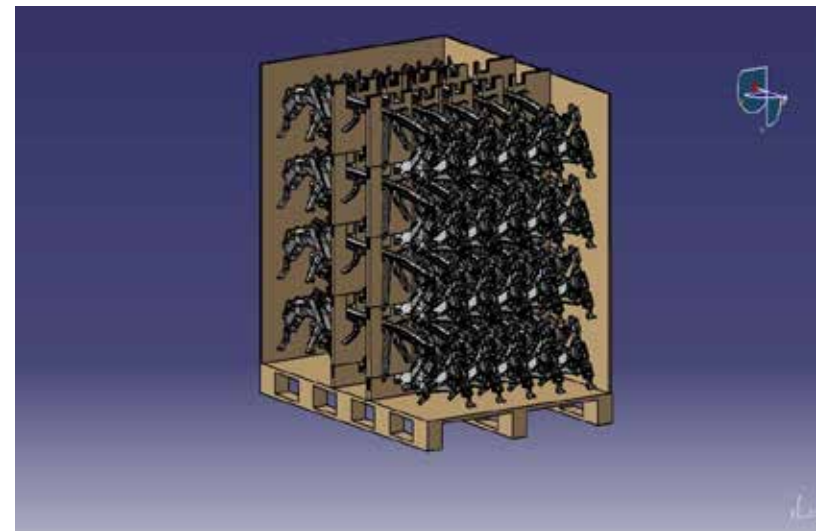
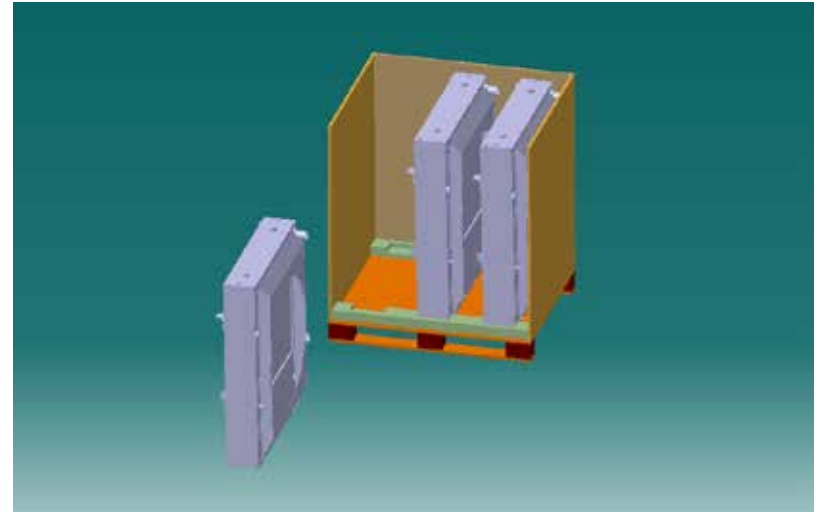


Engineering and service



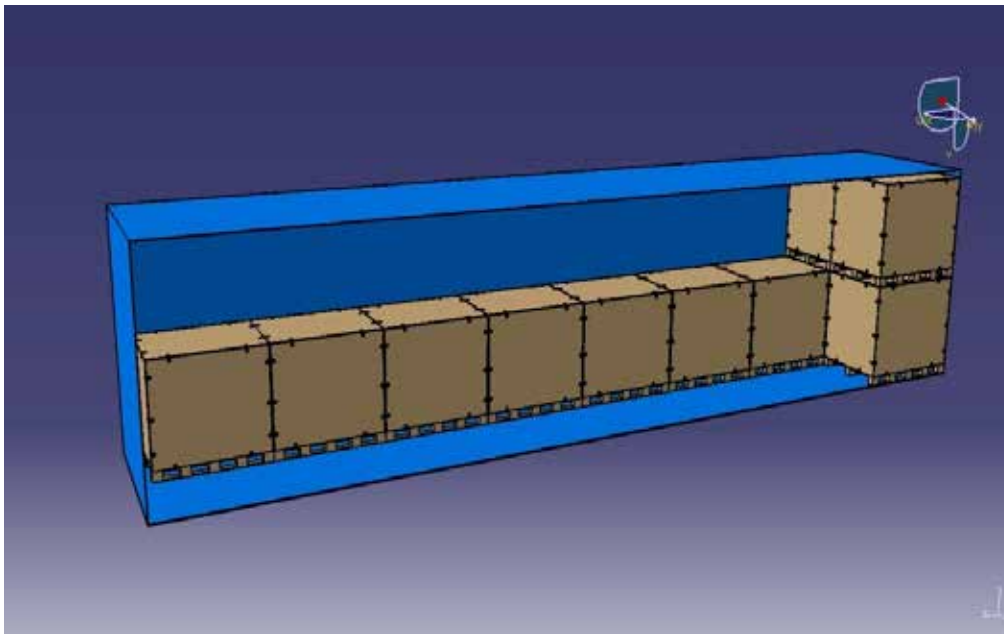
3D integrated development

- The box design is simulated in a 3D program such as CATIA
- Allows us to determine packing density without using physical parts
- Allows fast handling of inquiries
- Based on the simulation and acquired knowledge, a prototype can be ordered for testing



Pack plans

- Pack plans can be provided upon request
- Boxes can be designed to match all kinds of transport methods

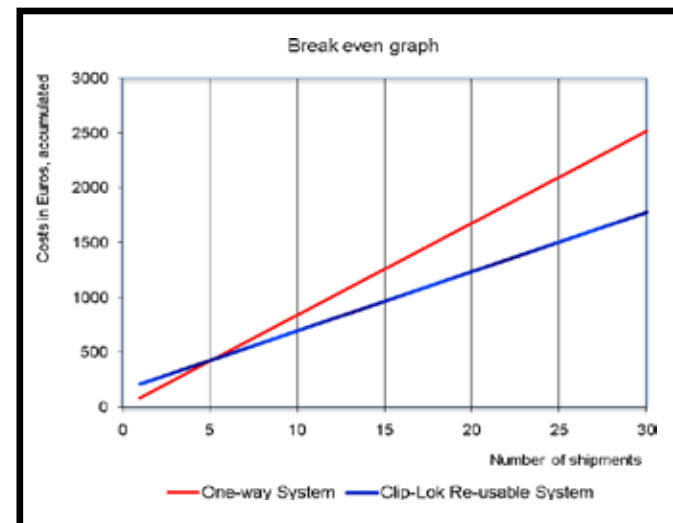
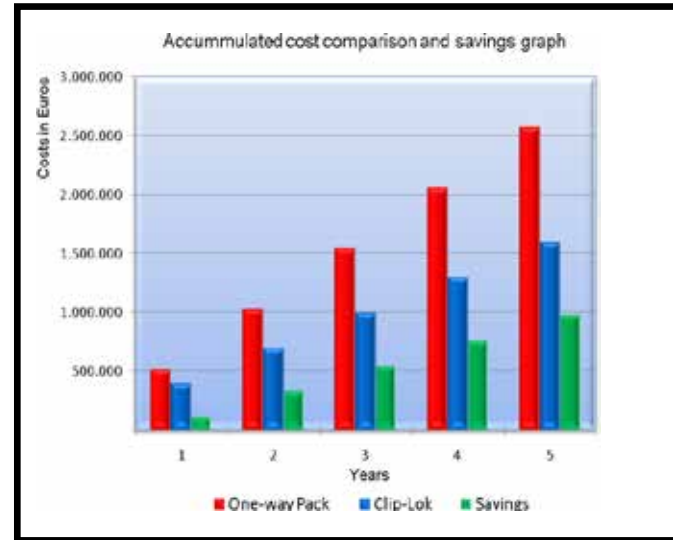


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Nr 1	Nr 2	
Nr 3		
Nr 4		
Nr 1	Nr 1	Nr1

Feasibility study

Clip-Lok is able to calculate:

- Your cost savings when using the reusable Clip-Lok system instead of one-way boxes
- The possibilities to increase the numbers of parts and boxes per shipment
- Potential cost savings when optimum dunnage is designed



Clip-Lok packaging guarantee

Cost effectiveness



Experience and support



Quality



How may we help you?





Clip-Lok SimPak[®]