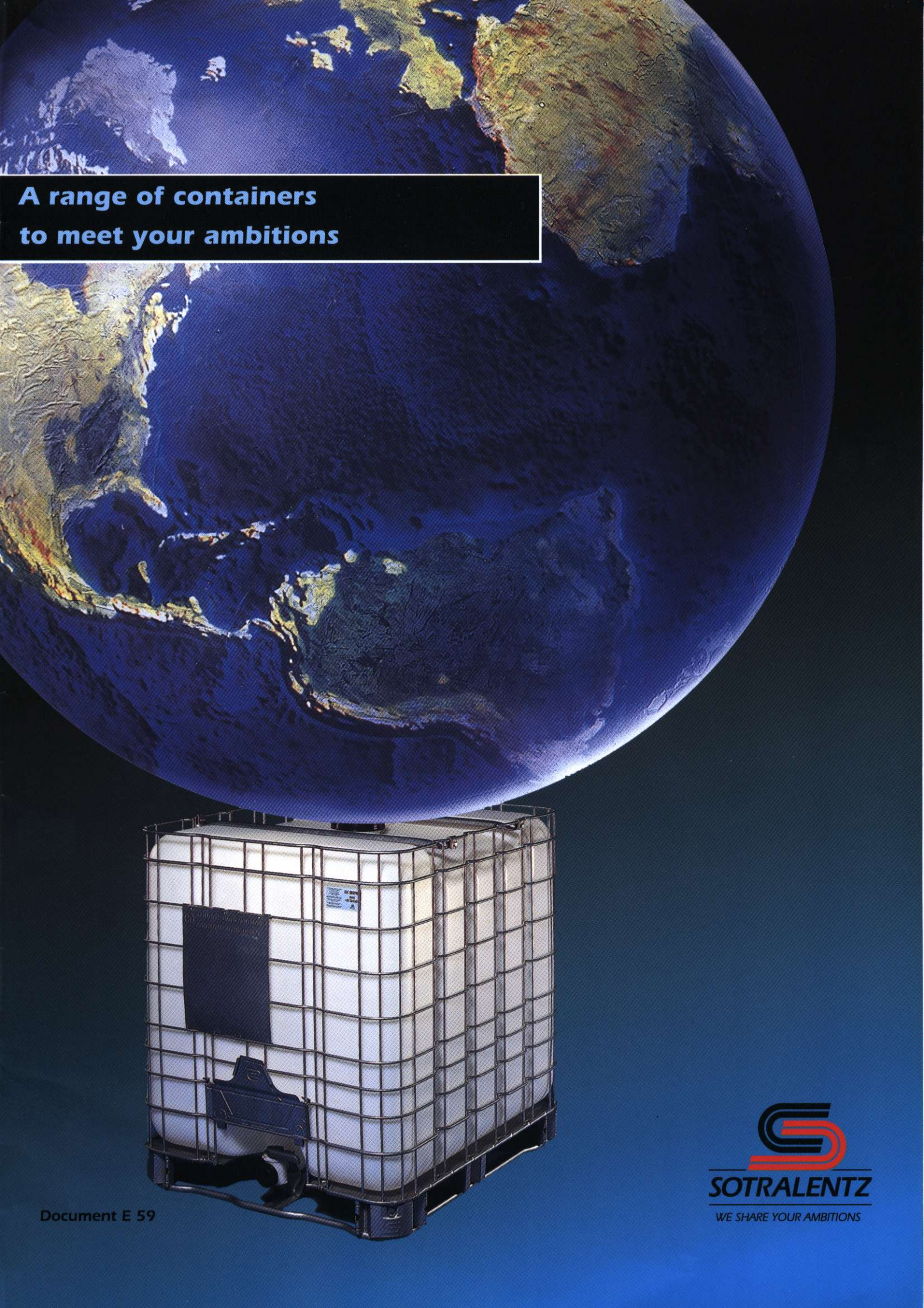




**A range of containers
to meet your ambitions**



Sotralentz, pioneers in the field of modular containers

At Sotralentz, we have been pioneers from the very beginning. Our commitment to continue to meet the specific needs of our customers has led us to develop ever more efficient products. In 1980, we designed the first container made up of a polyethylene bottle protected by a wire mesh cage. This patented product was designed by our engineering department in collaboration with our industrial customers, and has been immensely successful the world over.

Upon its release, the new Sotralentz container concept made a dramatic impact, as it was based on a number of original innovations.

For instance, it was the first modular container which could be dismantled completely, as it was made solely with replaceable components. It was also the first container with a protective welded mesh cage, which made it more elastic and thus more resistant to impact damage.

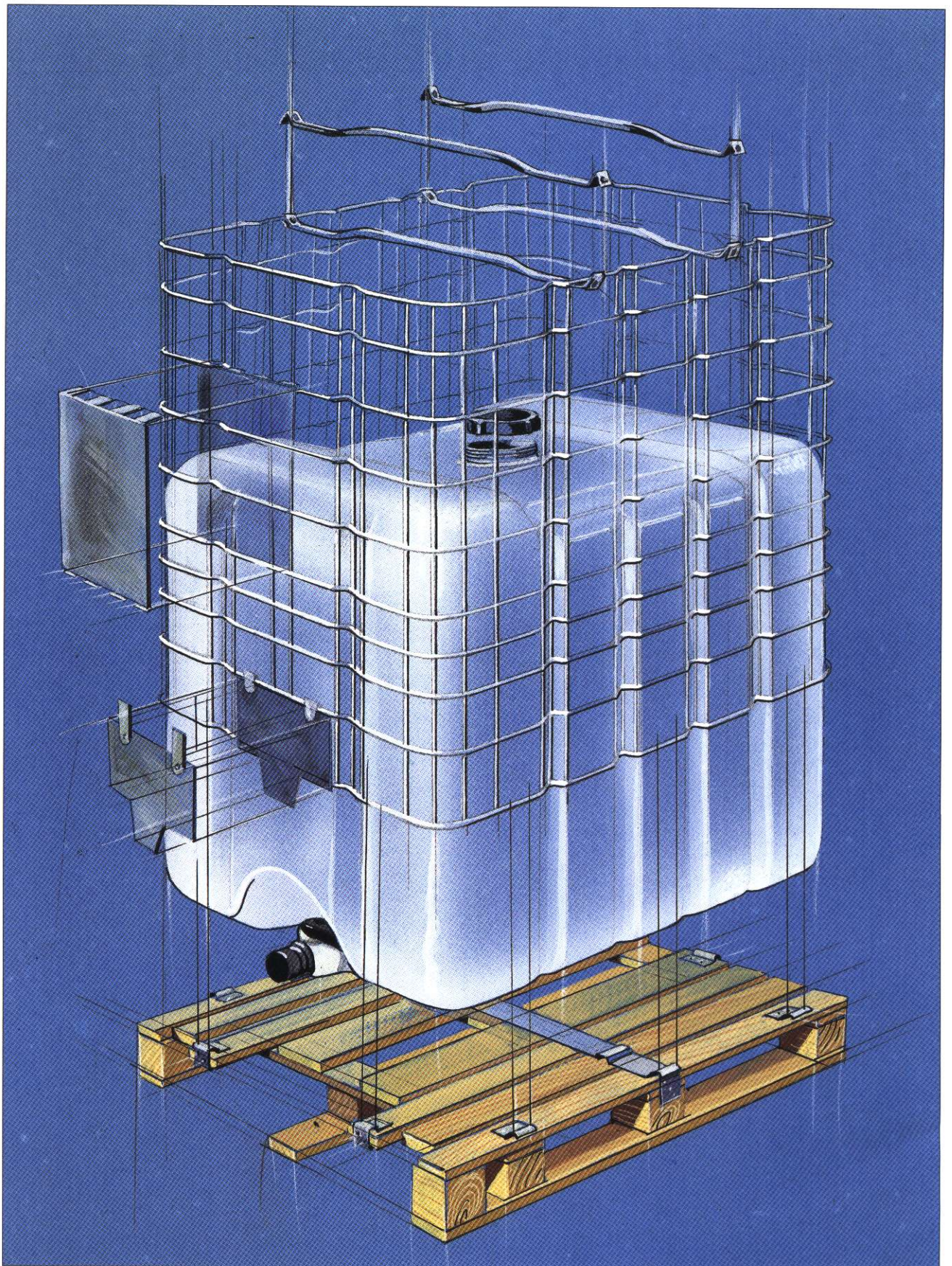
Furthermore, it was the first container where the contents could be seen from all sides.

The SL7 container described in this document is the latest development of the Sotralentz IBC concept.

It is easy to see why Sotralentz are among the top global manufacturers of packaging products. We are committed to staying in the lead by working even harder to provide total quality.



A complete range



of containers

Sotralentz offer a very wide range of packaging products, with capacities ranging from 3 to 1000 litres. Our engineering department has worked in close collaboration with major industrial groups to develop this range of containers for the storage and transportation of liquids and viscous products.



Stacking: 3/1
D = 1.9 max. - wooden pallet
Versions: SL7 Standard - SL7 UN

Stacking: 2/1
D = 1.3 max. - wooden pallet
Version: SL7 ECO.

UN Version: UN-approved container for road, rail and sea transport dangerous goods assimilated with the "standard liquids" : water, white spirit, wetting agent, nitric acid and butyl acetate, in compliance with international RID and ADR regulations and the IMDG code.

Cage: Welded formed wire mesh with anti-corrosion treatment and epoxy-polyester paint finish.

Optional: Close-meshed cages (*) except SL7 ECO.

Bottle: Extrusion blow-moulded polyethylene (HDPE).

Pallet: Four-way-entry pallets available in wood, metal or plastic. Interstackable metal and plastic versions (optional for wooden pallets).

SL 7 ECO		
Volume		1000
Section		1000x1200
Four-way-entry wooden pallet	height	1170
	weight	64

SL 7 Standard				
Volume		820	1000	
Section		1000x1200	1000x1200	
Four-way-entry pallet	Wood	height	995	1170
		weight	67	73
	Metal	height	985	1160
		weight	64	70
	Plastic	height	1010	1185
		weight	61	67

SL 7 UN Approval 31 HA1/Y...				
Volume		820	1000	
Section		1000x1200	1000x1200	
Four-way-entry pallet	Wood	height	995	1170
		weight	71	77
	Metal	height	985	1160
		weight	67	73
	Plastic	height	1010	1185
		weight	64	70



SL 7 UN + with electrostatic protection		
Volume		1000
Section		1000x1200
Four-way-entry metal pallet	height	1160
	weight	80

Cage: Hot galvanized welded and formed close-mesh (*) cage.

Bottle: Extruded blow-moulded polyethylene (HDPE), with the upper part coated with a zinc film.

Pallet: Four-way-entry pre-galvanized metal pallet, nestable.



SL 5 POPINOX		
Volume		1000
Section		1000x1200
Four-way-entry metal pallet	height	1160
	weight	126

UN-approved for the transport of dangerous goods. The stainless steel bottle is easy to clean and reusable. It can thus be used for the transport of liquids in accordance with ADR/RID/IMDG regulations. Protective cage. Pre-galvanized metal pallet.

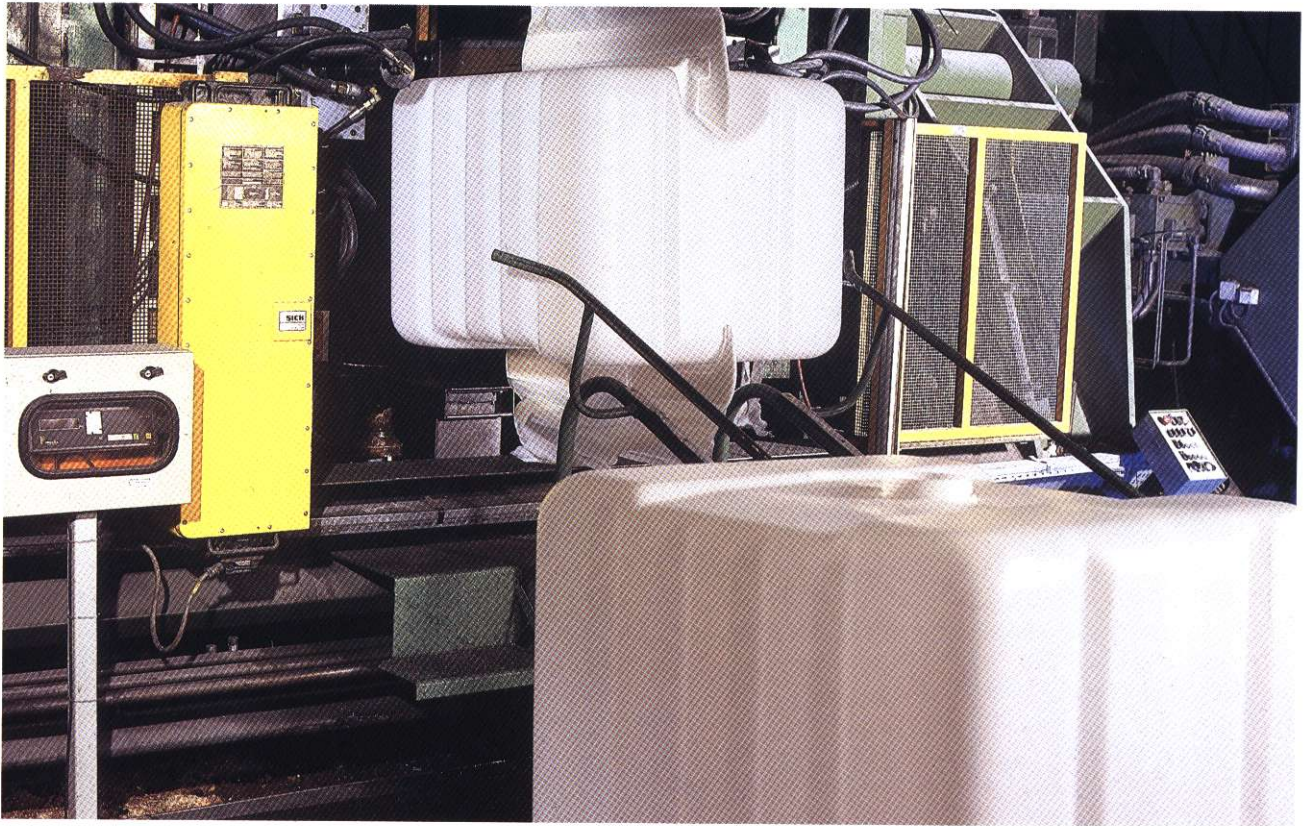
Cage: Hot-galvanized welded and formed cage.

Bottle: Stainless steel, formed and welded.

Pallet: Four-way-entry pre-galvanized metal pallet, nestable.

NOTE: The figures are as follows: volume in litres, section and height in mm, weight in kg. (Approximate values).

A closely controlled



manufacturing process

Our machinery incorporates the latest advances in technology, and most of our production is performed in our own plants. The manufacturing process is closely monitored at each stage by our technicians to ensure consistent product quality.

Blow-moulding: a single material and a single operation

Our one piece bottles are made by blow-moulding polyethylene in a single operation, which removes the risk of problems relating to sealing. The HMW (High Molecular Weight) polyethylene is UV stabilised and is approved for food use. Our line of blow-moulding machines is updated continuously in order to ensure the use of state-of-the-art techniques.

Consistent quality and flexibility

All our components are either made in our plants with special machines designed by our engineering departments, or outsourced from sub-contractors who undergo continuous quality assessment. The valve, for instance, is



protected from corrosion. They are resistant to chemicals and have a long lasting epoxy-polyester paint finish. The drawn wire complies with the requirements of the British Standard with regard to its chemical composition, mechanical strength and other important parameters. Our metal



The essential component which is made on a highly automated manufacturing line developed by Sotralentz, incorporating the necessary inspection systems. Similarly, our automated wire-mesh fabrication line provides consistent quality standards. All our wire mesh products are



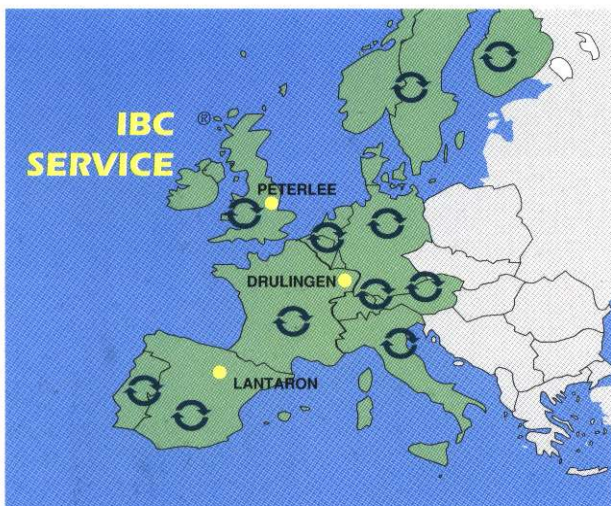
Our wire mesh products are made on a highly automated manufacturing line developed by Sotralentz, incorporating the necessary inspection systems. Similarly, our automated wire-mesh fabrication line provides consistent quality standards. All our wire mesh products are



IBC SERVICE® for efficient container recycling

Environmentally responsible

Our customers are faced with the problem of disposing of used containers. Sotralentz have developed IBC SERVICE® to provide an environmentally friendly solution where used containers are collected from locations in Europe* and then transported to the nearest reconditioning or recycling plant, for recycling or disposal in compliance with current regulations.



Free of charge

Sotralentz use a network of approved reconditioning /recycling/incineration facilities. This service is offered free of charge for Sotralentz containers, provided they are empty and can be reconditioned.

Service on demand

If you want to dispose of any empty containers, just mail your request for collection to Sotralentz or send a fax to +33 / 3 88 01 60 60. You will then receive the documents required for processing your request. Sotralentz will take charge of all the logistics: collection from the stated location and delivery to the most suitable reconditioning or recycling plant, depending upon the contents, condition of the container and the location of the collection point. For non-reconditioned containers, a disposal certificate may be issued upon request.

Compliance with all European regulations

IBC SERVICE® complies fully with all the environmental regulations applicable in Europe.

Simple procedure

The container bottles bear a label with all the details needed to contact Sotralentz.

Collection conditions

In Europe, only containers manufactured by Sotralentz (France, Spain and UK) and Sonoco (USA) will be collected.

The containers must be in a condition which allows reconditioning. Containers at the end of their life are not collected free of charge under IBC SERVICE®.

Safety requirements

As IBC SERVICE® is aimed at making the packaging materials reusable, all the containers intended for collection must be carefully decontaminated as indicated in the IBC SERVICE® document.

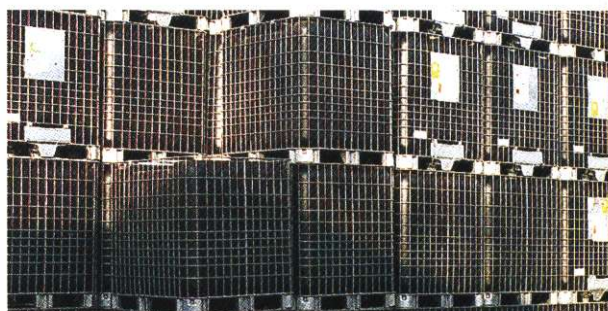
Note

Loading will be performed by the sender. Unless otherwise agreed previously, containers which do not meet the conditions set by Sotralentz will be returned to the sender at the sender's cost. For all containers prepared in compliance with the given conditions, IBC SERVICE® is offered free of charge.

IBC SERVICE® Training

Sotralentz also offer an IBC SERVICE® Training programme to train reconditioning personnel in inspection and maintenance of Sotralentz containers.

* Austria - Belgium - Denmark - Finland - France - Germany - Ireland - Italy - Luxembourg - Norway - Portugal - Spain - Sweden - Switzerland - the Netherlands - UK



Dedication to Quality

Customer needs have top priority

Our approach towards innovation and development is based upon extensive internal testing. It has enabled us to obtain all the official approvals and authorizations for the transport of hazardous materials. Our sales policy is geared towards meeting customer needs by providing solutions which are tailored to what the customers are looking for in terms of technology, cost-effectiveness, regulatory and industrial requirements.



Guaranteed reliability, safety and functionality

Our Quality Assurance system has ISO 9002 certification which covers the manufacture of all the components and the final assembly of containers and provides a guarantee as to the reliability, safety and functionality of our products. The specifications and performance are verified at each stage of the manufacturing process, which is also monitored by TÜV* (German inspection organisation) officials. Product conformance is certified by the Quality department. The high quality standards of Sotralentz containers have been proven by the reliable service they have been providing for many years all over the world.

Continuous improvement as a matter of course

In order to ensure complete customer satisfaction, our Quality department takes part in in-depth analyses of the perceived needs of the market and endeavours to improve product quality on a continuous basis. Each manufacturing stage and the logistics are then subjected to careful inspection. Our after-sales service department provides effective guidance to users of our products.

A committed partner

The involvement of our staff, their long experience and ever-increasing know-how have made Sotralentz a company of professionals whose expertise is recognised in the trade. Customers have the guarantee that in Sotralentz

they have a partner who will never go back on a commitment.

Sotralentz Quality assistance

In order to provide the best service to our customers, we believe that our job does not end when the product is delivered. Customers can count on our expertise and support when it comes to using, reconditioning or recycling our containers.

ISO 9002 Certification

The Sotralentz Plastic Division was issued with ISO 9002 certification in 1992 (LRQA certificate no. 920846). This



gives our customers the assurance that the products supplied will comply with the agreed specifications. It also means that any corrective action required by the users of our containers will be taken effectively and that no effort will be spared to improve the products even further.

Storage and Handling

With Sotralentz containers, you can cut space requirements by 1/3 and save 2/3 of the time needed for storage and handling!

Space-saving

With its almost cubic shape, the SL7 container makes the most of the available storage space. The pallets are designed for easy stacking.

The evidence in figures:

Requirements for storing 100,000 litres	volume	100 containers stacked 3 high	Floor area	33 stacks x 1.2 sq.m. i.e. 40.8 sq. m.
		125 pallets with 4 drums of 200 l. each		41 stacks x 1.4 sq.m. i.e. 60.48 sq. m.
SL7 containers cut space requirements by 33%				

Time-saving

For any given volume of material, the time required for filling and handling 200 l drums is much greater than when the same volume is packed in SL7 containers. This means that labour costs can be cut considerably.

The evidence in figures

(based on the experience of customers):

The time required for unloading, transferring to stock, filling, closing, storage, issuing from stock, releasing for shipment and loading is as follows:

Total handling time	Drums	200 l = 6,4 minutes	Container	1000 l = 10,9 minutes
		1000 l = 32 minutes (5 drums of 200 l each)		
SL7 containers save 66% of the time required for handling				

SL7 Containers: Guaranteed safety

All our UN models have passed strength tests in compliance with the applicable requirements of the regulations relating to the transport of dangerous goods. Furthermore, the design of the metal cage and the elasticity of the wire mesh make the container exceptionally resistant to impact damage. Anti-corrosion protection is provided by a patented treatment and epoxy/polyester paint.

The bottles are made of HMW (High Molecular Weight) polyethylene. The contents of the container can be seen through the translucent material, which is UV stabilised and food use approved. For light-sensitive materials, the bottles are also supplied in black.

The valve is protected by a metal gate on all UN versions (optional on standard models), except for plastic pallet.

The four-way-entry pallets are made from selected wood (metal and plastic pallets are available as an option).

Stacking

Our containers are designed to be stacked 3/1, when the maximum density is 1.9 (depending upon the type of pallet). In practice, we recommend stacking them 2/1 or 1/1, depending upon local conditions (type of handling truck, flooring etc.)

SL7: some models have additional design feature

The system whereby the upper containers nest with the lower ones offers more safety during handling operations.

Installing a pump or a mixer in container lids is particularly easy.

The bottle is designed to enable optimum drainage (liquid residues do not exceed 60 ml), thereby reducing waste and enhancing environmental safety.

Aesthetic appearance

SL7 containers make your products look more attractive, during storage as well as transport.

Easy to transport

SL7 containers are suitable for the most modern forms of transport. They may be used with 20' ISO containers (18 containers of 1000 l) or 40' containers (42 containers of 1000 l) for transport by road, rail or sea.



Accessories



All the components of Sotralentz containers can be replaced.

Identification plate

The plate is made of pre-galvanized metal with standard dimensions of 331 x 390 mm ; Optional dimensions: 667 x 390 mm; 512 x 432 mm (820 l) or 552 x 432 mm (1000 l). Additional plates may also be fitted.

Valve protection gates

An optional valve gate is available with metal pallets.

A gate is fitted on the UN versions of wooden and metal pallets (optional on standard models).

Valves

The valves can be replaced easily by unscrewing them from the bottle. They are designed for close flow control and have a triple safety system which makes them watertight and tamperproof. The colour of the handle shows the type of seal used. A wide range of specific PE and metal valves is offered, for use with different adaptors (see technical data sheet).

Caps

Standard caps have a 150 mm or 220 mm diameter. They are available with a 2" bung / no bung or fitted with degassing or quick emptying vent devices.

Tamperproof caps

Patented tamper-evident device with security pin which can be customized.

Variety of seals

The valve seals are selected according to the type of the material to be filled in the container, and are essential for the safe use of the containers. In particular, the stored material must not make the seals dissolve, swell, harden or crack.

The colour of the handle shows the type of seal used in the valve:

- grey handle: the two seals which seal the inner cylinder are produced from FPM (VITON) whereas the 2 others are made of EPDM.
- white handle: all valve seals made of FPM (VITON)
- black handle: all valve seals made of EPDM.
- green handle: for food use.

The choice of the type of seal is often difficult when a mixture of products are to be stored, and should be subject to a trial. Our technicians will be pleased to answer any questions relating to specific needs.



IBCs for the transport

The transport of hazardous materials is subject to regulations aimed at protecting both the individual and the environment.

Under these regulations, all dangerous goods are required to be packaged and transported in strictly defined conditions.

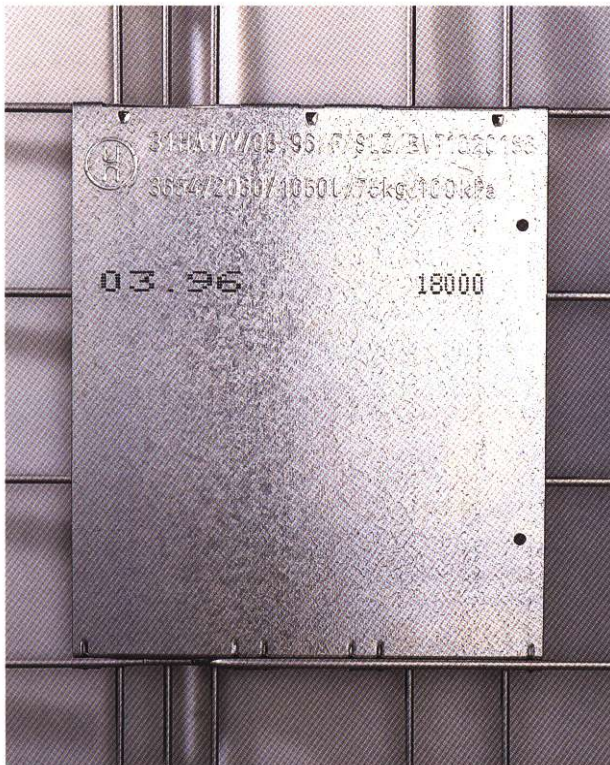
Packaging is obviously of prime importance in this respect. The user is responsible for selecting appropriate packaging, making sure that it complies with regulations and is suited to the contents.

Regulations

On the basis of the "Recommendations for the transport of dangerous goods" developed by UN experts ("orange book") international regulations specific to each mode of transport have been drafted. These are as follows:

- the IMDG code for maritime transport
- RID for rail transport
- ADR for road transport
- IATA regulations for air transport

All these regulations have a common source, namely the "orange book", and specific provisions relating to the relevant mode of transport.



Regulations content

The regulations relate to the classification of materials, packaging specifications and transport conditions.

- Classification of materials : Materials are classified on the basis of the type of hazard (class of hazard) and the degree of the danger (packing group). Composite IBCs of

the SL7 type are mainly used to transport materials from the following classes:

- 3 : Flammable liquids
- 5.1 : Oxidizing materials
- 6.1 : Toxic materials
- 8 : Corrosive materials
- 9 : Miscellaneous dangerous materials and articles

belonging to packing groups II or III.

- Packaging specifications: these include the technical definitions and the types of packaging which may be used for the various materials which are transported.

- Transport conditions: these specify labelling, packing list etc.

Requirements relating to packaging

The requirements relating to IBCs can be found in section 26 of the general introduction to the IMDG code, chapter VI of RID regulations, and section A6 of ADR agreement.

The design type of IBCs need to pass the following mechanical tests in an approved laboratory (such as BVT in France, BAM in Germany etc.) before they are approved for the transport of dangerous goods:

- bottom lift test
- stacking test: a load equal to 1.8 times the gross maximum mass is applied for 24 hours.
- airtightness test: 20 kPa for 10 minutes.
- hydraulic pressure test: normally 100 kPa pressure applied for 10 minutes.
- drop test: at -18°C, on the edge with the valve, from a variable height (1.2 to 1.9 m) depending upon the maximum density of the materials stored.

These five tests are performed in the order given above, preferably on the same IBC. However, if necessary, a second IBC may be used for the drop test.

For IBCs with extrusion blow-moulded bottles (such as Sotralentz SL7), chemical compatibility may be proved as per Appendix V/A.5 of RID/ADR regulations, by storing standard liquids for 3 weeks at 40°C. Standard liquids are as follows:

- mixture of hydrocarbons (white spirit)
- wetting agent
- acetic acid
- nitric acid
- normal butyl acetate

At the end of this storage period, the mechanical tests described above are conducted.

Materials may be transported in any given IBC if:

- it may be assimilated with one of the standard liquids with which the IBC has been tested;
- its density and vapour pressure match the performance level of the IBC with the relevant standard liquid;
- the transport of the material in an IBC is authorised under applicable regulations.

The performance of IBCs approved for the transport of

of dangerous goods

dangerous goods is identified on the front plate. For example, on the SL7 1000 UN:

31 HA 1/Y/—/F/SLZ/BVT 1020186

3654/2030/1050 I/75kg/100kPa/##

- 31 HA 1 = Composite plastic/metal (HA) IBC with rigid plastic inner bottle (1) for liquids (31)
- Y = Packing group II
- - = Date of manufacture (month and year)
- F = Code of the country in which approved
- SLZ = Manufacturer code (Sotralentz)
- BVT = Test laboratory code
- 1020 186 = Test report number
- 3654 = Stacking test load (kg)
- 2030 = Maximum permissible gross mass (kg)
- 1050 I = Capacity
- 75 kg = Tare weight
- 100 kPa = Test pressure
- ## = Date of the last regulatory inspection (month and year)

Life and reuse of IBCs

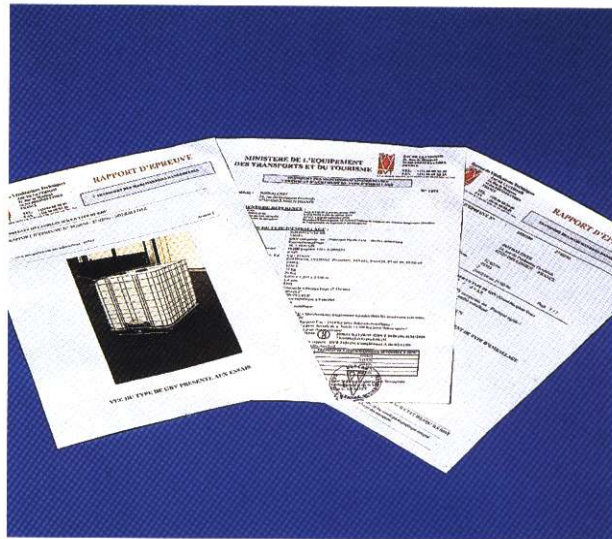
The useful life of an IBC is limited to a maximum of 5 years from the date of manufacture, except in specific cases, where it is reduced to 2 years under applicable regulation (e.g. transport of nitric acid).

During its lifetime, the IBC may be reused several times provided it is inspected and found to be in a good condition prior to each reuse.

After 30 months of use, each IBC must be inspected by a body approved by the competent authorities of the relevant country.

Approvals of SL7 containers

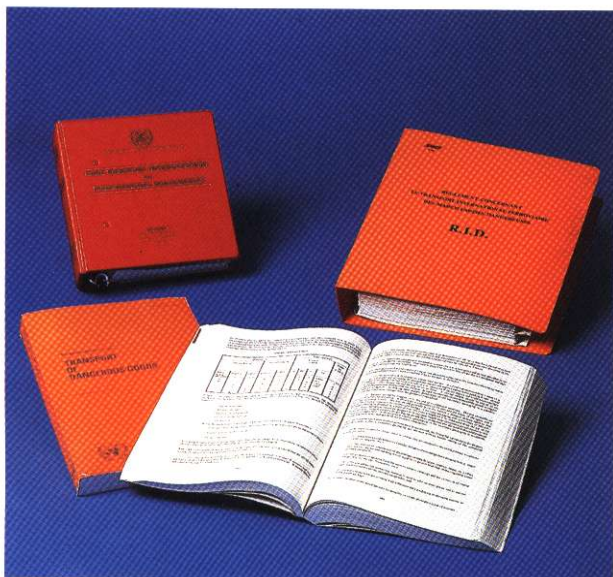
In addition to the standard SL7 family, a UN-approved SL7 range is also available for the transport of dangerous goods. Furthermore, these comply with the vibration requirements under US regulations.



For example, the performance of the SL7 1000 UN model (wooden pallet) is as follows:

- drop test: 1.9 m (water with antifreeze at -18°C, on all lower edges)
- hydraulic pressure test: 100 kPa for 10 minutes
- stacking test: approximately 4000 kg
- bottom lift test: 2500 kg
- airtightness test: 20 kPa/ 10 min
- vibration test: 30 vibrations/minute/amplitude greater than 25 mm (DOT)
- chemicals: standard liquids water/nitric acid/white spirit/wetting agent/butyl acetate.

We can obtain any additional approvals needed by our customers for the transportation of specific products (e.g. if they are not assimilated with standard liquids).



Rely on Sotralentz to find a solution

A la carte service

At Sotralentz we monitor the markets and technological advances very closely, and will be responsive to your needs. We aim to offer the best solution for any specific requirements.



Assistance for the use of our products

Our involvement goes beyond design and manufacture. Regardless of the materials you want to store or transport, you can rely on Sotralentz to find a solution. Our specialists will assist you in using our containers and ensuring compatibility, as well as providing you with details about the transport regulations applicable in different countries. Whether it is the selection of valves or seals or ensuring compliance with standards, we can provide the most suitable solution.

IBC SERVICE ® for recycling your containers

If you wish to dispose of your used containers, you can ask for the special IBC SERVICE ® from Sotralentz. Under this service, used Sotralentz containers can be collected and taken to the nearest reconditioning or recycling plant free of charge, subject to certain conditions. IBC SERVICE ® is a further step in promoting an environmentally responsible approach.

POINT DE TRAITEMENT CENTRAL POUR LA REPRISE
DES CONTENEURS EN EUROPE.
ZENTRALE STELLE FÜR RÜCKNAHME DER
CONTAINER IN EUROPE.
CENTRAL OFFICE FOR CONTAINER
RECYCLING IN EUROPE.
CENTRALT KONTOR FÖR ÅTERVÄNNING AV
CONTAINERS I EUROPA.

CE SERVICE EST GRATUIT S'ILS RÉSERVE QUE LES
CONTENEURS SONT TOTALEMENT VIDES ET RINÇES.
DIESER SERVICE IST KOSTENLOS UNTER VORBEHALT,
DIE CONTAINER MÜSSEN TOTAL ENTLÉERT
UND AUSGESPÜLT SEIN.

THIS SERVICE IS FREE OF CHARGE SUBJECT TO FULLY
DRAINED AND RINSED CONTAINERS.

DESSA SERVICE ÄR KOSTNADSFRIT, UNDER FÖRBESÄTTNING ATT
CONTAINERNA ÄR FÖLLSTÄNDIGT TÖMDA OCH URSKÖJDA.

IBC SERVICE®

FAX
+33/03.88.01.60.60



Cost-effective maintenance

The bottle, pallet, valve etc. are all replaceable, so you can keep your containers in full working condition at a low cost.

A flexible and versatile delivery service

We have a large transport fleet for the delivery of our complete range of containers, from 5 to 1000 litres, to the location of your choice. Our transport department is



flexible, and always aims to meet any special requirements and deliver the goods on time. Like all other Sotralentz personnel, our drivers know the products well and will be pleased to assist you or supply any information.

Competent distributors

All our distributors and reconditioning partners, are trained in Sotralentz products. They can therefore answer any queries and provide a specific solution to meet your needs.

Global customers

Sotralentz products are manufactured in Europe (France, UK and Spain), in the US (by our licensee Sonoco), and we have customers all over the world. Our containers travel far and wide over the five continents.

Sotralentz, a global operation

As the years go by, the international presence of Sotralentz is growing ever stronger. Flexible production and strict compliance with lead times have earned us our reputation the world over.

We work with major industrial groups and do everything we can to support customers wherever they may be. This is why Sotralentz will be setting up a number of new facilities and training new distributors in the near future.

Thanks to the mobility, flexibility and responsiveness of our team, Sotralentz have become efficient players in the world marketplace.

In Europe, our customers and agents are supplied with products from our plants in France, England and Spain.

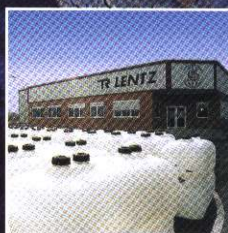
In other areas, we are developing a network of distributors to respond to the growing global interest for our IBC's.



DRULINGEN plant
(FRANCE)



PETERLEE plant
(UK)



LANTARON plant
(SPAIN)



LAVONIA plant
(SONOCO, USA)

A strong group

Sotralentz is an international group which is specialised in several industrial fields. The experience and expertise of our staff and the efficiency of production plant provide customers with the assurance that the products and services supplied will meet their ambitions.

PLASTIC DIVISION



Packaging department



Housing department



Case department

HEAVY ENGINEERING DIVISION



WIRE MESH DIVISION



SOTRALENTZ S.A.
24, rue du Professeur Froehlich
67320 DRULINGEN
FRANCE

SOTRALENTZ (U.K.) LTD
5 Mill Hill - North-West Industrial Estate
PETERLEE, Co. Durham - SR8 2HR
ENGLAND

Depositos Tubos Reunidos-Lentz
TR - Lentz S.A.
Poligono Industrial de LANTARON, parcelas 15 y 16
01213 COMUNION (Alava) SPAIN