



FLEXITANKS

SUSTAINABILITY REPORT 2019-2020



European manufacturer of flexitanks,
leader in design and process automation.



Today, sustainability is one of the most important topics in the industry, especially ecological sustainability in the area of packaging.

Consumers around the globe increasingly care about environmental protection and sustainability. According to market research, every second consumer wants to learn more about product sustainability, while 82% of all consumers say they care about the sustainability aspects of packaging. This applies not only to the material used to produce the packaging, but also to its entire life cycle.

As a leading and European flexitank manufacturer, Trust Flexitanks takes on responsibility for a habitable environment. Sustainability is therefore a key component in our corporate policy and business mission.

It governs our proactive behaviour – driven by the commitment of a responsible and successful company. We do not want to wait for our industry to impose any rules but we strive to be the “green” benchmark in our sector!





In all phases of a product's life, from its inception to the end of its life, we strive to protect natural resources, reduce emissions, prevent waste, avoid environmental pollution, and optimize logistics:

- We systematically research and consider alternative raw materials, based on recycled materials, and apply them wherever possible and reasonable. Only ecologically friendly providers that share our philosophy are selected.
- Our production site cooperates with local recycling companies where almost all inevitable production waste is converted into new products (film and other plastics, steel, carton, ...). Most of them are or will be re-used in Trust products and ancillaries.
- We strive to minimize natural resources in our production process or reduce to a minimum its ecological impact.

PROJECTS

- We have signed an exclusive partnership with EU based company "ECOCIRCLE BV" – dedicated exclusively to the recycling of flexitanks and bulk liners and give birth to new products, used by others and/or by ourselves.
- Trust actively cooperates with "AELER", Swiss based company who develops special composite based containers to increase the payload and thus reduce packaging materials and carbon footprint of the liquid transport.
- We have developed a strong and reliable bulkhead system for the industry to be re-used worldwide. We encourage our customers to use these systems wherever economically viable. **Trust** is actively working on the enhancement of its worldwide network to make the recoverable bulkhead project more efficient.

Trust Flexitanks is committed to sustainable development and to transparency and accountability, to ensure a healthy future environment for the next generations to come.

Raf Herman

Director *Trust Flexitanks*



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1. GENERAL SUSTAINABILITY: FLEXITANKS VS OTHER TRANSPORT OPTIONS

Flexitanks are usually unjustly categorized as non-ecological packaging. But in fact nothing could be further from the truth:

Flexitanks were mainly invented to:

SOLVE INEFFICIENCIES OF DRUM AND BOTTLED TRANSPORT

- * increase the payload per cntr by + 25% compared to steel drums and by +40% compared to bottled transports
- * reduce packaging weight compared to drums, IBC's and bottles by up to 80%
- * reduce loading operations by forklifts using manpower and gas/diesel

SOLVE INEFFICIENCIES OF ISOTANK TRANSPORT

- * avoid imbalances in the isotank market causing double transports and double carbon emissions thus reducing total carbon footprint considerably.
- * avoid cleaning costs of isotanks with waste water and extra local transports
- * avoid bottleneck situations where no isotanks are available

Flexitank VS Steel Drum



- ✓ Flexitank has far lower package cost than a steel drum. One 20ft container can load about 80 units 200L steel drum. Its total cost is about USD2000~2,500. But one 24,000L flexitank is only about 10%.
- ✓ One 20ft container can load about the 16,000L drum. But the flexitank can reach 24,000L. It can save about 25% freight cost.
- ✓ Container flexitank completely eliminates the complex operation procedures, manpower, working hours and many other costs required by barreled cargo. So its advantages are more obvious.

2. TRUST SUSTAINABLE INTERNAL PROCESSES

2.1 SELECTED RAW MATERIALS IN PRODUCTION PROCESS

In order to minimize the ecological footprint of our materials, Trust Flexitanks strives to :

- * use recycled materials wherever these materials will not jeopardize the end quality of our products.
- * select providers with proven sustainable production processes
- * choose products with minimal ecological impact

PRIME MATERIALS ONLY: PE FILM - WOVEN PP OUTER - VALVES

Due to the high mechanical and food grade requirements, some key materials like valves, PE film and PP woven outers can only be made from new sources.

Current technology and food grade requirements do not allow a substantial use of recovered materials.

We have started a project with our main suppliers to detect short and medium term possibilities to include small percentages of re-used but clean materials.

Trust only works with European suppliers with proven sustainability records and with warranties that no forbidden substances as phthalates, xylenes, heavy metals etc are used in the production process.

Wherever possible only natural materials without colouring are used to reduce the ecological impact and to ease recycling after its use.

Following our continuous improvement process, thinner but more resistant materials are developed to reduce the amount of raw materials used.

Local and close-by producers reduce the logistical carbon footprint of these materials.

PE and PP are 100% recyclable materials and Trust actively supports and encourages the recycling processes through its exclusive partnership with "ECOCIRCLE BV" (see further)



Natural PE film and welding material

GENERALLY RECOVERED MATERIALS: BULKHEADS

The Trust bulkhead materials are 90% made from recovered materials

BACKING BOARD: Both MDF boards (medium density fibre) and PP boards are made of at least 80% recycled materials.

MDF boards are made of recycled wood particles with glue;

PP boards are made of min 80% recycled PP pellets.

Both provided in Europe to reduce ecological logistical footprint.

STEEL BARS: 60% of our actual bulkhead sold are made with recovered steel bars

20% of our actual bulkheads sold are made to be recovered by the customer = Logistics operator

20% only of our actual bulkheads sold are new and go to unknown destinations.

Steel is one of the few materials that do not lose mechanical specs when re-melted after use. In this respect steel always finds its way to the local scrap recycling plant, wherever in the world. Our steel providers are local producers to reduce ecological logistical footprint. Trust has developed a re-usable bulkhead for worldwide use with all its partners – Customers



The Trust Eco4 bulkhead with 100% recycled materials!

GENERALLY RECOVERED MATERIALS: BULKHEADS

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ANCILLARIES:

Plastic PP legs and plastic PP studs are injected by Trust where more than 70% of the material used is recycled PP material. Local production means no carbon footprint.



CTR LINING:

Both carton and PP lining are made from close to 100% recycled materials as no special mechanical specs are required for these materials. All materials “Made in Europe” to minimise ecological impact.



FLEXITANK BOX:

The Flexitank boxes are reutilised for cntr wall protection when fitting the flexitanks so no residual material is created when the Flexitank is fitted according to our Fitting Manuals



2.2 RECYCLING WASTE PRODUCT FROM PRODUCTION PROCESS

The production process of flexitanks results in little leftover materials and they are fairly easy to recycle:

Leftover quantities of PE film and woven PP are brought to a local certified plastics recycler

Empty carton boxes and office paper are recovered by local the carton industry

Leftover quantities of MDF boards are returned to MDF producer

Leftover quantities of PP boards are returned to local certified plastics recycler

Leftover parts of steel bars are bought by a local scrap dealer.

No chemicals or other high ecological impact materials are used.

The Trust factory produces an absolute minimal quantity of non recoverable waste. Our production process can be categorized as very ecologically sustainable.



Trust recycling área: PE film and carton recovery bins

2.3 USE OF NATURAL RESSOURCES

WATER

The production process of flexitanks does not need water.

Only in our testing facility, water is used to fill and empty the bags.

A special storage tank is placed on site to recover and re-use the water after testing.

Trust is actually building a complete new factory where rain water can be collected to be used in our testing facility.

ELECTRICITY

The production process of flexitanks uses electricity to heat the welding equipment.

Constantly heated devices are reduced to the maximum and replaced by impulse heating with comparably low electricity consumption.

The roof of our new factory is prepared for solar panels to be installed. The installation of solar panels is planned for the next 3 years.

AMBIENT TEMP

Our new factory is being built to the highest thermal insulation standards to reduce ambient heating and air conditioning to an absolute minimum.



Testing facility with water storage tank



Trust new factory actually being built

3. TRUST SUSTAINABLE PRODUCT DESIGNS

3.1 THE SINGLE LAYER FLEXITANK

TRUST is one of the very few producers offering PE single layer Flexitanks.

When it comes to ecological sustainability, the TRUST single layer flexitank offers many advantages compared to the multilayer solution.

Also when the full (direct + indirect) cost of the transport is calculated, the single layer flexitanks is almost always the most economic solution:

- * Residue product after discharge with single layer flexitanks is almost zero, even for more complicated products with high viscosity. Results with single layer are way better than with multilayer tanks.
 - * No product value lost
 - * No product recycling or waste Management cost
- The single layer Flexitank is the better recycling option as only one material is used (PE film) and materials do not need to be separated.
 - * The multilayer flexitank where both woven PP and PE film are used, needs to be (manually) separated. Recycling of the multilayer is still unpractical and landfill is the more economic option.
 - * With current technology, the single layer flexitank is at this moment the only viable recyclable product on the market!



The Trust single layer flexitank

3.2 THE 40FT FLEXITANK

The success of the Flexitank business is becoming its own enemy with a lack of decent 20ft ctnrs in some ports worldwide. This causes empty containers to be repositioned which will increase the carbon footprint. (Same problem as the imbalances in the isotank market).

The use of 40ft containers with a much higher availability in many ports gives a solution to this problem.

TRUST is actively developing the 40ft flexitank and hopes to be able to offer a solution in the coming months.

The 40ft flexitanks will also be designed to be used for truck trailer transport whereby trucks can be used for others types of transport on outward or inward legs helping to reduce unnecessary emissions.



The 40ft ctrnr flexitank

4. TRUST SUSTAINABILITY PROJECTS

4.1 ECOCIRCLE

Although **TRUST** as a manufacturer has no direct operational responsibility in terms of recycling, we strive to actively encourage and support the recycling process.

Recycling is a separate business for specialists. This is why Trust has signed an exclusive cooperation agreement with ECOCIRCLE BV www.Ecocircle.nl

ECOCIRCLE's main objective is to recycle all flexitanks and use the recycled materials again in Flexitank industry (bulkheads, lining material etc.)

This will be achieved through cooperation with Flexitank collectors in different locations in Europe and later globally.

Landfill is no sustainable solution for flexitanks and forbidden in more and more countries. New EU legislation will soon forbid the export of used flexitanks material outside of the EU. Local recycling will be encouraged and Trust aims to support these new directives.

Ecocircle will act as a consultant for all our customers in terms of recycling. It will gather all information about where and how flexitanks are burnt, destined to landfill or recycled. With this information recycling points can be set up where most efficient and viable.

Trust will add a sticker to all its flexitanks with contact details of ECOCIRCLE (see below) . This sticker has to be placed on the bulkhead board so that all receivers of our flexitanks can contact ECOCIRCLE and discuss all short and long term recycling options.

This is obviously a long journey. The first year real achieved recycling percentage will be low but every year more information and knowledge will be available and achievements will exponentially grow. Trust and Ecocircle want to be the benchmark in flexitank equipment recycling.



Sticker to be placed on bulkhead

4.2 AELER

The best way to reduce the carbon footprint of liquid transport is to increase the payload per container moved.

Swiss-based Company **AELER** has set its sights on innovating the 60-year-old container. AELER containers are built out of composite materials which makes them lighter, better insulated and stronger than steel containers. This enables them to safely increase the payload per container by almost 20%: up to 28,000 liters or 28 tons.

The use of an AELER container can reduce the carbon footprint by up to 6 tons of CO₂ per year compared to using a standard steel box.

www.aeler.com

Trust partners with AELER and cooperates with the design testing of the composite containers. Moreover, we design special flexitanks for this Project in order to resist the increased volume.



The AELER composite container loaded with 28KL Trust flexitank

4.3 TRUST WORLDWIDE NETWORK · REUSABLE BULKHEAD

Trust is actively working on enhancing its worldwide network. The **TRUST NETWORK** is a cost free network where our customers can connect and do B2B business.

Trust will not interfere in the agreements between customers and will not take any commission.

The network helps our customers to become stronger commercially but also creates opportunities for collaboration on flexitank material recycling, re-use of bulkheads etc.

Trust together with **ECOCIRCLE** will be the driving force for the ecological aspect of the network.

The reusable bulkhead is presented to our customers. Objective is to detect flows between customers. Here the possibility is offered to take the stronger bulkhead version that can be re-used many times. This is good for the environment and creates also economical benefits.

Recycling options will be presented by Ecocircle and all our customers as well as all receivers of our flexitanks can have direct contact with Ecocircle for any help needed how and where to recycle the flexitanks.



5. CONCLUSION AND ROAD AHEAD

Sustainability is more than economical steady growth and assurance of long term job creation.

It is part and parcel of the social and ecological responsibilities of a Company in society.

Social responsibilities

As a European Company Trust offers decent working conditions following and exceeding European and local working condition laws and regulations.

It is our desire and obligation to create a positive, healthy and stimulating working environment where every worker can develop himself professionally but can also build his personal life project based on the economical rewards achieved through his job. Trust offers long term jobs with fix contracts to its employees so they can run a smooth and prosperous life outside the production hall walls.

Ecological responsibilities

In this document we have concentrated on the ecological aspects of flexitanks in general and of Trust in particular. The actual solutions offered are far from perfect but the path is marked and first steps taken. This will be a life document and progress will be monitored continuously.

We have chosen the right specialized partners (ECOCIRCLE and AELER) to guide us on our path to excellence in this matter.

We will encourage our customers, providers and other partners to participate in this exercise to put our business in the green spotlight to guarantee a long and steady growth and help our environment be healthy for many generations to come.

Raf Herman

Director Trust Flexitanks