



The World's No. 1 in Can Machinery

# Composite Cans

Manufacturing & Systems



**Grabher INDOSA-Maschinenbau AG**  
Industriestrasse 24  
CH-9434 Au (St.Gallen)  
Schweiz

Telefon +41 (0)71 747 57 57  
Telefax +41 (0)71 747 57 47  
[www.indosa.com](http://www.indosa.com)  
[info@indosa.com](mailto:info@indosa.com)



# Seam your composite cans with environmentally friendly cardboard bottoms!



## INDOSA is ready, take advantage of our experience!

### Cardboard bottom seaming machines for fillers

- For round and non-round paper and cardboard cans
- Cardboard bottoms directly manufactured from a reel or ready-made cardboard bottoms destacked from a magazine
- TIGHTLY sealed onto the cans and compressed
- Directly combined with INDOSA filling systems

### Machines and lines for can manufacturers

- Machines and tools for the manufacture of cardboard bottoms
- Machines for the manufacture of aluminium tear-off or paper membranes
- Machines and tools for the manufacture of cardboard insert lids
- Machines for the manufacture of cans with improved ecology
- Machines for many different kinds of seamings on cans



**Grabher INDOSA-Maschinenbau AG**  
Industriestrasse 24  
CH-9434 Au (St.Gallen)  
Switzerland

Telephone +41 (0)71 747 57 57  
Telefax +41 (0)71 747 57 47  
www.indosa.com  
info@indosa.com

## Why Cardboard Bottoms on Composite Cans as per INDOSA's Ecological System?

Due to an increasingly new understanding for the protection of the environment more and more prescriptions as well as laws are enacted. The „packagings“ are in an exposed position and become a real target. Entire industrial branches get under pressure - not only the packaging industry, but also the manufacturers and fillers of consumer goods, particularly of food stuffs, pharmaceutical products, etc. As a matter of fact new ways in the packaging field have to be searched!

### Requirements absolutely to be met by new packagings:

- Manufacture from natural raw materials with an optimal total balance in terms of ecology
- Environment protecting and economical manufacture
- Easy and reasonably priced recycling and waste disposal respectively

However, under the essentially increased ecological demands the real important qualities of a packaging must not suffer. For a successful packaging with a promising future the following important aspects have to be considered:

#### 1. Quality

- The content must be protected against the negative influence of the environment.
- The cardboard bottom is heat-sealed onto the can and is absolutely tight.

#### 2. Promotion

- The packaging should be presentable and effective for advertising purposes.
- The composite can with cardboard bottom is both elegant and environmentally friendly.

#### 3. Marketing

- The quality of the content should be recognized by its packaging.
- A great number of good brands is traditionally packed into composite cans.

#### 4. Competitiveness

- New packagings should reduce the costs.
- The cardboard bottom is cheaper with regard to manufacture and waste disposal.

#### 5. Profitability

- The utilization of cardboard bottoms should not require too many new investments.
- The can filling lines, etc. remain the same, even if cardboard bottoms are used.

#### 6. Amortisation

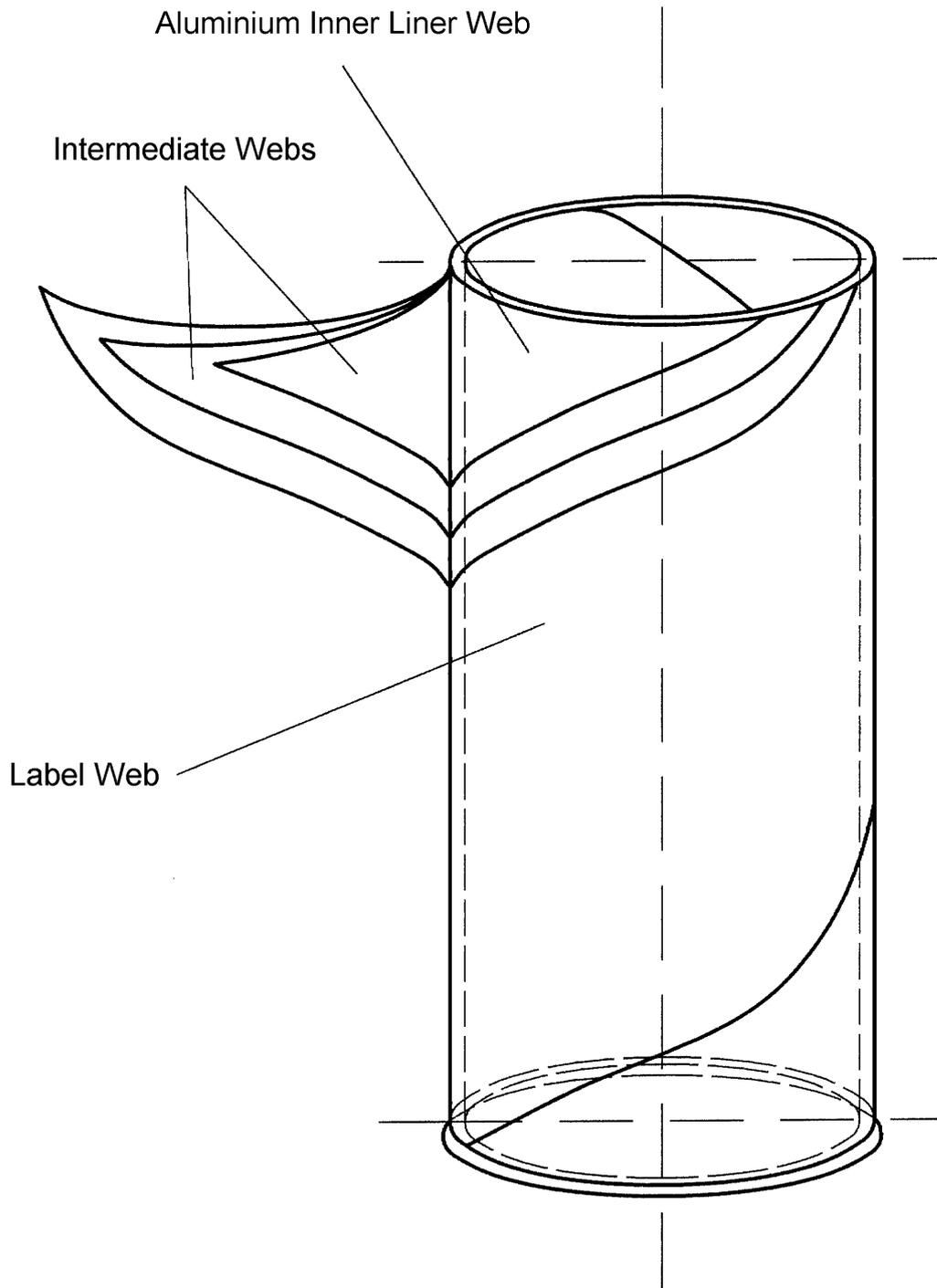
- The new methods should pay for themselves.
- The cost-saving cardboard bottom pays for the new seaming machine.

#### 7. Technique and Comfort

- The opening and reclosing of the packaging should not cause problems and be comfortable.
- It goes without saying that the lids and reclosures can - as up to now - either be reused or replaced by new ones (e.g. paper membranes, etc.).

Being composed of more than 95% of paper composite cans with cardboard bottoms and cardboard insert lids, manufactured with INDOSA systems, fulfil the conditions of a reasonably priced waste disposal and ecological „single packaging“, even with high-quality, continuous and sealed aluminium inner lamination.

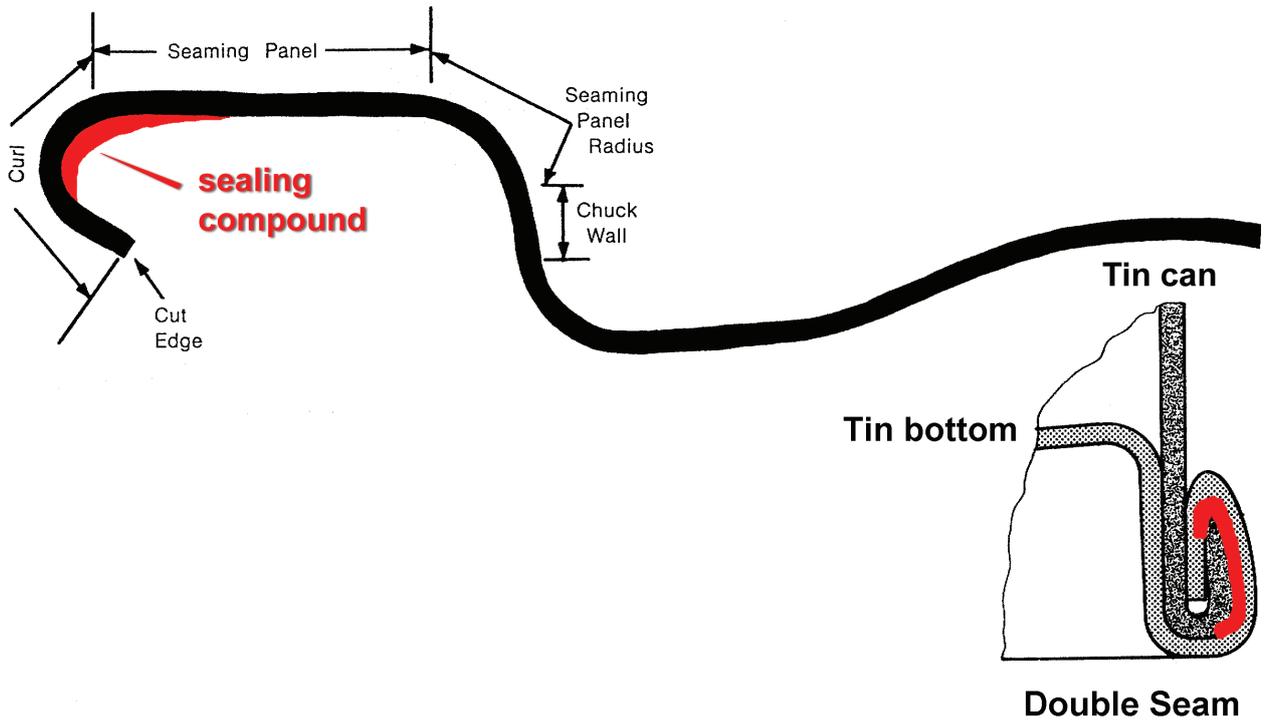
# Construction of a Composite Can



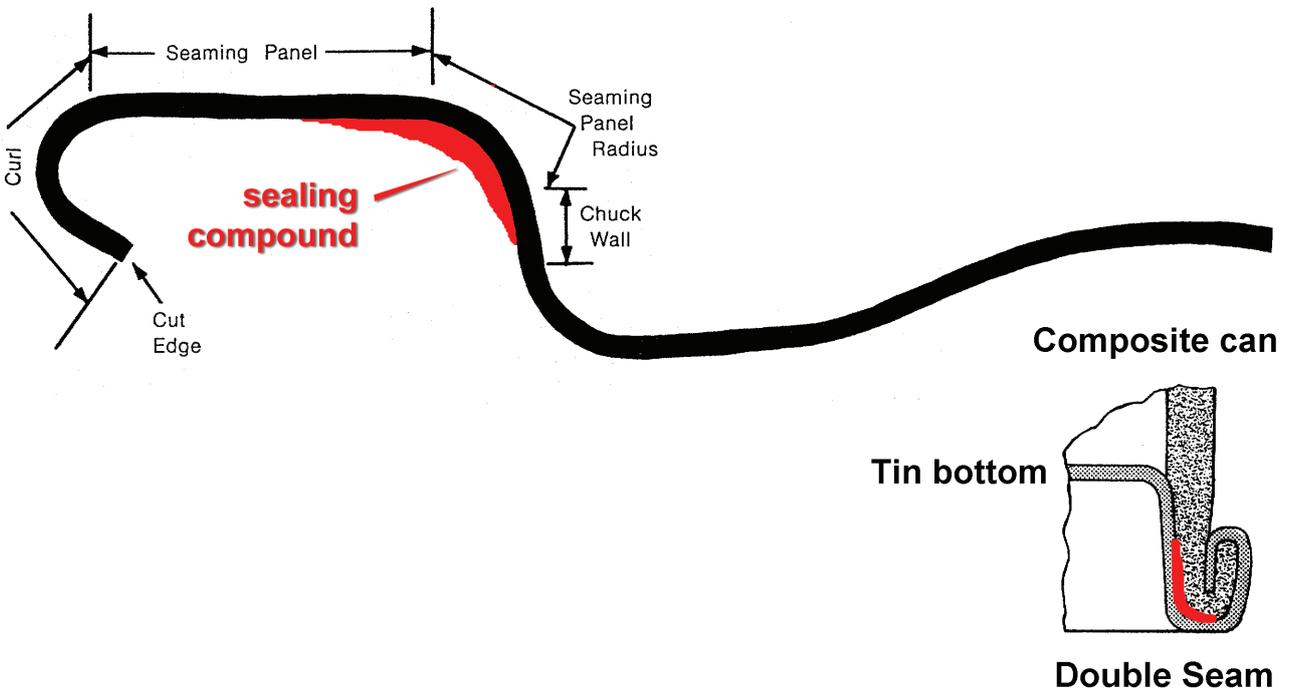
**Grabher INDOSA-Maschinenbau AG**  
Industriestrasse 24  
CH-9434 Au (St.Gallen)  
Switzerland

Telephone +41 71 747 57 57  
Telefax +41 71 747 57 47  
www.indosa.com  
info@indosa.com

# Tin Can with Tin Bottom

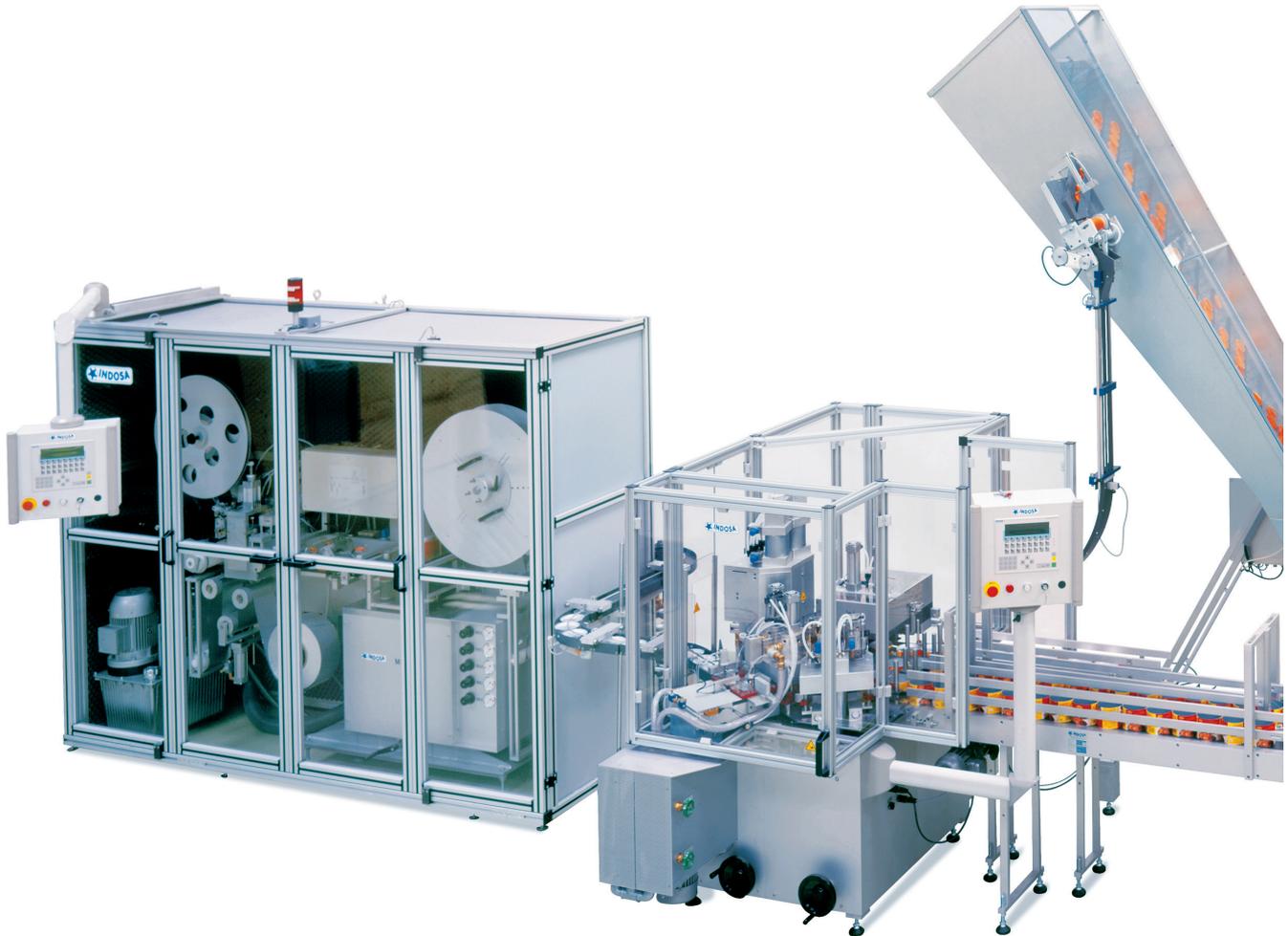


# Composite Can with Tin Bottom



**Grabher INDOSA-Maschinenbau AG**  
 Industriestrasse 24  
 CH-9434 Au (St.Gallen)  
 Switzerland

Telephone +41 71 747 57 57  
 Telefax +41 71 747 57 47  
 www.indosa.com  
 info@indosa.com



## Revolving Machine «INDOSA TWIN-matic 100M»

The INDOSA TWIN-matic double revolving machine consists of two stations for each operation. Two cans are transported and transformed at the same for each step. This distribution doubles the speed of the normal matic without forcing the process.

## Membrane Blanking and Deep Drawing Machine «INDOSA MST»

The «INDOSA MST» is an individual machine with a device to transfer the membranes to the revolving machine. The membranes and tear-off tabs are made out of aluminium foil which is dispensed from two reels respectively. The membrane is produced in the blanking and deep drawing tool. After deep drawing, the same tool cuts circumferential slits to produce the tear-off membrane. This last function can be cancelled to obtain a regular membrane.

## Plastic Lids Transportation «INDOSA SF 184»

The lid sorting and feeding equipment «SF 184» consists of a big hopper where the lids are stored, a steel plate apron conveyor to separate and transport the lids, a baffle plate to sort the lids, an outfeed canal with adjustable height and an air cushion transport canal or conveyor belt for the infeed into the revolving machine.

## Capacity

**up to 100 cans/minute** (for Ø 99 cans)

### **Fully automatic line for manufacture and sealing of tear-off membranes onto composite cans**

This line consists of a tear-off membrane sealing machine and a tear-off membrane manufacturing machine. The sealing machine's work stations are equipped as double stations, resulting in a capacity of 100 cans per minute at 50 cycles per minute (advantages during the sealing process, etc.). The membrane manufacturing machine works with 100 punching strokes/min. Both machines operate independently from each other and are synchronized by light barriers in the feeding canal for membranes.

#### **Membrane manufacturing machine INDOSA MST 131**

The tear-off membranes are manufactured on the membrane blanking and deep-drawing machine INDOSA MST/KST 131. The membrane band is directly taken from a material reel, blanked, deep-drawn and formed. Out of one reel of membrane material several thousand membranes can be manufactured. The blanked and deep-drawn tear-off membranes are carried to the INDOSA Twin-matic 100 M through an air cushion canal.

#### **Sealing machine INDOSA TWIN-matic 100 M**

The composite cans run through a conveyor into the revolving machine INDOSA Twin-matic 100M. As soon as 2 cans are detected, the indexing turret turns both cans in clockwise direction to the next double station. The following cans are held back during the rotation. At the 1st work station the blanked and deep-drawn membranes are - coming from the blanking and deep-drawing machine through the air cushion canal - directly delivered to the cans.

At the 2nd work station the applied membranes are centered onto the cans and heat-sealed.

At the 3rd work station the plastic lids, which are coming from the sorting and feeding system INDOSA SF 184, are applied onto the composite cans.

Temperature, sealing time and sealing pressure can simply be adjusted to the respective material.

#### **Connecting machines and lines**

Out of the wide range of the INDOSA programme, filling machines, accumulation tables, conveyors, etc. can be supplied exactly according to the customer's requirements.



### **Grabher INDOSA-Maschinenbau AG**

Industriestrasse 24  
P.O.Box 447  
CH-9434 Au (St.Gallen)  
Switzerland

Telephone: +41 (0)71 747 57 57  
Telefax: +41 (0)71 747 57 47  
Internet: [www.indosa.com](http://www.indosa.com)  
E-Mail: [info@indosa.com](mailto:info@indosa.com)

**INDOSA MST/KST 131 for manufacturing closures for composite or tin cans:**

- Aluminium-membranes with tear tab
- Paper membranes with or without aluminium coating
- Paperboard ends (bottoms) for closing composite or paper cans
- Paperboard insert lids or paperboard snap-on caps
- Paperboard shakers with rotary cap

<b>Capacity</b>	approx. 100 punching strokes/min
<b>Tool</b>	INDOSA blanking and deep-drawing tool
<b>Lid Size</b>	up to a can inside diameter of 131 mm
<b>Material</b>	from a reel, printed, coated, etc.
<b>Transfer</b>	stacker with stacking magazine or air cushion canal directly to an inline INDOSA sealing machine

**Grabher INDOSA-Maschinenbau AG**

Industriestrasse 24  
P.O.Box 447  
CH-9434 Au (St.Gallen)  
Switzerland

Telephone: +41 (0)71 747 57 57  
Telefax: +41 (0)71 747 57 47  
Internet: [www.indosa.com](http://www.indosa.com)  
E-Mail: [info@indosa.com](mailto:info@indosa.com)



Tear tab closures  
Shaker tops  
Paperboard ends  
Insert lids

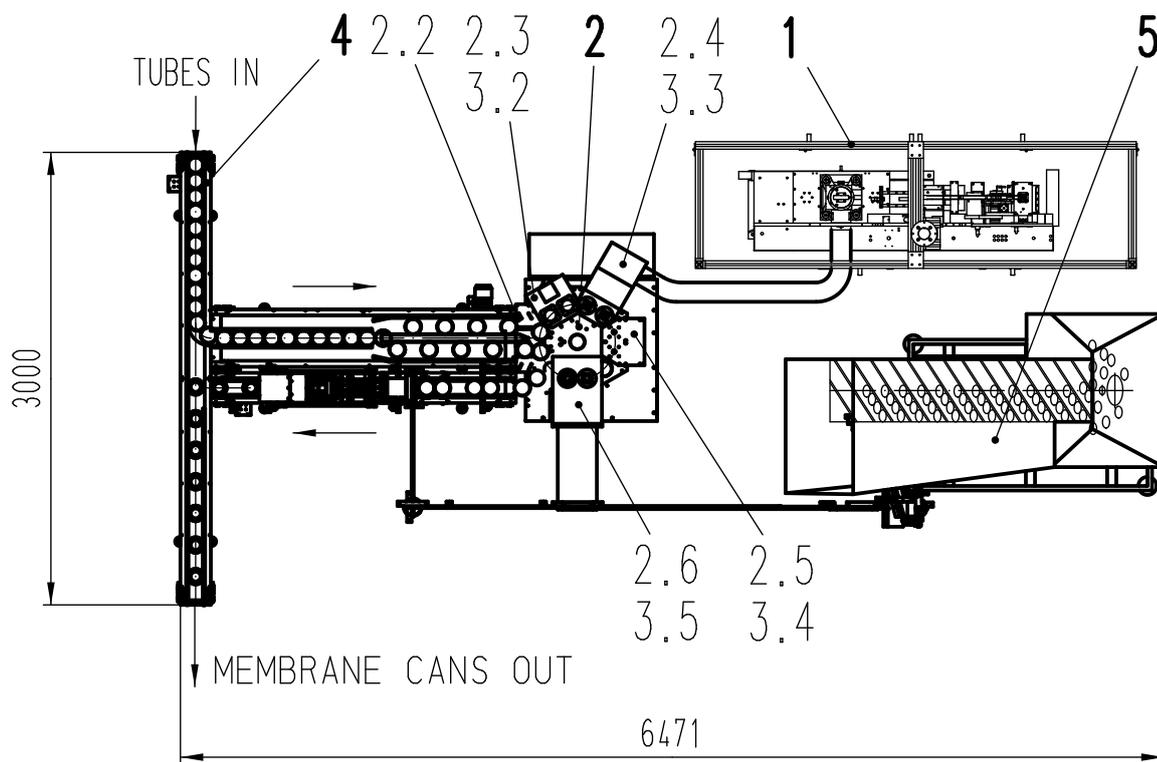
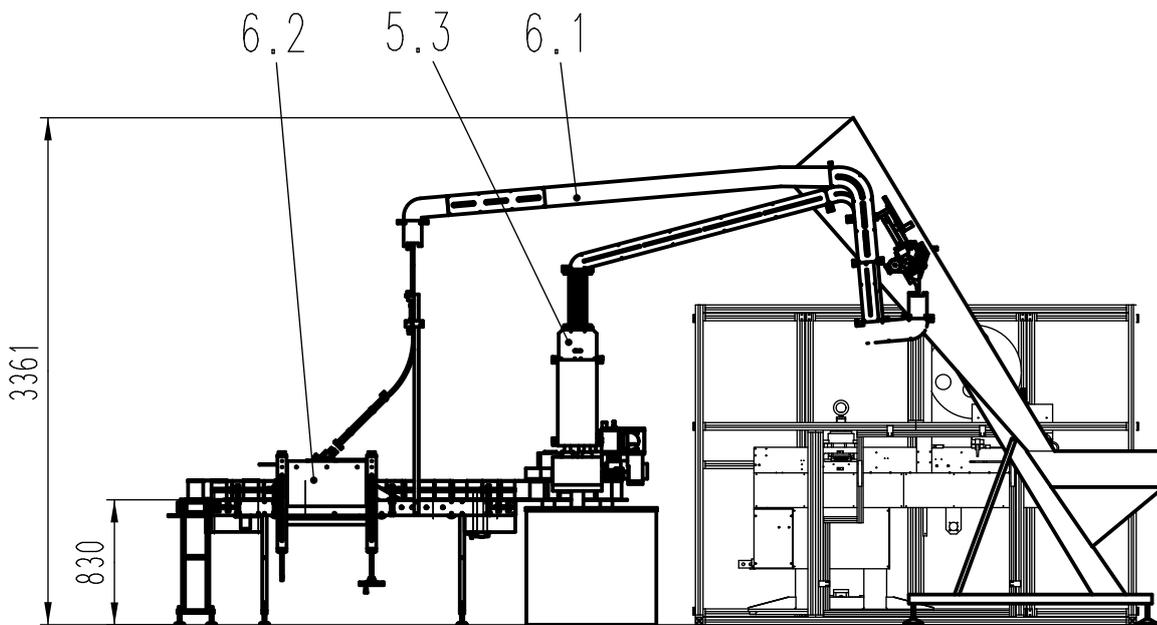
from  
Aluminium foil  
Paper  
Paper with Aluminium  
Paper with coating  
Paperboard with or without coating  
etc.



Rings made from a  
canbody tube.

Paper part blanked  
and deep drawn.

Insert lid completed.

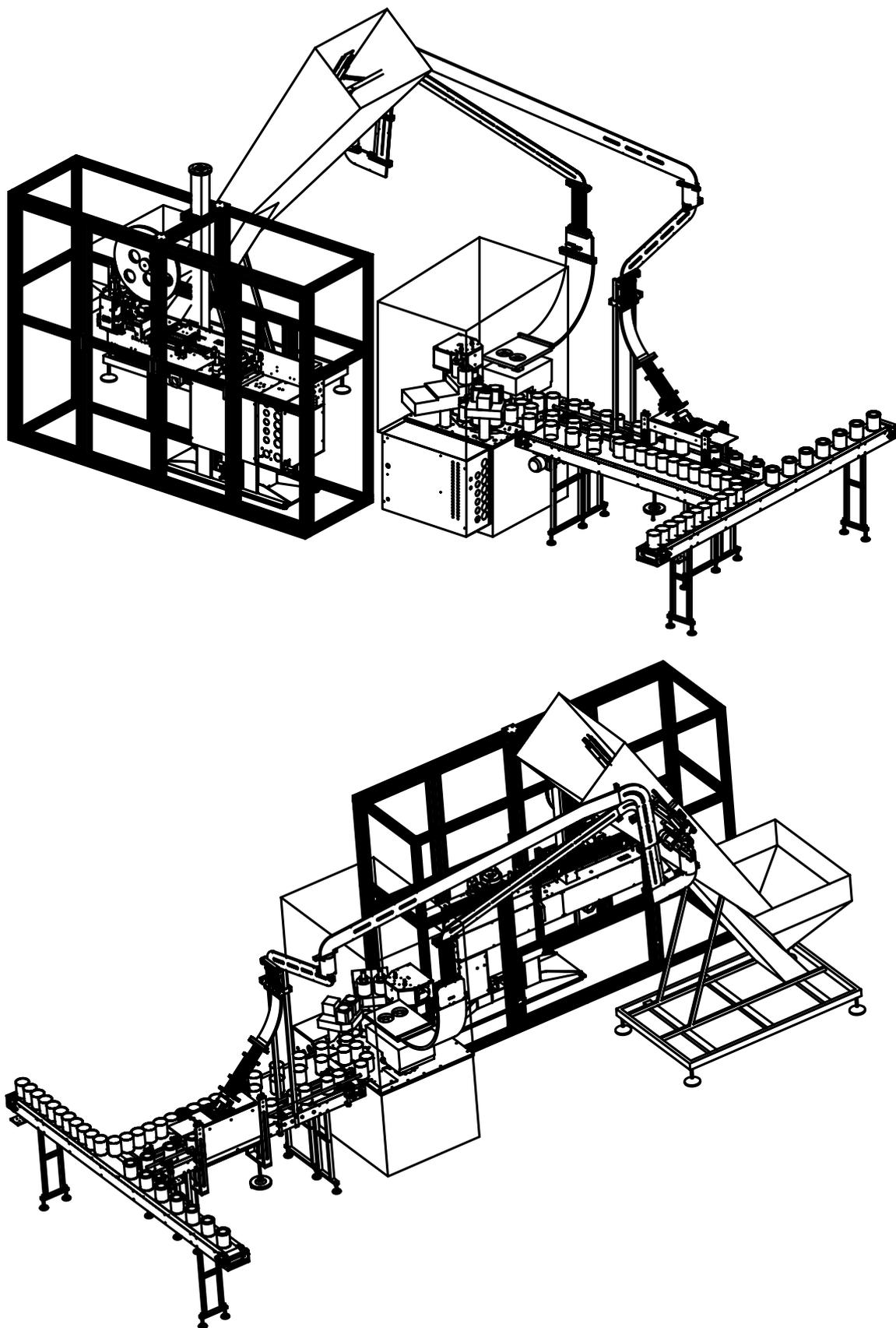


Layout Twin-matic100M/MST131/SF184/FB3000	A-Nr.		Gezeichnet	26.05.2005	hp/hw
	U-Nr.		Geprüft		
	Kunde				

**INDOSA** Grabher **INDOSA-Maschinenbau AG**  
 CH-9434 Au (St.Gallen), Switzerland

300 001 071

The copyright for this document is the exclusive property of Grabher INDOSA-Maschinenbau AG. No part of this document may be reproduced in any form without prior written permission.



Layout

Twin-matic100M/MST131/SF184/FB3000

A-Nr.

U-Nr.

Kunde

Gezeichnet

26.05.2005

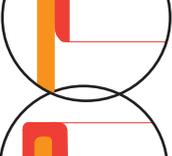
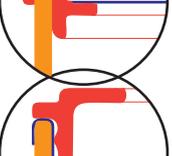
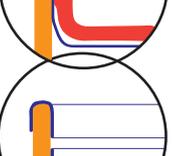
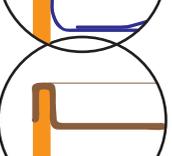
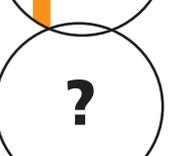
hp/hw

Geprüft



Grabher INDOSA-Maschinenbau AG  
CH-9434 Au (St.Gallen), Switzerland

300 001 072

	<b>Single Seam</b>	Tin plate or aluminium bottom and lid for „packaging can“
	<b>Double Seam</b>	Tin plate or aluminium bottom and lid for „tight can“
	<b>Double Seam with Membrane</b>	„Penny-Lever“ with metal insert lid and guarantee membrane
	<b>Double Seam with Snap-On Lid</b>	Metal ring with membrane and plastic snap-on lid
	<b>Pressed-In and Glued-In</b>	Plastic shaker and plastic bottom
	<b>Pressed-On and Glued-In</b>	Plastic ring with various closures
	<b>Sealed with Press-In Lid</b>	Aluminium or paper membrane with plastic press-in or snap-on lid
	<b>Sealed and Severed</b>	Aluminium tear-off membrane with tear-off tab and edge protection
	<b>Sealed and Pressed</b>	Composite can with cardboard or paper paper bottom with or without aluminium lamination
	<b>Developments</b>	Customer-specific solutions