

SMARTPOLIBOX®

✓ Brevettato/Patented

**THE MOST
ADVANCED SOLUTION
FOR FOOD AND BEVERAGE
TRANSPORT MONITORING**



**THE PERFECT SOLUTION
FOR TRACEABILITY!**

POLIBOX®



(R)evolutionary

POLIBOX®



(R)evolutionary

TAKING PART IN A BETTER FUTURE

POLIBOX® is always focused on researching materials, finished items and technologically innovative products. POLIBOX® conceives the products as components of integrated systems and follows the production of the items faithfully and totally. POLIBOX® deals with the processes that go from the direct purchase of some raw materials to the total control of all the productive activities of specialized companies that work in partnership.



EPP WITHOUT CFC



LOW IMPACT



HEALTHY ENVIRONMENT



EVERY TIME YOU USE IT, YOU'RE GOING TO:



**RESPECT THE
ENVIRONMENT**



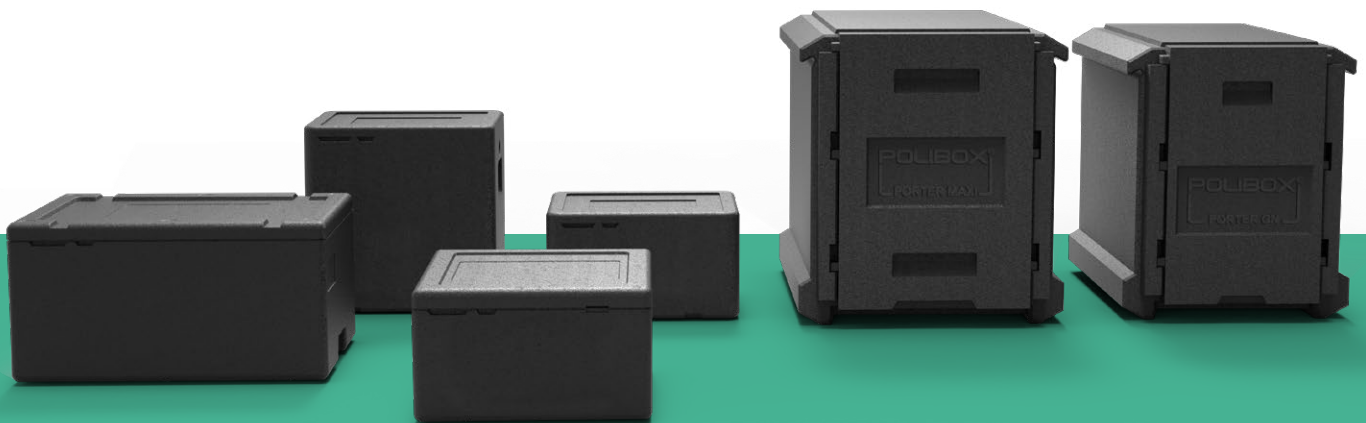
REDUCE WASTE



SAVE ENERGY

POLIBOX® CONTAINERS

Food and perishable items have very high conservation requirements. They must be maintained in a safe environment regarding health and hygiene. The other important requirement is the mechanical protection caused by the delivery of food products. And finally we have the temperature control. Today the need of HO.RE.CA. and catering companies is caring about ecological and environmental aspects. Our commitment has been and will be, in the coming years, to create product culture by promoting the reduction of environmental impact with our isothermal containers, as they are reusable, not disposable and above all 100% recyclable.



EXPANDED POLYPROPYLENE

Expanded Polypropylene used in the production of POLIBOX® is an ecological material: it is composed of 98% air and is recyclable. The basic material is oil. For the production of EPP, the pearls (form in which the polypropylene is presented at the early step) are swelled up to 50 times their initial volume by putting them in contact with hot water steam and nothing else. Hence chlorofluorocarbons are used neither for production nor for processing. Therefore the EPP does not harm the environment neither for its productive effect nor as a raw material, as it consists of air and only 2% of pure hydrocarbon structural material.

CO₂ REDUCTION

For the production of POLIBOX® only first quality virgin EPP is used, environmentally friendly: without CFC, polyurethane foams or other expanding gases. The goal is to use materials that minimize the environmental impact of CO₂ pollution. CO₂ reductions are the result of the ability to manufacture isothermal containers for foods that weigh up to 37,5% less.

100% RECYCLABLE

EPP can be burned with other municipal solid waste without producing poisonous or acidic substances, as if incinerated it produces only carbon dioxide (CO₂) and water (H₂O). 1 kg of expanded polypropylene saves about 1.3 kg of naphtha in incinerator operation.

You are allowed to dispose of the containers in normal landfills without affecting the environment, as the product is chemically neutral and does not pollute either the air or the aquifers.

We can safely say that these manufactured goods, shredded with solid urban waste, made mostly of air, contribute to the decomposition of organic waste.

PPE BENEFITS

RECYCLABILITY

POLIBOX is 100% recyclable.



LIGHTNESS

The reduction of the mass of the material and the number of minimized components drastically reduce the weight.

PPE



STRUCTURAL RESISTANCE

Main structural support thanks to the high strength/weight ratio.



ENERGY ABSORPTION

The closed cell structure guarantees a return to the original shape after the dynamic stresses.

UNIVERSITY OF STUDIES MILAN

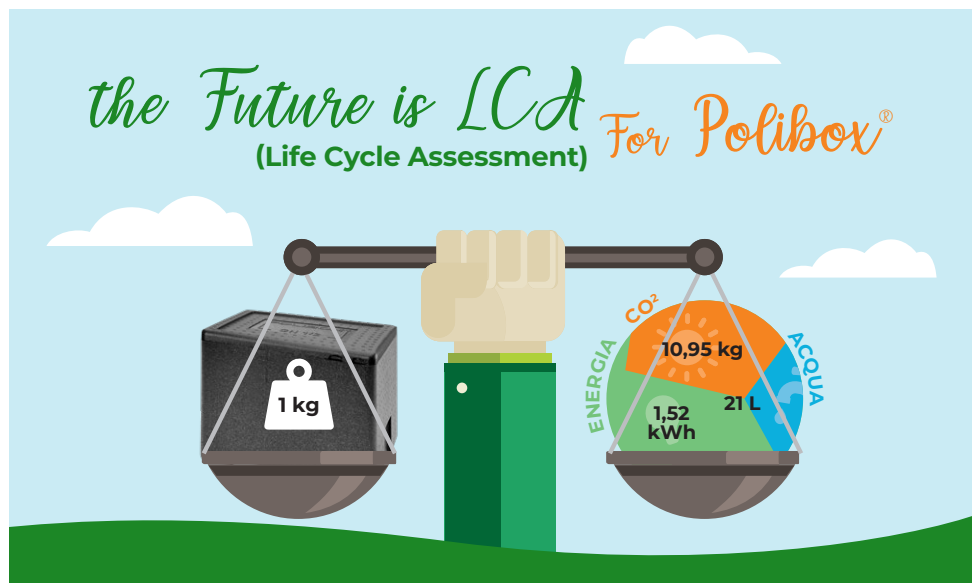
Department of Agricultural and Environmental Science production, territory, agro-energy.

Analysis of the life cycle of an innovative isothermal container for food preservation:

collection and analysis of data in reference to the production phase.

PURPOSE

Due to the collaboration between the Department of Agricultural and Environmental Sciences of the University of Milan and the company POLIBOX®, the environmental impact of the life cycle of a Polibox isothermal container was assessed.



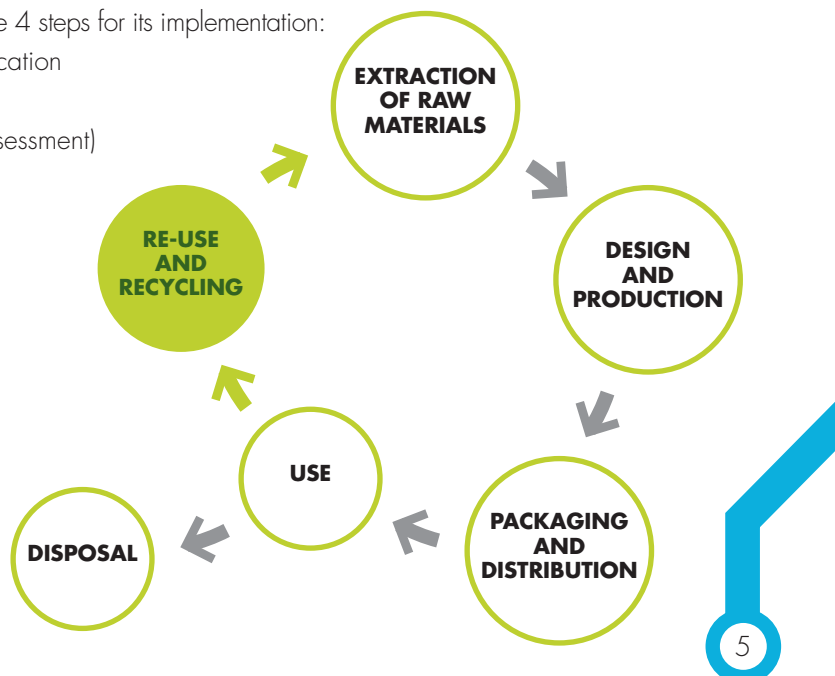
WHAT IS LCA (LIFE CYCLE ASSESSMENT)?

LCA (Life Cycle Assessment) is a quantitative tool to estimate the environmental impact of a product defined in the ISO 14040: 2006 and 14044: 2006 standards.

LCA is fundamental for companies who want to make decisions involving the environmental domain.

The ISO standards establish the structure of the LCA and define 4 steps for its implementation:

- Step 1: Definition of the objective and the field of application
- Step 2: Inventory analysis (LCI Life cycle inventors)
- Step 3: Evaluation of impacts (LCIA life cycle impact assessment)
- Step 4: Interpretation

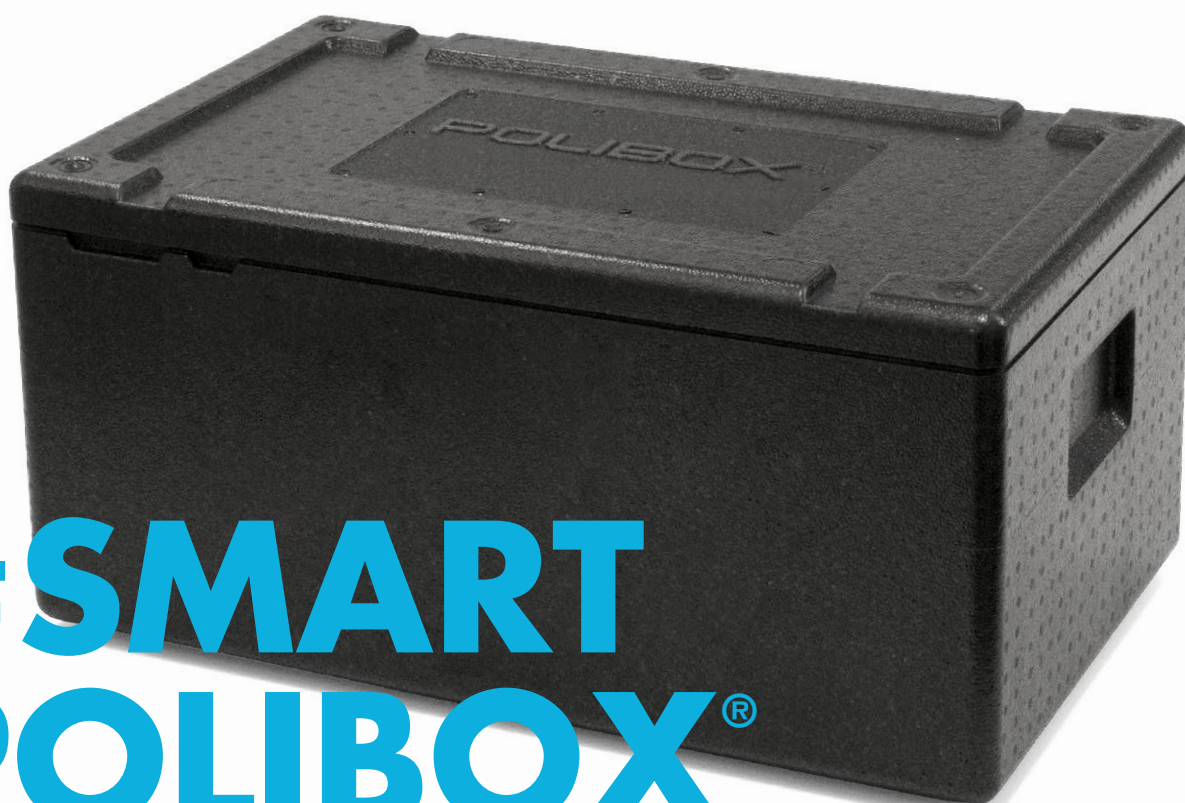




In order to meet the growing demand of food industry operators to be able to **track the shipments and deliveries of meals and foodstuffs in detail**, monitoring them along the entire distribution chain was born:

SMARTPOLIBOX®

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#SMART POLIBOX® EASYPLUS



Frame the QR-code
with your smartphone camera to
**GET MORE
INFORMATION**



WHAT IS SMARTPOLIBOX EASY PLUS?

The best tracking system in the world
Innovation meets excellence.

- + **TECHNOLOGY**
- + **TRACEABILITY**
- + **SECURITY**
- + **REPORTING**

SMARTPOLIBOX® Easy Plus is a solution based on an App and a WebApp that communicate in collecting, storing and managing traceability data based on the digital signature (Tag) of each SmartPolibox.

SMARTPOLIBOX® Easy Plus simplifies the tracking procedures of SmartPolibox isothermal containers, certifying through E-Signature the operating processes normally used for the delivery of perishable heat products.

The operations that have been defined are:

SHIPPING • DELIVERY • RETURN



SIMPLIFY TRACEABILITY PROCESSES



SHIPPING

The SHIPPING operation it is often used to "tag":

1. a transfer from one department to another;
2. a delivery to the carrier for transportation to a destination;
3. the start of a shipment to a customer of a SmartPolibox to carry certain contents;
4. it generally indicates an exit from where the SmartPolibox is "Charged" associating the departure place and destination place and communicating it to the Cloud.



DELIVERY

The DELIVERY operation it is often used to "tag":

1. the delivery to a recipient of a SmartPolibox with a certain content;
2. the withdrawal of a used SmartPolibox;
3. essentially it is convenient to use to associate the successful delivery to a specific destination by communicating it to the Cloud.



RETURN

The RETURN operation it is often used to "tag":

1. the return to the packaging area from where the SmartPolibox came out;
2. the return from a customer and/or destination place of a SmartPolibox received to carry certain contents;

THE SYSTEM IN BRIEF



*Intelligent Mobile Data Terminal

THE SMARTPOLIBOX® RANGE

Crystal GN 1/1

Cod. **119994**

600x400x300 mm
Black lid

Cod. **120179**

Orange lid

Cod. **120180**

Green lid

Cod. **120181**

Magenta lid

Cod. **120182**

Yellow lid

MAXI Crystal 310

Cod. **115847**

695x485x385 mm
Black lid

IMDT

Cod. **120020**

Intelligent Mobile
Data Terminal

CLOUD

Cod. **120183**

Annual SMARTPOLIBOX®
Cloud Subscription

SMARTPOLIBOX EASY PLUS?

To simplify and support the functioning of the process, the App allows two operating modes:

FREE

- > when you want to minimize IT controls and freely use the three operations OPO1-OPO2-OPO3;

DRIVEN

- when you want to have support during the Shipping-Delivery-Return process.

These two modes can be configured at any time as the departure and destination places are configurable.

Registered users on the cloud are able to:

- consult the data transmitted by their App,
- carry out searches with various filters,
- export data to produce statistics,
- print the **“Certificate of Conformity to the SmartPolibox Easy Plus Traceability System”**

SmartPolibox Easy Plus allows:

1. The registration of the App on Cloud using the WebApp user data;
2. The configuration of a set of Place of destination and Place of Departure;
3. The choice to operate in "Free" mode or "Guided" mode
4. Choose the operation to send;
5. The reading and sending of the digital signature to the Cloud (Tag SmartPolibox with associated GPS position, Operation and Destination chosen).
6. to check non-returned containers.

[illegible]

WHY DO YOU NEED TO USE OUR IMDT?

For the reliability of a highly professional instrument and for the advantage that derives from having already installed the App for system operation. "Intelligent Mobile Data Terminal" (IMDT) consisting of an industrial SmartPhone with Android 7.0 and equipped with an RFID reader.



IMDT

(Intelligent Mobile Data Terminal)

IMDT is equipped with: GPS sensor, RFID, Wi-Fi, USB connection, power supply.

It is also possible to install:

- a SIM/USIM for internet access in the absence of Wi-Fi;
- a flash memory to extend data storage capacity;
- other hardware devices as needed.

IMDT has been certified in order to work with all APP versions of the SmartPolibox solution.

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SMARTHEATER®

SAFELIVERY®

POLIBOXBAG®

OCEANPOLIBOX®