

A wide-angle photograph of a modern industrial beverage production facility. The scene is dimly lit with focused overhead lights illuminating the machinery. In the center, a large, complex machine with multiple glass-enclosed sections is visible, likely for bottling or capping. To the right, there are more machines and conveyor systems. The floor is polished and reflects the overhead lights.

BEVERAGES

- ✓ **TETHERED CAPS & CLOSURES**
MACHINES FOR CARTON CLOSURES,
PET BOTTLES AND POUCHES
- ✓ **UP TO 60,000 PARTS PER HOUR**
HIGHEST OUTPUT RATES
- ✓ **FULL SERVICE**
EVERYTHING FROM ONE SOURCE,
TURNKEY SOLUTION + CONTRACT MANUFACTURING

UP TO



500 MILLIONS

PARTS OUTPUT YEARLY PER MACHINE



0,05 sek

MIN. CYCLE TIME



100,00%

QUALITY CONTROL



60.000

PARTS / HR



85

MACHINE-BUILDER
SPECIALISTS



826

DELIVERED MACHINES



DIRECTLY CONNECTED WITH
INJECTION-MOLDING MACHINES



INLINE-VISION-
INSPECTION



FULL TECHNOLOGY
SPECTRUM



CONTEXO & BEVERAGES

THE BEST TECHNOLOGIES, THE HIGHEST OUTPUT RATES AND FULL SERVICE

Many well-known sports caps and carton closures are produced by machines from Contexo. And the number is growing! Contexo is continually developing its technologies and is thus **attracting more and more closure manufacturers**.

With its highly efficient assembly solutions, Contexo achieves the highest output rates from a very small footprint. The company's own feeding technology allows warm parts to be **fed directly from injection-molding machines**. Continuous-motion systems from Contexo are capable of the highest speeds. The quality-control systems are equally well engineered. Even at output rates of over 1,000,000 parts a day, **not a single defective part leaves the factory**.

This brochure presents the benefits Contexo offers for the production of beverage closures. **Find out for yourself and request an offer!**

visit us:



OVER 80 STANDARDIZED PROCESS STEPS



FEEDING

proprietary technology, vibration feeding, TE-Proof, centrifugal technology, spiral conveyors, flexible feeding system



HANDLING

all materials handled, air transport, vibration transport, length transfer, circular transfer, continuous motion, sorting, separating



DOSING

fluid, powder and adhesive dosing, and siliconization



FORMS

stamping, crimping, sealing, forming, US welding, gluing, grouting, riveting



LASER

use of all laser processes, e.g., cutting, welding, marking, micro-drilling and -piercing



PRINTING

laser, digital, tampon, and thermal-transfer printing, labeling, UDI coding



INSPECTION

vision control, quality control, leak testing, function testing, force and distance measurement, flow-rate testing



PACKAGING

tray packing, tubular bags and bubble wrap, palleting



DATA MANAGEMENT

imaging, statistics, line management, analysis

ALL DIAMETERS, ALL TECHNOLOGIES, ALL STANDARDS.



CARTON CLOSURES

SCREW AND FLIP-TOP CLOSURES, PULL-TABS AND PERFORATIONS

Contexo builds machines for all carton and bottle closures.

A standardized machine concept means Contexo can design and build your machines quickly and efficiently.



PET CLOSURES

+ TETHERED CAPS

TETHERED CAPS: SINGLE- OR MULTIPART, SPORTSCAPS, PUSH-PULL, HOT FILL, TE CAP ...

Contexo offers machine solutions for every type of closure. With broad experience and know how, Contexo is one of the most in-demand companies in this sector.



POUCHES, CANS AND MORE

DESIGN AND PRODUCE NEW AND ATTRACTIVE PRODUCTS!

Contexo is known as one of the most innovative companies in the industry. They regularly handle assembly requests that are turned down by all other machine builders. This means you can design and produce innovative products with Contexo – quickly, simply, and at low cost.

PROFIT WITH CONTEXO!

- ✓ up to 60,000 parts per hour
- ✓ full technology spectrum
- ✓ decades of experience
- ✓ assembly technology that treats parts gently
- ✓ standardized machine concepts
- ✓ expertise with rotationally asymmetrical parts
- ✓ full service + contract manufacturing



CONTINUOUS MOTION

⌚ up to 60,000 parts/hr

📦 2-5 components

RING INDEXING

⌚ up to 25,200 parts/hr

📦 3-10 components



RECLOSABLE CLOSURE

3 parts



SCREW CAP

3 parts, with large diameter



PET SPORTSCAP

3 parts, for highly carbonated beverages



COMPLEX SPORTSCAP

5 parts, with powder chamber and foil seal



POUCH CUTTER

3 parts, for aseptic packaging



SHRINK WRAPPING SPOUT

2 parts, with valve for flexible packaging



ROTARY INDEXING

- ⌚ up to 10,800 parts/hr
- 📦 2-6 components



CLOSING UNIT

- ⌚ up to 21,500 parts/hr
- 📦 1 component



SINGLE PROCESS UNIT

- ⌚ up to 48.000 parts/hr
- 📦 1-5 components



CARTON SCREW CAP

3 parts, for small packaging



ROCKER-ARM CLOSURE

2 parts, with spray inhibitor



TETHERED CARTON CLOSURE

3 parts, with integrated cutting ring



BOTTLE SPOUT

2 parts, with valve



SPORTSCAP

1 part, with visual TE check



TETHERED PET CLOSURE

3 parts



POUCH SCREW CAP

2 parts, choke proof



FLIP-TOP POUCH CLOSURE

1 part, economical



TETHERED CLOSURE

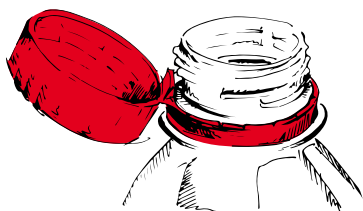
3 parts

EU-PATENT



HIGHSPEED ASSEMBLY OF TETHERED CAPS

ALL PROCESSES INTEGRATED IN ONE MACHINE



For the cost-effective and reliable production of **single or multi-piece tethered caps**, Contexo has developed a machine platform that combines all necessary processes in one machine:

Assembly - Folding - Slitting - Closing - Packaging.

The modular platform system allows full flexibility and is ideal for new products. The advantages of the concept are obvious: small footprint, significantly **reduced costs** and **less energy consumption**. In short: less investment, more safety and long machine life.

PERFORMANCE DATA

⌚ **48.000** PARTS/HR

📦 **1-5** COMPONENTS

⌚ **0,06** SEC. CYCLE TIME



All functions integrated: assembly, slitting, folding, closing, checking, packing



Continuous Motion: Highest output, low space requirements



Changeable Slitting-Unit: Precise slitting geometry

The system is based on continuous-motion rotary presses. This guarantees maximum output rates. The integrated slitting unit eliminates the need to invest in expensive and high-maintenance injection molds. Filigree in mold operations are replaced by simple, safe processes, as material no longer has to be pressed through narrow channels. The integrated folding and roll cutting of the TE strip is not only more cost-effective, but also more stable in the production process: the TE bridges are not stressed or damaged during handling, the downstream process and assembly. This also eliminates the high maintenance costs of the tools. At the same time, the high speed and repeatability in the production process is guaranteed, i.e. significant cost reduction with more safety. The camera stations inspect the typical elements inside and outside the closure and enable 100.00%

quality control. This ensures that only technically flawless products are sent for further processing. The user-friendliness of the machine has also been taken into account: 360° accessibility, changeable slitting unit and low maintenance thanks to mechanical components.

More options for product design

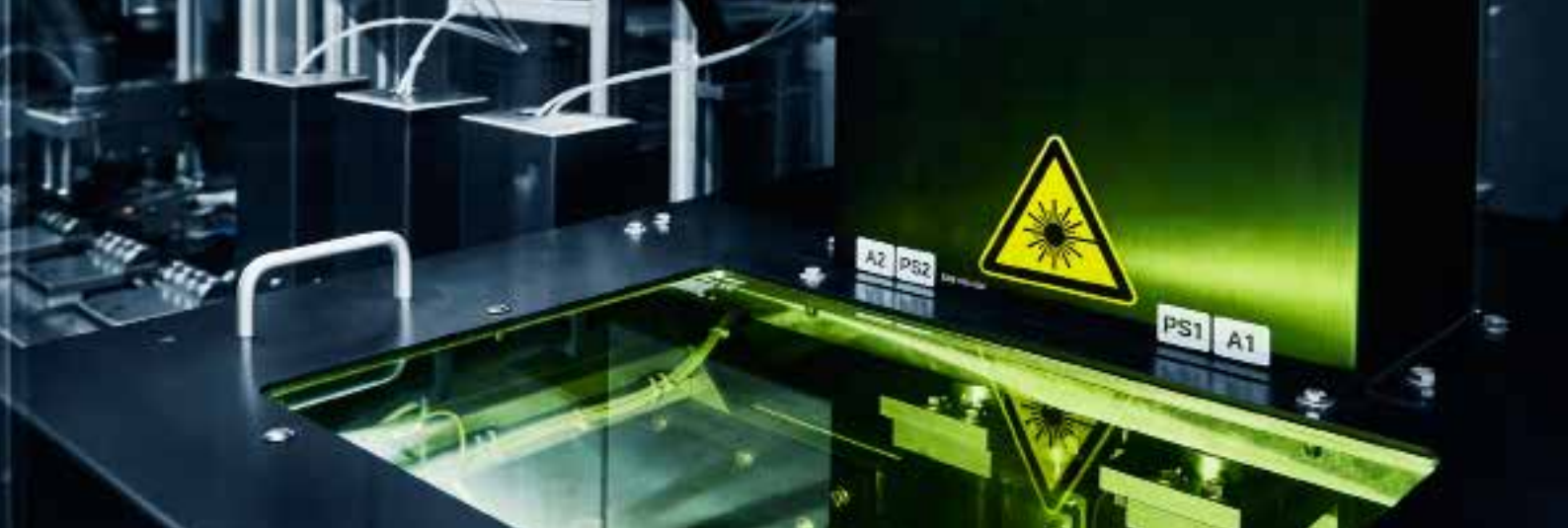
It is also interesting for product development: this opens up unimagined possibilities for product design. Whereas previously there were restrictions in terms of shape and appearance, innovative, eye-catching designs are now possible with the Contexto system. The vulnerability of the TE bridges is eliminated and the rotating mold axis makes unusual shapes possible. Even closures without TE bridges are feasible.

watch video on



ADVANTAGES AT A GLANCE

- ✓ **COST REDUCTION** simple and safe processes take the place of expensive injection molds and filigree in mold processes
- ✓ **LOW SPACE REQUIREMENTS** by integrating all processes in just one system, the space requirement can be reduced by up to 30%.
- ✓ **PRODUCT DESIGN** more options for innovative designs thanks to integrated slitting and rotating tool axis
- ✓ **FULL PROCESS INTEGRATION** all necessary processes are integrated: Assembly, folding, pressing, slitting, closing, testing, and packaging.
- ✓ **REDUCED ENERGY CONSUMPTION** Savings of up to 50% due to compact, standardized plant concept
- ✓ **INDIVIDUAL FORMAT ADJUSTMENT** Machine can be adapted to all single and multi-part tethered caps



HIGH PERFORMANCE

FLEXIBLE OUTPUT

MODULAR PLATFORM SYSTEM

Because today complex closures frequently come to market with new beverage products, a beverage's success leads to a sudden increase in the number of complex closures demanded. A **flexible platform** that can adapt to the new required output is therefore critical. For this reason, Contexo has developed a modular platform system capable of widely different output rates within a short period of time. It also handles the various phases of the product's life cycle. The modular platform system allows existing stations and tools to be transferred to new machines.

MARKET LAUNCH



8 millions per year
ROTARY INDEXING



EUROPEAN MARKET



300 millions per year
LINEAR INDEXING



GLOBAL MARKET



800 millions per year
CONTINUOUS MOTION



COMPLEX CLOSURES

ADDITIVES - SPECIAL SEALINGS - COMPLEX DESIGNS

WITH ADDITIVE



- Active ingredients (powder, pills, liquids)
- Assembly of 7 components
- Injected TE functions no longer required
- Tamper proof
- Two-component injection molding no longer required

TE-PRINTING



- Printing a seal at the edge between cap and body
- When opened, the sealing shows a clear-cut edge
- Injected TE functions no longer required
- Tamper proof
- Easily recognizable for consumers

PRINTING



- Simple print workflow for logos on caps
- Individualized mass production
- Printing on demand
- Printing area: top and lateral surface
- Textured surface printable

LASER-CUTTING



- Cutting of TE functions
- No injection of thin spots
- No demoulding problems
- Simpler injection molding tools
- Cutting of opening aids

LASER-WELDING



- Full integrated laser process
- Precise and reproducible
- Cap and body can be welded at the hinge
- Simpler tool design
- Two-component injection molding no longer required



JOURNAL ARTICLE THE HIGHEST OUTPUT RATES AND THE BEST QUALITY FOR BEVERAGE CLOSURES

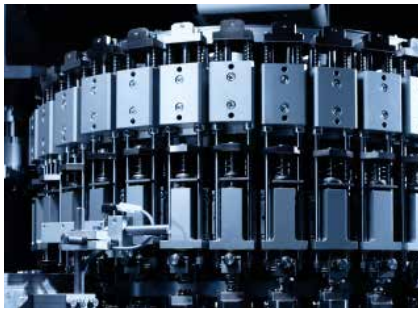
*Reaching ever higher speeds is a great challenge for today's machine builders:
Mechanical stress on parts increases, while at the same time reliable
quality control becomes more and more difficult. Contexo's machines show that
the combination of continuous motion and inline quality control is the new
standard for high output rates and high-quality parts*

→ **THE FASTEST AND MOST RELIABLE** beverage-closure machines are built by Contexo. Their machines are so fast that the human eye cannot follow what is happening. Every six-hundredth of a second, a new beverage closure is assembled, folded, inspected three times, and packed. 920 closures per minute, 1.3 million per day. And not one single defective part leaves the factory.

This level of performance is made possible by the continuous-motion rotary system. For over 10 years, Contexo has invested in this technology and continues to develop it. Today, the machine builder from Winterbach in Germany is a world leader in the field.

"The challenge was to build an exceptionally reliable and fast assembly machine on a small footprint", recounts Jürgen Müller, CEO of Contexo. "In our opinion, continuous motion combined with feeders for warm-moulded parts, and with direct inline inspection of those parts is the most effective solution."

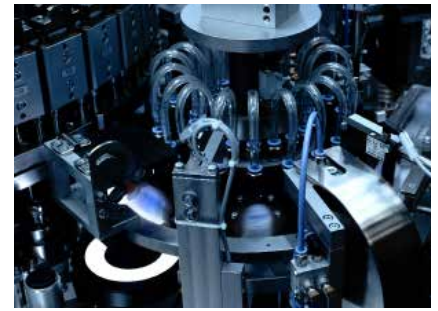
Contexo is currently using this technology to build a machine for one of the largest beverage-closure manufacturers in the world. It is the third Contexo machine ordered by the client this year. This means that production at the company will be state of the art. Machine tests confirm expectations: Over one million parts per day with 100.00 % reliability achieved.



HIGH-SPEED ASSEMBLY Leading continuous-motion technology and quality control from Contexo



PRECISE AND GENTLE FEEDING TE-proof vibration feeding and chained injection-molding machines



100.00 % RELIABILITY Zero Defects in Market thanks to comprehensive inline vision inspection

CAPACITY GROWTH THROUGH INTELLIGENT FEEDING, QUICK ASSEMBLY AND INLINE QUALITY CONTROL

This kind of speed is reached using continuous-motion technology. A central tower with 36 tools assembles the parts, while feeder satellites guide them at a precisely controlled rate; a system that places minimal stress on the parts.

“When Contexo started with continuous-motions systems over 10 years ago, we were one of the fastest at 300 parts per minute. Now we are 3-4 times faster”, explains Jürgen Müller.

However, assembly speed is only one condition required for high, market-conform output rates. The market now expects zero defects. End products have to be 100.00% error free. This is why many producers have launched additional inspection machines in recent years. But they can only inspect the assembled parts after the production process. This results in a larger installation area and slower completion times – and a finished beverage closure cannot be illuminated with full reliability.

RELIABLE QUALITY: INSPECTION BEFORE AND AFTER ASSEMBLY

Contexo has therefore adopted a different method for quality control: Not only is the finished closure inspected after assembly, each individual component is also inspected beforehand. For this to work, the inspection systems are integrated, inline, into the assembly machine

and work in sync with it. The additional system enables the full inspection and evaluation of all of the closure's features.

HIGHER EFFECTIVENESS: CHAINED TE-PROOF FEEDING WITH INJECTION-MOLDING MACHINES

At high assembly speeds, reliable feeding is the primary and largest challenge. These performance rates can be too much for existing feeder technologies. At high speeds, they cause pearlescence and other damage to the fed-in parts.

So Contexo developed their own TE-proof vibration feeder. The feeding ensures continuous flow because it is was developed as a stable unit capable of 80% overcapacity. It can also process warm parts directly from the mold. This results in beverage-closure machines that can be chained directly with injection-molding machines. The warm parts are fed in with no need for human involvement and thus no risk of contamination.

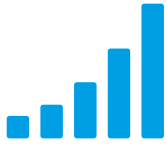
THE KEY TO SUCCESS: CONTINUOUS MOTION, VIBRATION FEEDING AND INLINE VISION INSPECTION

By chaining injection-molding machine, assembly unit and packaging system, Contexo offers a space-saving and effective alternative for manufacturing closures. Moreover, these machines can be produced cost effectively because Contexo works with standardized machine concepts and a full, in-house technology spectrum.

0

ZERO DEFECTS IN MARKET

100.00% quality control with
inline vision inspection



HIGHEST OUTPUT RATES

a world leader in continuous-motion
technologies



MINIMAL FOOTPRINT

direct vibration feeding for
warm parts



COMPLEX ASSEMBLY TASKS

e.g. expertise with rotationally
asymmetrical parts



RELIABILITY

decades of experience



THE BEST TECHNOLOGIES AT FAIR PRICES

standardized machine concepts and
full technology spectrum



STRESS FREE

full service and contract
manufacturing

PROFIT WITH CONTEXO NOW!

MANUFACTURE BETTER AND MORE ECONOMICAL WITH CONTEXO

CONTEXO offers attractive assembly solutions for all types of caps & closures.
Find out for yourself and request an offer today.



REQUEST AN OFFER NOW!



We'll be happy to make you an offer – because it's very likely you will be able to
improve your production and reduce your costs.

CONTEXO · Matthias Müller · Herrenäckerstraße 7-9 · 73650 Winterbach · Germany
Phone +49 (0)7181 606-100 · info@contexo-gmbh.de

ABOUT CONTEXO

HIGH PERFORMANCE FROM A FAMILY-RUN COMPANY

Contexo is an international machine builder that designs and produces **technical solutions for global brands and companies**.

Contexo specialises in building **high-performance assembly machines for mass production**. In 1982, Karl Müller, the family's father, began building machines. His three sons have led the company since 2011.

Contexo's assembly machines are characterized by their technical perfection, high efficiency and versatility. **Up to 65 production stages** can be integrated in one system, for example: assembly, imprinting, joining, gluing, welding and lasering.

With performance capacity of **up to 1,209 parts per minute**, Contexo's continuous-motion assembly machines are in a league of their own in terms of **speed and precision** right across the world.

"We do everything we can to ensure our customers' projects are successfully realized! From our great grandfather down, we all have mechanic's hands, so all of us are constantly looking for the best solution!"

MATTHIAS MÜLLER, HEAD OF SALES



CONTEXO
automation



CONTEXO GMBH Herrenäckerstraße 7-9 73650 Winterbach Germany

Tel. +49 (0) 7181 / 606-100 Fax +49 (0) 7181 / 606-150 info@contexo-gmbh.de www.contexo-gmbh.de