



On the agenda



The path to a sustainable, circular future

What does this mean for FIBCs?

09:00 - 09:45 hrs CET



A transforming financial landscape

EPR, taxes and incentives

09:45 - 10:30 hrs CET



The road to implementing circularity

An example from the IBC Industry

10:45 - 11:15 hrs CET



Circular FIBC solutions

Design for recycling, reuse and recycled content

11:15 h - 12:15 hrs CET





Session 3 – Speakers



Thorsten Classen

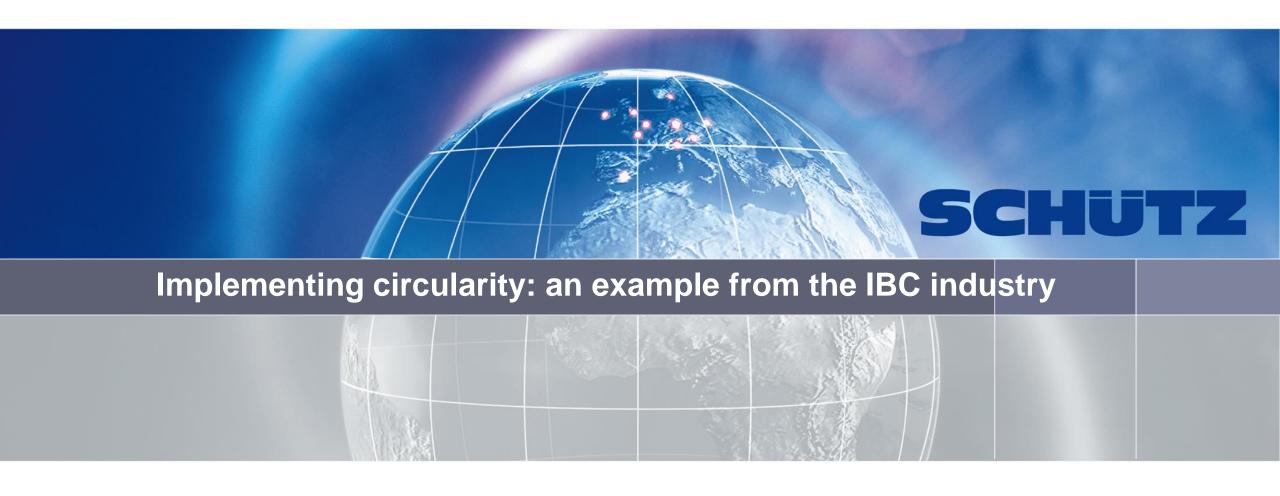
Managing Director at

LC Packaging GmbH



Michael Pleitgen

Manager Reconditioning Services
at Schütz GmbH & Co. KGaA



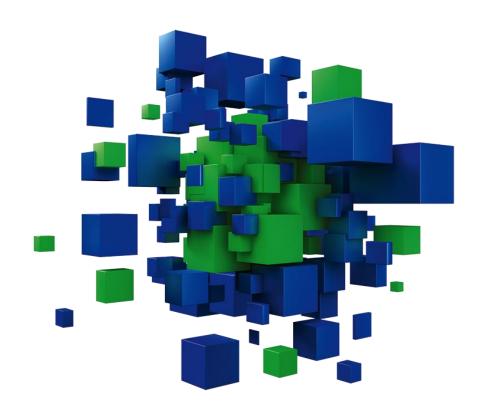
Sustainable FIBC Virtual Conference Closing the loop together 19.05.2022

The road to implementing circularity: an example from the IBC industry

- Company presentation SCHÜTZ
- SCHÜTZ TICKET SERVICE
- Our road to implementing circularity
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SCHÜTZ Group – Key Facts



1958 founded by Udo Schütz

100% family/foundation owned

> 2,500 million EUR sales (2021)

> 7,000 employees (2021)

55 production and service sites

4 business lines



4 Business Lines



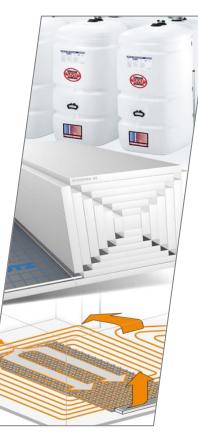
















PACKAGING SYSTEMS

Innovative. Reliable. Sustainable. Global.













Collection and reconditioning of IBCs



FAST | FLEXIBLE | SUSTAINABLE | WORLDWIDE

A commitment to sustainability from the very beginning

- 1976 SCHÜTZ started reconditioning IBCs
- 1980 SCHÜTZ was the first reconditioner and manufacturer to guarantee the collection of IBCs
- 1992 Introduction of the SCHÜTZ TICKET SERVICE the world's first manufacturer-operated collection system for used IBCs
- since SCHÜTZ has consistently expanded the service by investing in state-of-the-art equipment for IBC reconditioning and HDPE and steel recycling





SCHÜTZ TICKET SERVICE – Today

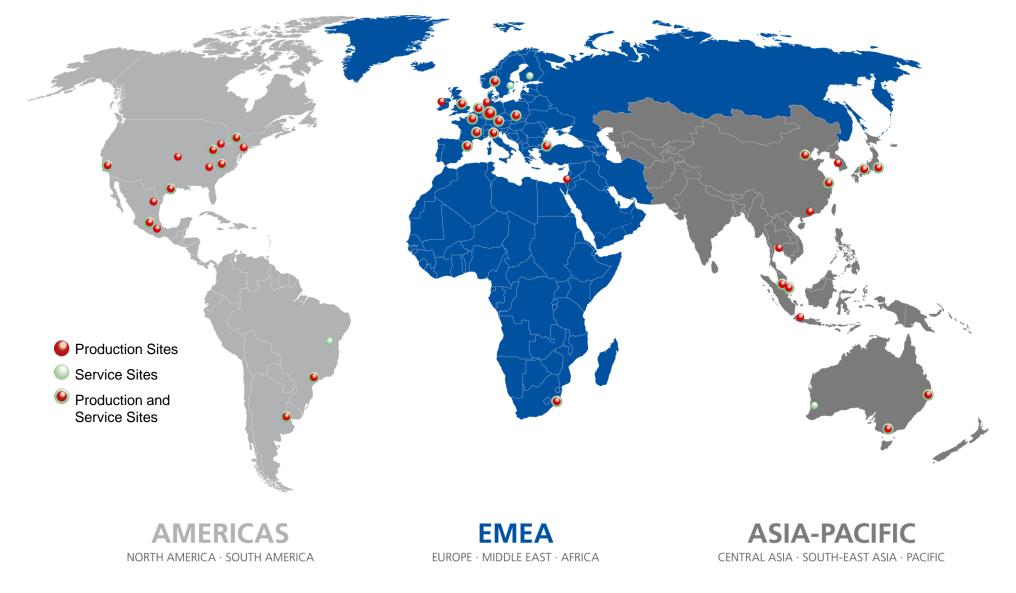
- SCHÜTZ is the world's biggest reconditioner of IBCs
- Global production and service network with over 50 locations and state-of-the-art facilities
- Free collection and environmentally-friendly reconditioning





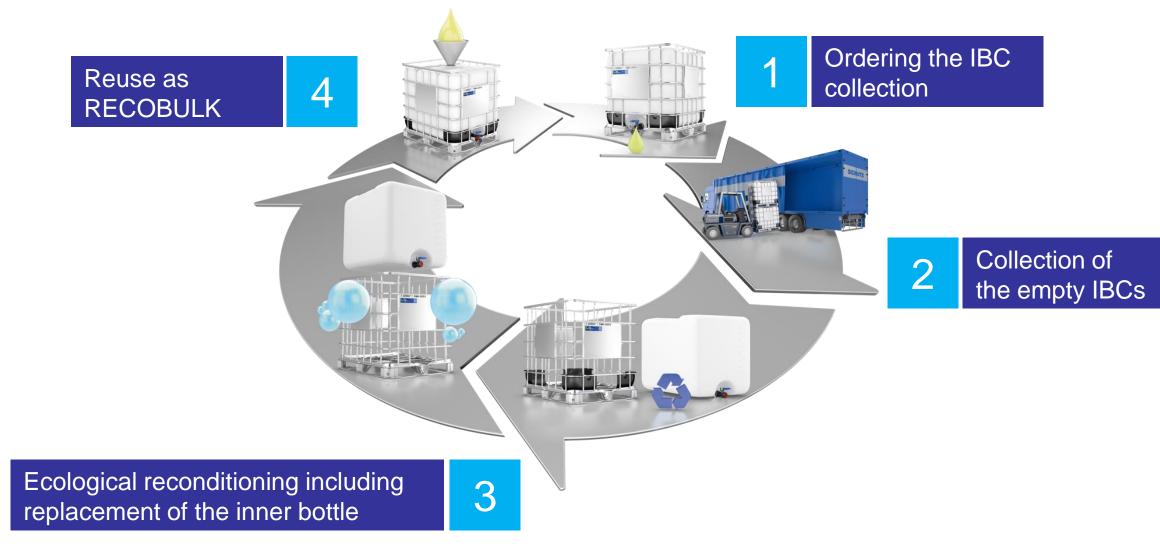


PACKAGING SYSTEMS Worldwide





The SCHÜTZ TICKET SERVICE – how it works





Ordering a collection

- The SCHÜTZ TICKET SERVICE
 can be ordered in all the world's key industrial
 regions fast and conveniently:
 - After registering free of charge and with no obligation, the customer receives a customer number
 - IBC collections can be ordered online through the website or the app, by email, phone or fax





SCHÜTZ TICKET SERVICE Sticker on every IBC



- Replaces the previous fax
- QR code refers to <u>www.schuetz.net/ticket</u> with automatic forwarding to local subdomain/local language version
- Cover sheet peels off to reveal contact phone numbers on the rear





Collection

- Depending on the region and quantity, the registered IBCs are collected within a few working days
- Collection is free of charge under the terms of the SCHÜTZ TICKET SERVICE
- The only system operating globally, even for the collection of very small quantities (in many regions starting from 1 IBC).





Environmentally-friendly Reconditioning

- Reconditioning takes place exclusively in certified plants with resourcesaving processes
- Compliance with the highest environmental and safety standards
- Worldwide standardisation of all safety and QM-relevant processes and parameters
- Containers are equipped exclusively with original SCHÜTZ inner bottles and components







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Our road to implementing circularity

- Consistent and systematic development of products that are reusable and recyclable
- Intelligent product design focused on homogenous materials
- Reduce mix of materials to a minimum
- Reuse material for own products







Our road to implementing circularity

- Multiple use and recycling are part of the core concept for economic and ecological efficiency
- Clear focus on reuseability and separability of all materials
- Reduce material weight without losing performance
- Replace all non-sustainable materials







Devise a clear service commitment to collect packaging

- Clear and comprehensive service
 - Binding and transparent service offer
 - Service must be widely available
 - Clear promise to collect packaging
 - Building a network with partners with common goals
 - Always focus on self-operated service and control entire process





Devise a clear service commitment to collect packaging

Build an administration-free return system

Proactive approach and maximized customer friendliness

 Continuous development of processes to reduce customers' administration to a minimum

Define a framework

- Return packaging only according to transparent conditions
- Define minimum quantities or conditions
- Users must be obliged to accept them





Devise a clear service commitment

- Common goals with customers
 - Increasing reuse and use of recycled material
 - Further reduction of the CO2 emmissions
 - No compromise on quality, safety and performance
 - Long-term supply security





SCHÜTZ Green Lifecycle Management

- As a technology leader with a unique combination of manufacturing and product expertise, we optimize the entire life cycle of our packaging for maximum eco-friendliness:
 - Intelligent product design
 - Worldwide collection service
 - Durable and reusable product quality
 - Closed material cycles



EFFICIENT USE OF RESOURCES



Reuseability of materials

Reconditioning of IBC

- SCHÜTZ IBC are consistently developed for best recyclability
- High-quality steel cage and robust pallets made of steel and plastic
- Uniform worldwide process for remanufacturing
- Reuse of cages and pallet saves approx. 100 kg CO2 emissions per cycle





RECOBULK RECONTAINER



Recovery of HDPE Recyclate

- SCHÜTZ operates its own recycling centres for HDPE regranulation and reprocessing
 - Recycling in optional quality levels
 - Even heavily contaminated material can be processed with the aid of special degassing extruders
- Result: Homogeneous recyclate with perfect processability for any application





Material recycling & reuse - All 100% In-house

Closed material cycles

- In IBC reconditioning, SCHÜTZ uses a complex process to recycle the used inner bottles that are replaced during IBC reconditioning
- The recyclate obtained is 100% reused for SCHÜTZ packaging







Existing Product Range

 Thanks to the use of recycled material for pallets and corner guards, for decades our IBCs have complied with the call to use a high proportion of recycled materials in plastic components

Proportion of recyclate in plastic

40%

ECOBULK MX

Plastic skid pallet with acid protection UN certification: 1.9 Packaging weight: 58.5 kg

Proportion of recyclate in packaging weight: 17%



Proportion of recyclate in plastic

55%

ECOBULK MX

Full plastic pallet UN certification: 1.9 Packaging weight: 57.5 kg

Proportion of recyclate in packaging weight: 32%





SCHÜTZ GREEN LAYER – IBCs

- With our new SCHÜTZ GREEN LAYER IBCs we are increasing the proportion of recycled materials even further
- The middle layer of our modern three-layer liner inner bottles consists of high-quality, natural-coloured recycled material and represents 30% of the inner bottle weight

More than
6.8 kg
CO₂
additionally
saved per IBC

- The inner and outer layers are made of virgin HDPE
- The contents and the environment only come into direct contact with new material





SCHÜTZ TICKET SERVICE - Our clear service commitment

FAST

- IBC collected within a few working days
- with our produceroperated service all customer have a direct contact person for all queries and details concerning the collection
- easy ordering either online, per app, by E-Mail or phone

FLEXIBLE

- IBC returns, from small quantities to full truckloads
- if a customer requires special logistic solutions we can help
- special pick-up or individual logistic solutions

WORLDWIDE

- Collection and reconditioning of IBCs in all major industrial regions around the world
- SCHÜTZ has its own global network of reconditioning and production sites for original SCHÜTZ components
- Standardised global service quality

SUSTAINABLE

- Reconditioning processes comply with the highest environmental and safety standards
- Valuable natural resources are preserved through IBC recycling
- Reconditioned IBCs offer full product safety thanks to replacement with original SCHÜTZ components



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General market trends and challenges

- Significant change in the raw materials market: increasing demand for sustainable materials
 - high-quality recyclates with limited availability
- Rising prices for high-grade recyclates (up to and beyond virgin material prices)
- New legal requirements





Closing the loop together

- For the broadest possible and most cost-effective supply of ecological packaging, the active participation of customers and end user of emptied packaging is crucial
- For an optimum availability of sustainable products
 maximizing the return quantities from all possible returners
 (e.g. customer / end user) are extremely important, to be
 able to cover the rising demands for ecological packaging
- With the SCHÜTZ TICKET SERVICE, we have created an open loop system that has been helping to keep the costs of industrial packaging and its ecological footprint low for decades









Today's sessions



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