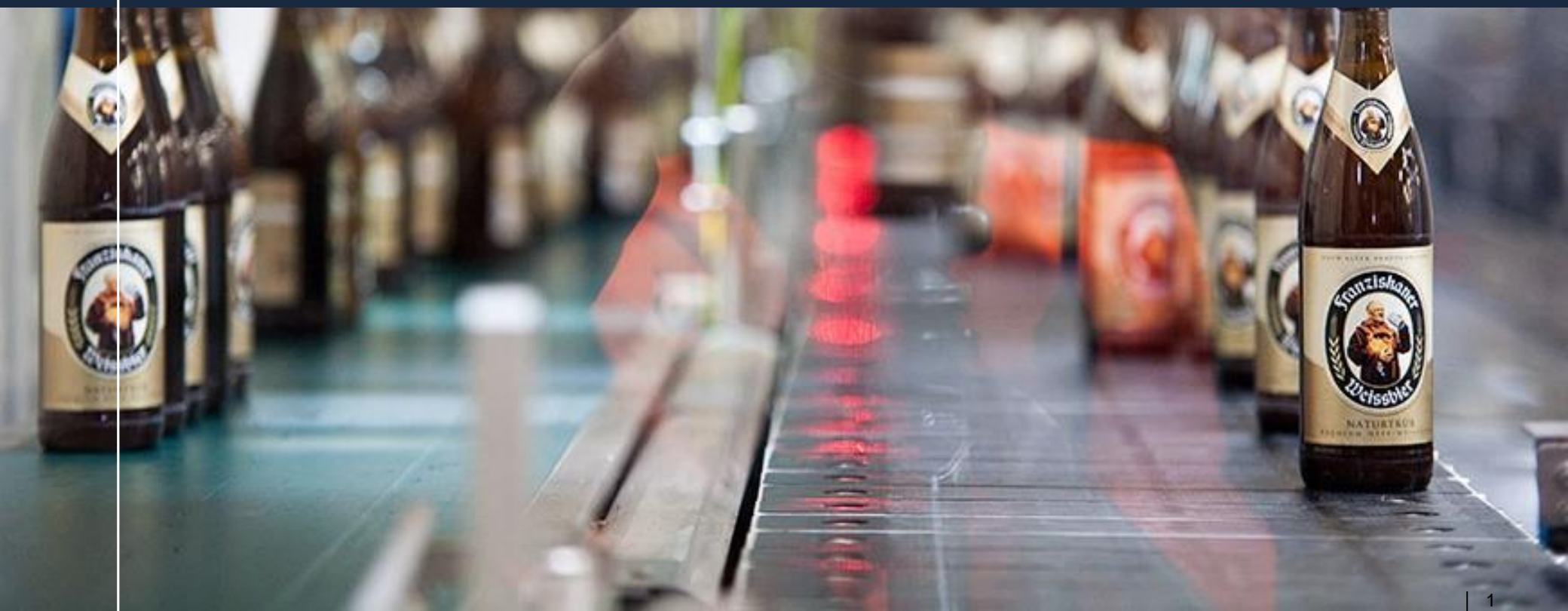


Exposé

Beverage-Packaging Line TLM 903 935

LTC Consulting



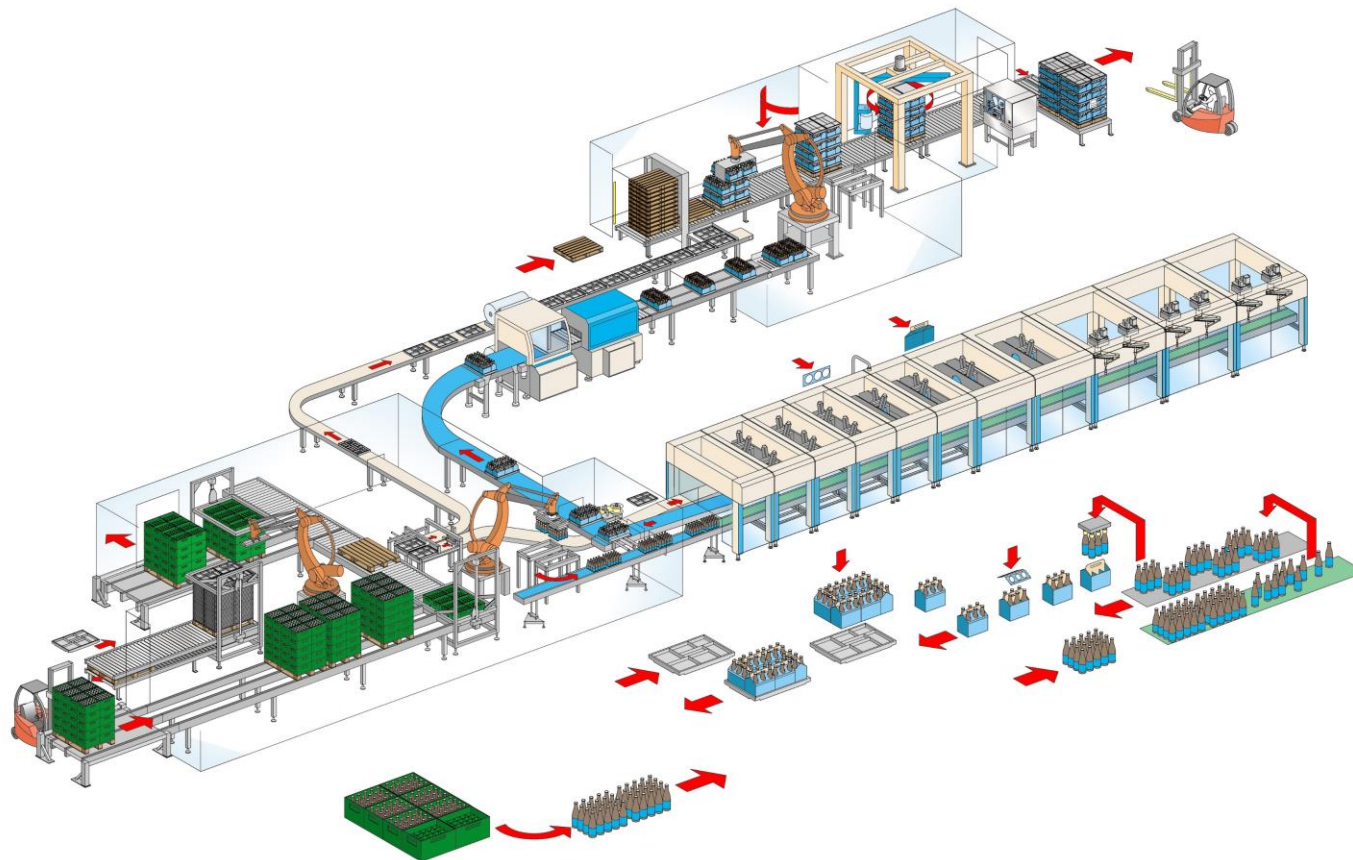
Exposé TLM 903 935

Packaging Line - Overview

Manufacturer	Gerhard Schubert GmbH
Type	Beverage Packaging Line
Name	TLM 903 935
Manufacturing Year	2008
Operational Since	2019
Location	Unterschleißheim (Germany)
Condition	Used, in good condition, currently in use
Product Package	Complete system: palletizer, compressors, tool test bench
Demonstration	By appointment, on-site
Availability	Immediately

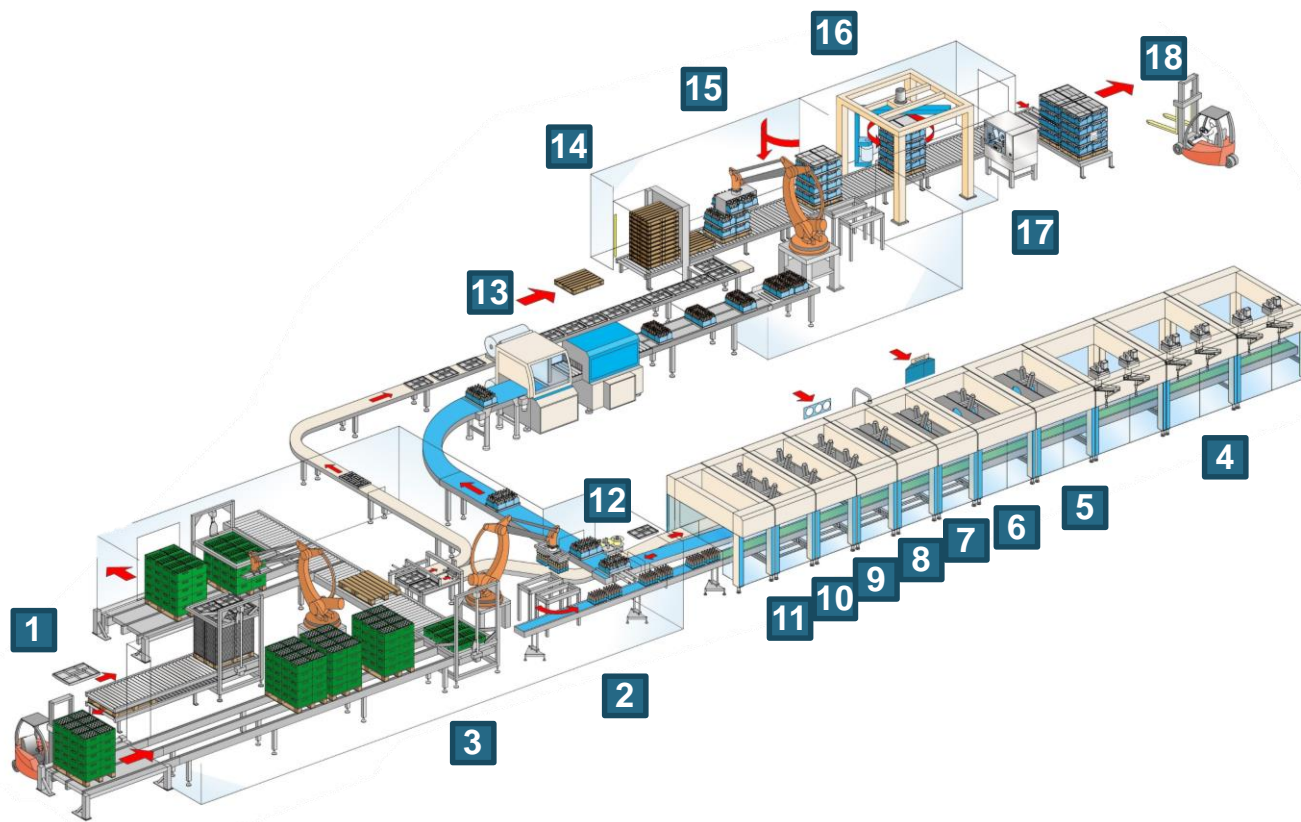
Exposé TLM 903 935

Packaging Line - Overview



Exposé TLM 903 935

Packaging Line - Overview



POS	Description
1	Unpackaged full product feed
2	Bottle de-palletizer
3	Empty crate & tray handling
4	Grouping of bottles
5	Case & tray erector
6	Case & cluster erector
7	Case packer
8	Carrier / cluster sealer
9	Re-position carrier / cluster
10	Carrier inserter into case
11	Tray inserter / case-sealer
12	Case printer (dual sides), Front Back Wrap-labeler (around corner)
13	Shrink-wrap tunnel for trays
14	Pallet depot
15	Palletizer
16	Stretch-wrapping machine
17	NVE-Printer
18	Finished pallet output

Exposé TLM 903 935

System Composition

- **De-palletizing** of crates, removal of bottles, feeding of product conveyor belt, palletizing of empty crates, palletizing of fully packed cases, stretch film winder. System includes three robotic arms, type KR180-2PA, manufactured by KUKA, Augsburg. System also allows for re-loading of emptied crates.

Supplier: **PCA Roboter- und Verpackungstechnik GmbH**, Ansbach, Germany

- **Grouping** of bottles which run in loose order on a continuously moving product conveyor belt, using 3 robots, type TLM F44. Set-up of cardboard materials for all primary and secondary packaging variants (sleeves, baskets, trays, shipping cartons), inserting bottle separators inside the cases, loading and sealing of cases, utilizing 10 robots type TLM F2, and one new TLM F3 robot.

Supplier: **Gerhard Schubert GmbH**, Crailsheim, Germany

Exposé TLM 903 935

System Composition

- **Printing of cases** in multiple colors for identification of various product types and for application of expiration date or other information on case.

Supplier: **Wolke Inks & Printers GmbH**, Hersbruck, Germany

- **Labeller** for cases, loaded pallets.

Supplier: **PAGO Etikettiersysteme GmbH**, Aichtal, Germany

- **Stretch-wrapmaschine** for wrapping trays.

Supplier: **Hugo Beck GmbH + Co. KG**, Dettingen, Germany

Exposé TLM 903 935

Process Description

Packaging process:

- De-palletization,
- Bottle supply to Schubert TLM-Packaging line,
- Building of cases, sleeves, or carriers,
- Grouping/sorting of bottles for cases, sleeves, or carriers,
- Loading of grouped bottles into cases, sleeves, or carriers,
- Inserting of sleeves or carriers into cases,
- Inserting of grouped bottle formations into cases,
- Optional: Application of separators into cases,
- Sealing of cases with hot glue,
- Printing and application of case label (only one type of label is intended. Differentiation between beer types through variations in print color),
- Feeding of sealed cases to palletizer,
- Programable tier arrangements on pallets
- Stretch-wrapping of pallets for load safety,
- Printing and application of pallet labels (two labels per pallet),
- Output of completed pallets.

Exposé TLM 903 935

Manufacturer & Component Suppliers

Manufacturer:

- Schubert



Component Suppliers:

- PCA
- KUKA
- Festo
- Wolke
- Hugo Beck
- Sick
- Kaeser
- Siemens





















Exposé TLM 903 935

Format Overview

Format	Performance	Bottle	Primary Packaging	Secondary Packaging	Installed
20 loose bottle case with separators (0,5 ltr.)	15.000 bottles / hr 12,5 cases / min		-		Yes
12 loose bottle case with separators (0,5 ltr.)	15.000 bottles / hr 20,8 cases / min		-		Yes
24 bottle case with 4x6-pack carriers (12 oz)	15.000 bottles / hr 41,6 6-pack open carrier / min 10,4 cases / min				Yes
24 bottle case with 6x4-pack carriers (0,33 ltr.)	15.000 bottles / hr 62,5 4-pack carriers / min 10,4 cases / min				Yes
24 loose bottle case with separators (0,33 ltr.)	15.000 bottles / hr 10,4 cases / min		-		No, but tools are available
4-pack cluster (0,33 ltr) 6x4-pack cluster in tray	15.000 bottles / hr 62,5 4-pack-clusters / min 10,4 trays / min				Yes
















Exposé TLM 903 935

Format Overview

Format	Perormance	Bottle	Primary Packaging	Secondary Packaging	Installed
6-pack cluster (0,33 ltr) 4 x 6-pack cluster in tray or open crate	15.000 bottles / hr 41,6 6-pack-cluster / min 10,4 trays / min				No, but tools are available
12-pk cluster (0,33 ltr) 2 x 12-pack cluster in tray	15.000 bottles / hr 20,8 12-pack-cluster / min 10,4 trays / min				No
3-pack cluster (0,33 ltr) 8 x 3-pack cluster in tray	10.800 bottles / hr 60 3-pack cluster/ min 7,5 trays / min				No
6-pack cluster in closed case (0,5 ltr) 4 x 6-pack cluster in tray with glass	10.800 bottles / hr 60 3-pack cluster/ min 7,5 trays / min				No
6-pack cluster in closed case (0,5 ltr) 4 x 6-pack cluster in tray	10.800 bottles / hr 60 3-pack cluster/ min 7,5 trays / min				No
Logipack with 6 x 6-pack carrier (0,33 ltr.)	15.000 bottles / hr 41,6 6-pack carriers / min 10,4 cases / min				No

Exposé TLM 903 935

Format Overview

Format	Performance	Bottles	Primary Packaging	Secondary Packaging	Installed
Logipack with 6 x 6-pack carriers (0,5 ltr.)	15.000 bottles / hr 41,6 6-pack-carriers / min 10,4 cases / min				Yes
Logipack with 3 x 6-pack carriers (0,5 ltr.)	15.000 bottles / hr 41,6 6-pack-carriers / min 10,4 cases / min				No, but tools are available
Logipack with 4 x 4-pack carriers (0,5 ltr.)	15.000 bottles / hr 41,6 6-pack-carriers / min 10,4 cases / min				Yes, but not active
24-pack open crate mit 4 x 6-pack cluster (0,33 ltr.)	15.000 bottles / hr 41,6 6-pack-carriers / min 10,4 cases / min				Yes
20-pack open crate with 3 x 6-pack carrier (0,5 ltr.)	15.000 bottles / hr 41,6 6-pack-carriers / min 10,4 cases / min				Yes

Exposé TLM 903 935

Services

10 years replacement part supply by manufacturer

Optional arrangements:

- Set-up
- Service
- Maintenance contract
- Extensions & customization
- Integration into current production process
- Employee training
- QM-handbook

Exposé TLM 903 935

Financing

Leasing
Manufacturer offers various financing options

VVV

Exposé TLM 903 935

Summary

Versatile and flexible packaging system.

Freely programmable robotics and highly flexible tools allow for independent product customization.

All components supplied by industry leading manufacturers, made in Germany.

On-site demonstration of TLM packaging system in production by request.

System allows for remote maintenance, and has a lean management system.

24/7/365 tech support.

Entire system can be operated by one employee.

Pallet feed and output via double fork possible.

System allows for different pallet types & sizes.

Tool test bench included.

Screw compressors included.

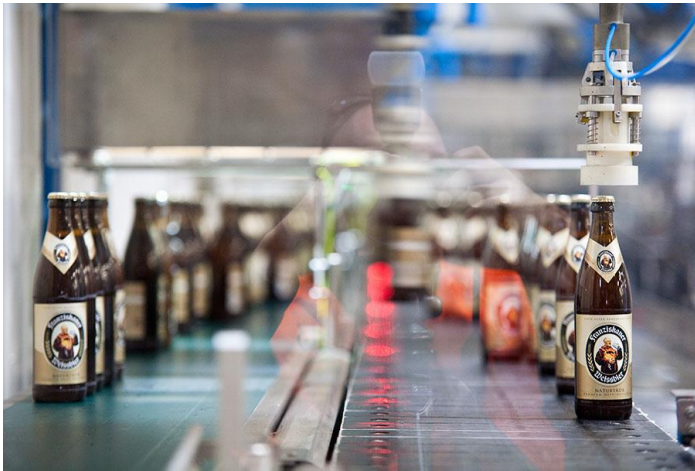
Exposé TLM 903 935

Picture Gallery



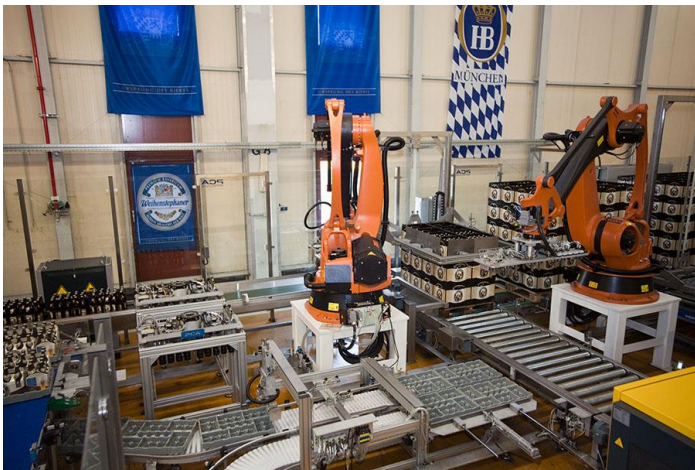
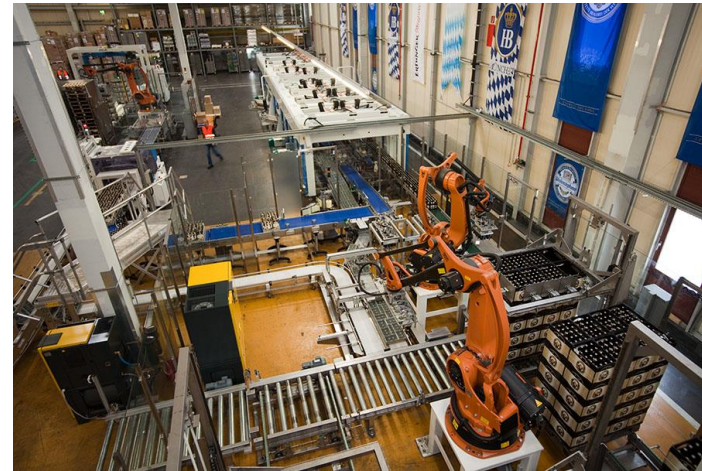
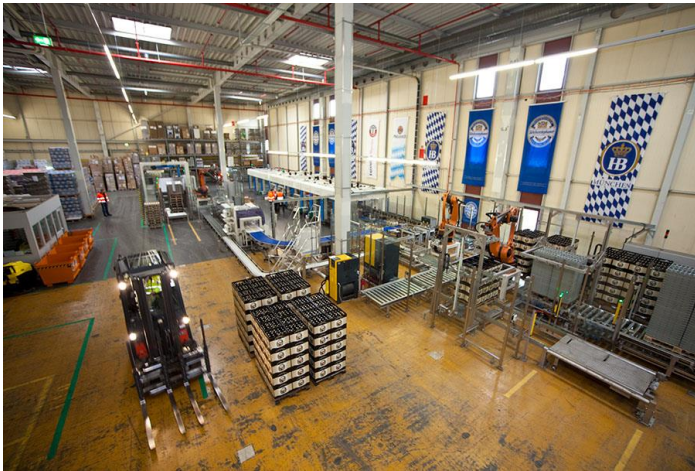
Exposé TLM 903 935

Picture Gallery



Exposé TLM 903 935

Picture Gallery





Contact:

Michael Salzmann

+49 151 / 614 589 86

m.salzmann@ltc-consulting.de

LTC Consulting UG – Hauptstraße 13 – 85296 Rohrbach - Germany