SIDEL SUPER COMBI

ONE SMART SOLUTION

WATER

CSD

Performance through Understanding

Sidel

THE FUTURE OF BEVERAGE PRODUCTION IN TODAY'S DYNAMIC MARKET

GREATER DEMAND REQUIRES SMARTER SOLUTIONS

Water and carbonated soft drinks remain two of the world's most valuable beverage categories, as the need for affordable water becomes ever more important and the popularity of carbonated soft drinks (CSD) continues to grow. In addition to growth, beverage market demand is subject to shifting consumer needs and preferences.

Trends supporting increased beverage demand:

- Increased urbanisation and unprecedented population growth
- Greater spending power and increasing standards of living in emerging countries
- Consumer demand for trustworthy and affordable premium brands
- Polarisation in bottle formats – single serving vs. family size
- Need for convenience and increased demand for on-the-go products
- Increased personalisation of products in terms of design and taste

Increased need for flexible high-speed production and agile operation

As consumer beverage preference broadens and overall demand increases, the ability of solutions to efficiently satisfy output requirements for new products – while utilising technologies that improve long-term viability – has become an essential key to success.

Maximum product quality and differentiated branding are also of critical importance, as are issues of environmental impact and the need to keep production costs under control. A Sidel solution will help overcome these challenges.

Meet your specific needs with Sidel

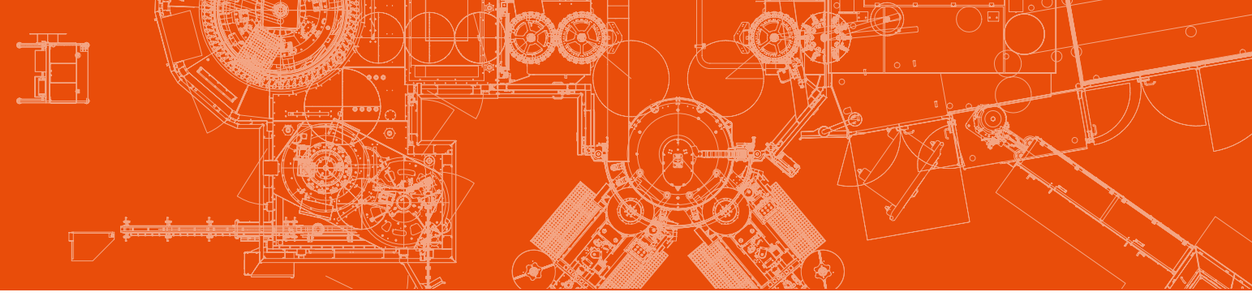
At Sidel, we provide solutions that help beverage producers to differentiate their brands with the right PET packaging and equipment solutions, while ensuring total food safety and product integrity. We can help you to produce a variety of products with increased production flexibility and reliability, and we make sure you consistently reach your goals while pursuing the lowest possible total cost of ownership (TCO).

An innovative solution for the future

On the following pages, you can read more about one of our refined innovations. Combined with our unmatched in-house packaging expertise and bottle lightweighting capabilities, the Sidel Super Combi is our fastest, most innovative solution for Water and CSD beverage production, delivering self-optimising performance and increased long-term value across the entire production process.

SIDEL SUPER COMBI

DESIGNED AND ENGINEERED AS ONE SMART SOLUTION



INNOVATING WATER AND CSD PRODUCTION

To satisfy high demand with high production capability, while still maintaining the flexibility needed to ensure varying market preferences are addressed, a smarter solution is needed: Sidel Super Combi.

Sidel Super Combi integrates five process steps – preform feeding, blowing, labelling, filling and cap feeding – into a single system, and utilises integrated equipment intelligence to provide continuous production optimisation and enhanced performance over time.

This makes it the ideal solution for maximising water and CSD production, and increasing line efficiency while reducing your TCO.

SIDEL SUPER COMBI INTEGRATES

- Preform feeding
- Blowing
- Labelling
- Filling
- Cap feeding

into **one smart solution**

The smart way to consistent performance
Through connected data-analytics management and optimised maintenance services the Sidel Super Combi is able to continuously sustain production efficiency.

- 95% overall efficiency
- Maximised uptime and production output at constant high/very high speed
- Equipment intelligence optimises, maintains and enhances performance over time

Comprehensive TCO reduction
Sidel Super Combi allows you to minimise CAPEX and OPEX for the lowest production cost per square foot.

- All process steps integrated; no conveying
- Fewer operators required
- Reduced setup time
- Reduced maintenance time
- Lower energy consumption
- Ultra-lightweight PET bottles
- Optimised use of raw materials

Faster changeover time
The integration of innovative new technologies minimises changeover time for improved uptime.

- Blower changeover under 40 seconds with Bottle Switch technology
- Faster labeller changeover via improved operational ergonomics
- Option for fully automatic filler changeover

Up to 30% more compact
Footprint and line-integration/planning are important drivers of the Super Combi technology and construction.

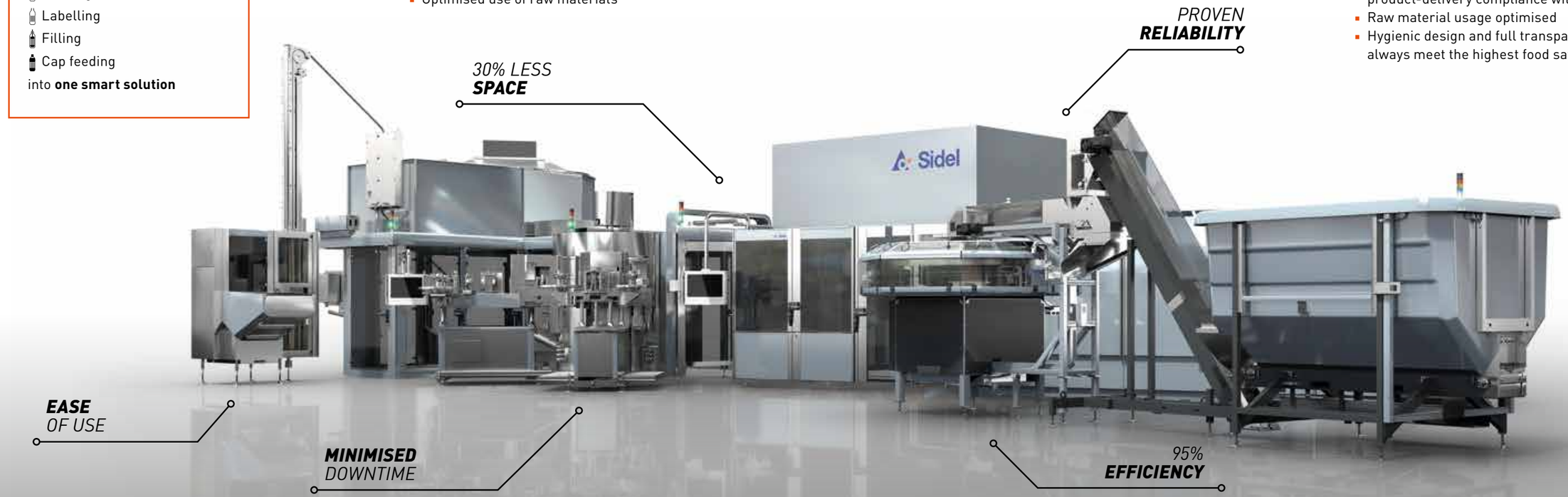
- Compact, ground level preform feeder
- Up to 30% footprint reduction compared to standalone equipment
- High labeller accessibility

Ergonomic and user-friendly
The Super Combi's physical layout and design support easy access, operation and maintenance.

- Optimised ergonomics for improved operator access/safety across the whole system
- Single-operator control possible
- Equipment intelligence complements operations for improved ease of use
- Intuitive control interfaces simplify production and maintenance

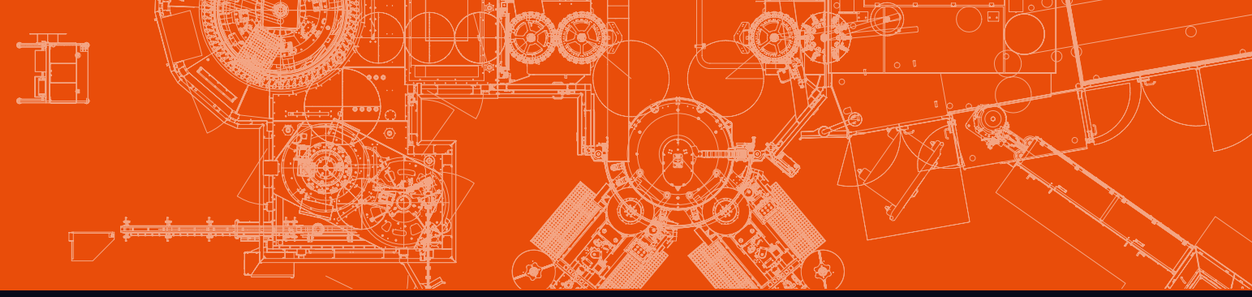
Prioritising product quality
With a focus on hygiene, packaging quality and liquid integrity, the Sidel Super Combi ensures high end-product quality.

- Positive transfer (neck-handling) across whole system, enabling maximum lightweighting capability and higher bottle quality overall
- Integrated vision/rejection systems ensure product-delivery compliance with specification
- Raw material usage optimised
- Hygienic design and full transparency ensures beverages always meet the highest food safety standards



EQUIPMENT INTELLIGENCE

MAXIMISE PERFORMANCE WITH DATA-DRIVEN INTELLIGENCE



A SOLUTION THAT DOES THE THINKING FOR YOU

As part of a new generation of Sidel equipment, the Sidel Super Combi is equipped with integrated machine intelligence, which allows for autonomous performance regulation and long-term enhancement.

In addition to optimised productivity, benefits include simplified operation, reduced maintenance time and minimal downtime thanks to guided problem-solving via the intuitive Human-Machine Interface (HMI) – all leading to a minimised TCO.

Self-adjustment to manufacturing conditions
Sidel Super Combi's Intelli-Adjust functionality allows it to self-optimise according to individual manufacturing parameters and processes. Performance is set and controlled through close-loop systems, eliminating the need for operator intervention.

- Simplified production procedures
- Reduced operator-skill requirement
- Increased operator productivity
- Reduced creation/setup time for new recipes (blowing and filling)
- Reduced setup time for new labels
- Reduced raw material waste
- Optimised production restart

Smart notification for better reactivity
With an automated alert system, the Super Combi provides timely reports on events (e.g. changeovers, label/cap shortage) and faults (e.g. fallen bottles) through EIT audio and smart portables via the Sidel InUse platform.

- Informs on alarms/events and coordinated line activities (e.g. changeover), reducing unplanned downtime and improving operator productivity without additional training
- Advanced vocal synthesis informs operators on machine status and upcoming events (e.g. changeover)
- Status-monitoring of entire line
- Compatible with most smart-capable devices and multiple delivery methods, including e-mail and customisable push notifications

Intuitive operator intervention
Improved Root Cause Analysis (RCA) software makes it easier to solve problems quickly. Guided troubleshooting with the augmented-reality Hololens reduces the operator skill requirement and offers increased repeatability of changeover and maintenance procedures.

- Self-evaluation of downtime issues
- Machine guides operators during RCA, displays relevant procedures to minimise total downtime
- Machine can communicate with Big-Data repository to learn from network and refine RCA capabilities
- Simple, immediate One Point Lesson access
- Leverages Sidel InUse and Sidel Services Online platforms to provide updated user manuals and quick spare part orders

Predictive capabilities
Sidel Super Combi predicts potential failures, and optimises maintenance plans by learning "from experience," and provides real-time access to our Big-Data repository for refining its own prediction algorithms. These improvements allow it to maintain and control and even improve performance of main components and modules such as blowing valves, filling valves and labelling station.

- Improved uptime through proactive operator intervention
- Optimised maintenance with replacement and reassembly only as necessary
- Reduced operator skills needed to predict/prevent malfunction

PREFORM FEEDING

OPTIMISE PRODUCTION FROM THE START

COMPACT, GROUND-LEVEL PREFORM FEEDING

The new, modular Sidel Easy Feed preform feeder is highly accessible, reducing downtime in the event of operator intervention, as well as for changeover. Its compact ergonomics prioritise safety, user-friendliness and high-speed performance all at once.

- Up to 56% footprint reduction
- Up to 81,000 p/h
- Easy installation, setup and operation

Top-quality preforms
The preform quality is preserved all the way from hopper to oven, ensuring packaging integrity further down the line.

- Shortened preform path results in fewer damaged preforms
- Gentle handling ensures preform integrity
- Reduced preform stress through neck-handling

Enhanced flexibility and ease of use
The new preform feeder is designed to maximise user-friendliness for safer operation.

- Quick, easy changeovers
- Lightweight preform-handling
- Ground-level installation for improved accessibility; high visibility and enclosure of all moving components for enhanced operator safety
- Fewer settings involving package-dependent parts (PDP)

Improved unscrambling
A rotary unscrambler keeps the sorting process running smoothly without the need for a a high-level platform.

- Setting-free sorting based on neck shape with customised parts for easier processing
- Shorter path from hopper to blower infeed reduces recycling rate and protects preform quality
- High visibility and easy access
- Vertical preform positioning and neck-flange path transfer
- Large speed spectrum: 30,000 p/h to 81,000 p/h

Motorised rail for better performance
The fast, reactive rail solution enables low-pressure gap-recovery and safeguards preform integrity during transfer.

- Controlled infeed pressure at infeed wheel and all along rail for improved accuracy
- Under-neck belt transfer with food-grade brushes for increased quality
- Limited wearing with soft preform contact reduces maintenance

FAST, EFFICIENT AND SAFE PREFORM FEEDING

- Ground-level access
- Better performance
- Wide range of preform designs
- Wide range of machine speeds
- Minimal maintenance
- Quick changeovers
- Compact

1 / *Preforms are transferred by the neck flange to ensure their integrity.*

2 / *A rotating table unscrambles and sorts all preforms.*

3 / *The sorting unit gently places the preforms into a vertical position.*

4 / *The preform feeder can be easily accessed at ground level and offers high visibility.*

BLOWING

ACHIEVE SMARTER AND FASTER PRODUCTION

UNCOMPROMISING EFFICIENCY, UNLIMITED FLEXIBILITY

With a design that improves on existing Sidel Matrix™ technology, the Sidel Super Combi blower boasts a wide range of benefits. It operates at high oven efficiency and a minimal environmental footprint, with fast changeovers for increased uptime, providing for the lowest possible TCO and pushing the boundaries of ultra-lightweight bottle production and handling.

Flexibility for consistency across multiple configurations
Produce bottles of different shapes and sizes within a single machine.

- Option to produce bottles in size and shape that best fit your specific needs
- Up to 200 possible blower configurations
- Three sizes of blowing station – bottle volume from 0.1L to 3.5L

Top bottle quality regardless of design
Designed with the quality, integrity and consistency of your product in mind.

- High bottle quality, regardless of configuration
- Large process window allows for effective monitoring
- Control of material distribution improved by electrical stretching
- Consistent packaging quality and performance with optional Intelliblower™ system
- Vision-control system to check faulty preforms and/or blown bottles
- Minimised risk of bottle deformation with improved transfer from blower to labeller using second pitch-change wheel

High-speed, high-output
Built for the most demanding production requirements, the Sidel Super Combi blower offers improved production capability that increases uptime.

- Best market uptime with production output of up to 2,500 bottles/mould/hour
- Quick changeovers in under 15 minutes, bottle-to-bottle*

Reduced electricity consumption
The Super Combi blower consumes less compressed air and electrical power. More energy efficiency can be gained by integrating proprietary Eco-Oven technology.

- Up to 45% less electricity consumed
- Up to 15% reduction in preform heating time
- Fewer installed motors; all brushless
- Up to 35% reduction in compressed air used with AirEco2 option (double air-recovery)

Intelliblower™ makes every batch a winner
As part of the Super Combi's equipment intelligence, Sidel Intelliblower leads the field in blow-moulding performance with its unique, patented blowing-process control and self-regulation, allowing for repeatable, consistently high bottle quality and performance.

- Automatically detects and eliminates bottle process deviations, reducing scrap
- Strong impact on production uniformity and packaging quality: controls pre-blow phase parameters instead of focusing solely on heat regulation
- Very responsive management for prompt correction

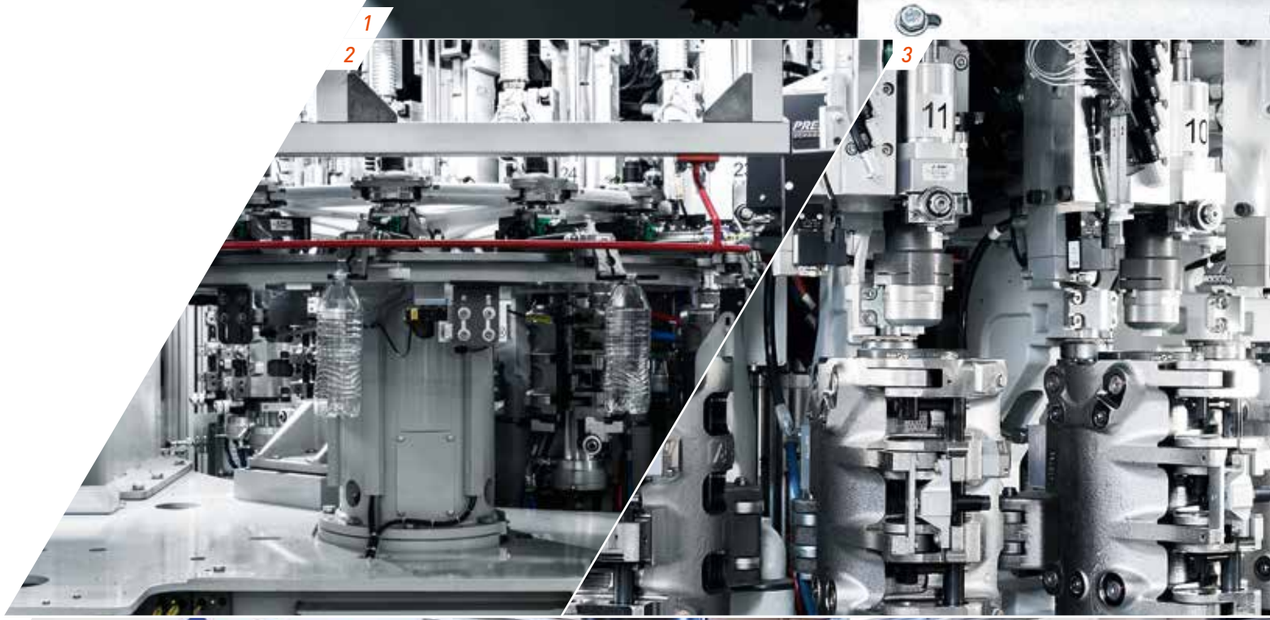
** 24-cavity machine with single operator*

1 / *With reduced heating times and optimised heating modules, the Eco-Oven allows for up to 45% less electricity consumption.*

2 / *Brushless motors allow great precision and energy saving.*

3 / *With less than 40 seconds per mould, Sidel blowers offer one of the fastest changeovers available.*

4 / *The Sidel Super Combi blower offers a modular and extensive blow moulder portfolio.*



LABELLING

MAXIMISE UPTIME WITH INNOVATIVE LABELLING

MORE FLEXIBILITY TO MINIMISE PRODUCTION DOWNTIME

High-output beverage production at high and very-high speed requires equipment that can overcome traditional obstacles to ensure continuous uptime. Sidel Super Combi's labelling equipment is the result of extensive innovation and improvements to existing Sidel labelling technology.

- Accessible and ergonomic with radial footprint
- Flexible portfolio-selection – roll-fed and pressure-sensitive labels (PSL)
- Increased reliability with strong validation based on 6-Sigma analysis

A new performance standard
- High-efficiency labelling process
- Up to three active roll-fed labellers for very high-speed production
- Fast, easy and reliable label-reel auto-splicing
- Improved machine availability due to automatic removal of glue particles by vacuum-cleaning system without labeller stoppage
- Master/slave configuration possible; no downtime in event of individual labeller stoppage

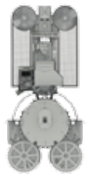
Unmatched process flexibility
With the option to implement different machine configurations based on output and flexibility requirements, the labelling process can be optimised.

- Single Aggregate – one station at high speed
- Double Aggregate – two stations working simultaneously
- Double Aggregate – two stations in master/slave setup (one working, one on standby)
- Triple Aggregate – three stations working simultaneously; or two working, one on standby

Label Vision System
This solution minimises waste and improves branding by identifying and preventing the filling of bottles with faulty labels.

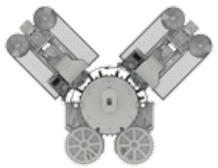
- Vision-control system can be installed just after labeller, before filling
- If label is incorrectly applied, ejection system rejects bottle before filling and capping

Flexible multi aggregate labelling system – standard configuration



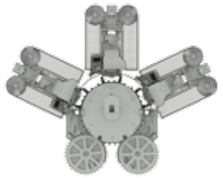
Single Aggregate:

- One station labels all bottles
- Max Speed: 36,000 bph
- Reel-change with High Speed auto-splicer



Double Aggregate:

- 2 stations working at the same time (one for every other bottle)
- Max Speed: 66,000 bph
- Reel-change with splicer HS



Triple Aggregate:

- 3 stations working at the same time (one for every other bottle)
- Max speed: 81,000 bph
- Reel-change with High Speed auto-splicer

1 *The reliable automatic splicing changes label reels at very high speed.*

2 *Easily change the number of vacuum drums to increase the range of labels and make changeover quick.*

3 *The new gluer system with improved heater reduces glue usage and simplifies maintenance.*

4 *The new labelling machine provides better accessibility and ergonomics.*

LABELLING

ELIMINATE DOWNTIME WITH CONTINUOUS LABELLING

INNOVATIVE MASTER/ SLAVE CONFIGURATION

The Sidel Super Combi's labeller offers the possibility to organise multiple labelling stations into master/slave configurations, thereby maximising production uptime.

By utilising the go/no-go and label-extraction system, this setup allows one station to run ("master"), while the other station ("slave") remains idle until a reel-change, at which point the station roles automatically switch. The result is a labelling station change during continuous high-speed production – without product loss or a reduction in production speed.

- Top performance for increased production
- No stoppage-related downtime
- Maximum output at 55,000 bph
- Drum-cleaning performed during active production
- During acceleration and deceleration, the labeller's extraction system removes labels from drum when bottle is not present
- Go/no-go system disables drum vacuum during label-extraction

Reel change with no-stop system:
- Bottle-gap request (ten bottles)
- "Master"-station deceleration – out
- "Slave"-station acceleration – in
- Offline aggregate splicing

Improved auto-splicing system
The Super Combi's labeller employs a sectored vacuum drum, which lets it apply many labels between quick changeovers.

- Possibility to alter sector count and vacuum division, increasing machine's label range without changing other modules
- Sector flexibility allows for optimal machine configuration and performance
- Adjustable vacuum pad helps machine setup
- Optimised vacuum speeds improve process stability
- Lightweight exchangeable parts – drum replaceable without need for external devices

Cleaning roller for vacuum drum
To improve the machine availability a vacuum cleaning system is applied, in order to automatically remove glue particles without stopping the labelling process and affecting production uptime.

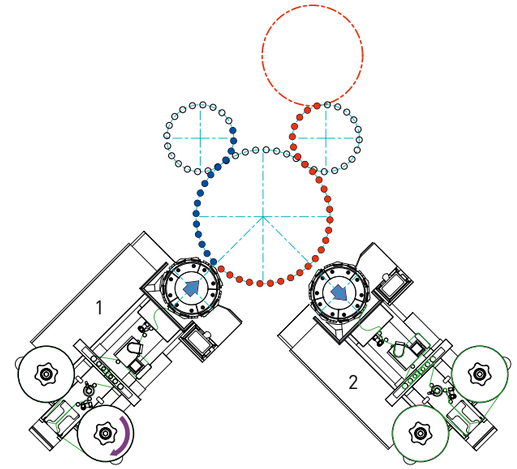
Improved melting for optimised consumption
The labeller's new melter is designed to minimise glue usage while still ensuring adequate application.

- Avoids mixing of old and fresh glue
- Low glue volume heated
- Low glue volume moved
- Avoids glue degradation
- Simplifies maintenance
- Temperature management (± 3° C)

New precision glue roller
The laser-engraved roller transfers a controlled quantity of glue to the label and avoids splashing and glue filament phenomena.

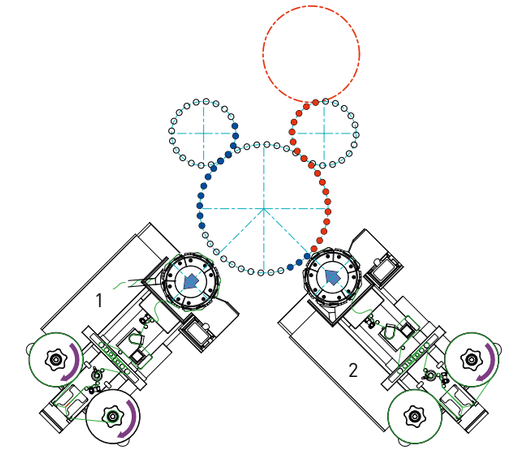
- Reduced glue consumption
- Easy setup and maintenance with fewer components
- Improved availability and efficiency
- Easy access to all system components

MASTER/SLAVE CONFIGURATION



Label station 1 is "master" and station 2 is "slave."
1. "Master" station is in label-application contact position
2. "Slave" station is in standby position

MASTER/SLAVE REEL CHANGE



1. "Master" station pre-alarms, creating production-flow gap
2. "Master" station applies final label to last pre-gap bottle, retracts from label-application contact position
3. "Slave" station advances to label-application contact position, applies label to first post-gap bottle
4. Station 2 is now effective "master" station. Reel change on Station 1 can be performed, after which it becomes "slave" station

Not labelled bottles
Labelled bottles

FILLING

INCREASE FILLING ACCURACY AND EFFICIENCY

PRECISE, HIGH-PERFORMANCE FILLING FOR WATER AND CSD

The Sidel Super Combi's fillers ensure water or carbonated soft drink beverages producers optimal quality with high efficiency, while maintaining hygiene and maximising beverage accuracy.

Based on Sidel Matrix Filler technology, it can fill any beverage type with or without conductivity, delivering high filling precision and maximum hygienic compliance. Changeovers are quick, and the filler's external beverage tank is easy to clean, saving time for reduced costs.

Built with your beverage in mind
Whether you're producing water or CSD products, the Super Combi has the technology needed to ensure smooth production.

- Vortex, magnetic or mass-flow meters ensure consistent and accurate beverage volume
- Integrated electro-pneumatic components
- No vertical bottle movement – smoother handling prevents spillage, foaming and bottle jams
- External beverage tank easier to clean
- Reduced filler environment under positive pressure (HEPA filters) optional
- CIP automatic dummy bottles optional

Safer and more hygienic
The Super Combi's filling equipment is designed and built to maintain environmental hygiene.

- Reduced filling enclosure covers only space around valves, resulting in up to 80% less volume compared to traditional solutions
- Environment controlled by pressurised filtered air
- Low consumption of water and chemical agents for external cleaning
- Self-draining surfaces

Maximum uptime and efficiency
With reduced changeover time and maintenance requirements, the Super Combi's filler can produce greater beverage volume in a standard cycle.

- 30% less downtime for maintenance
- Option for fully automatic changeover via HMI

Smart and sustainable
The Sidel Super Combi's filler cuts electrical and chemical usage for lower costs and greater sustainability.

- Optional reduced filler enclosure results in smaller filling environment, with less chemical and water used during external cleaning
- Reduced electrical consumption using servomotors

1 *Contactless filling improves hygienic production of still beverages.*

2 *The small beverage chamber ensures stable feeding and effective cleaning.*

3 *The rotary fluid distributor ensures smooth beverage feeding without turbulence.*

4 *A wide range of enclosures is available to meet the most stringent hygienic requirements.*

CHOOSE THE RIGHT FILLING TECHNOLOGY

SIDEL MATRIX SF100 FM FILLER

Contact-free filling with multiple configurations
The Sidel Matrix SF100 FM utilises flow-meter technology and configurable controls to deliver precise filling performance and improved hygiene.

- Filling valve with vortex flow-meter control
- All parts that come into contact with water produced from SS AISI 316L
- Multiple enclosure-configuration options – tight/wide/reduced
- Double filling speed available for higher filling level
- External beverage tank with feeding pump controlled by variable frequency drive (VFD)
- Electro-pneumatic components integrated on filling valve

Safer, easier automatic cleaning
Automatic dummy bottles simplify and accelerate internal cleaning of fill valves, including nozzle tip, filling tube, and diaphragm.

- Inserted by a pneumatic piston, dummy bottle is automatically positioned under valve to close circuit for CIP
- CIP system cleans all filling valves internally without manual intervention, preventing possible re-contamination

Reduced filler enclosure
The Matrix SF100 FM's modular enclosure minimises volume requirement while improving sustainability and hygiene.

- Filling area reduced to space around valve
- Volume reduced by up to 80% compared to traditional solutions
- Environmental control via slight over-pressure of filtered air
- Simple, clean design
- Self-draining surfaces
- Fully automatic external surface cleaning
- Saves water, chemicals and time
- Complete fluid collection in a single draining point

SIDEL MATRIX SF300 FM FILLER

Flexible, safe and quick (configuration)
The flexibility of the Sidel Matrix SF300 FM system simplifies changeovers and cleaning.

- Neck handling with grippers
- Optional double-neck handling with quick-release gripper sectors
- External beverage tank with feeding pump controlled by variable frequency drive (VFD)
- Electro-pneumatic components integrated on filling valve
- Optional fully automatic bottle changeover
- Automatic positioning of dummy bottle under valve for closed-circuit CIP

Flow meters and servomotors
Sustainable, accurate filling is made possible by electronic flow-meter controls that can match any production criteria.

- Magnetic or mass flow-meter volume control
- Accuracy ensures precise filling without beverage waste
- Carousel and front base driven by servomotors
- Low maintenance

Swirl deflection into bottle
Our swirl system ensures minimal foaming under all production conditions.

- Low-foam filling
- High flexibility for optimal deflection, even when working with different bottle shapes or beverage types

CAP FEEDING

MAXIMISE EFFECTIVENESS WITH WATERFALL TECHNOLOGY

ENERGY-EFFICIENT TECHNOLOGY WITH UNMATCHED ERGONOMICS

The Gebo Cermex OptiFeed® cap feeder is based on patented AIDLIN waterfall technology that combines storage, elevation, orientation and high-speed feeding with energy savings. Comprising four key modules – hopper, guiding system, distribution and elevating system – this innovative solution feeds up to 18,000 caps/hour.

The machine's waterfall technology, modular platform and kinematic set-up allow for careful handling of each cap. Kinematics separate the orientation and elevating functions, reducing the total height of the "waterfall" cap-orientation system and allowing improved ground-level operator access. The underlying mechanical concept utilises a continuous, individual cap-elevating system for improved feeding efficiency.

Easy Maintenance
- Ground-level access to motorised elements, sensitive zones and cap-quality control
- Blockages prevented at top of cap-feeder
- Easy to transport; delivery times reduced by up to 30% with modular design
- Extended elevating system with adjustable height to expected connection point

High sustainability and low TCO
- Individual cap-elevating system eliminates need for compressed air and electronic fan systems during cap-extraction, optimising delivery of quality caps
- Reduced energy consumption
- Noise output reduced to 75 dB

Innovative waterfall technology
- Suitable for high-speed operations
- Less floor space required
- Easy to adjust, and reliable

Cap integrity and hygiene
- Precise quality control makes feeder suitable for fragile or thin wall closures
- High level of hygiene through aid de-dusting
- Positive pressure within hopper
- Customer-chosen air filtration method
- Optimised cleaning thanks to easy accessibility and durable materials

OVERVIEW

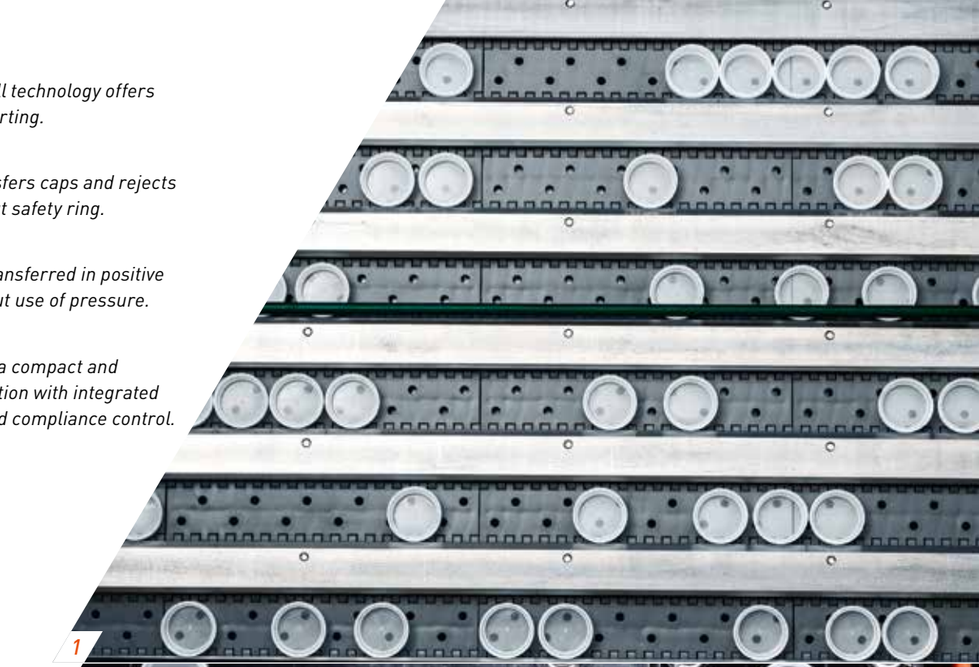
- Hopper capacity: 18.000 flat plastic caps
- Reduced footprint by up to 75%
- 100% reliability thanks to integrated vision control
- Low power consumption: 1kWh

1 / *Proven waterfall technology offers reliable caps sorting.*

2 / *The wheel transfers caps and rejects any caps without safety ring.*

3 / *The caps are transferred in positive elevation without use of pressure.*

4 / *Optifeed offers a compact and ergonomic solution with integrated cap integrity and compliance control.*



SIDEL SERVICES

BUILD, MAINTAIN AND IMPROVE YOUR PERFORMANCE

A HOLISTIC APPROACH TO SERVICES

Your line is a critical production asset, and you need continuous performance optimisation at every stage of your production lifecycle. From initial design to ramp-up, and beyond, Sidel helps you build, maintain and improve performance across your production's lifetime.

Sidel Services Online™
Since we designed and built your line, we have a comprehensive understanding of your line equipment and its individual parts. Our dedicated Sidel Services team offers you a tailored portfolio that can increase the value of your beverage production for long-term success.

Improve your packaging value
From design all the way through to production and ongoing optimisation, we have your packaging needs covered.

Our packaging services help you develop ergonomic designs, protect product quality and strengthen your branding while benefitting from improved line efficiency, product safety, environmental impact and cost-efficiency – all with a fast time-to-market.

Build skilled teams
Our customised training solutions help you build operator performance to achieve a quick vertical start-up, while balancing Human Resources (HR) turnovers and global diversification with increasing technological sophistication.

We provide evolving, efficient and secure competence-transfer, allowing to identify and nurture skilled, motivated teams capable of safe technical operations.

Optimise and maintain long-term performance
We understand that asset performance is key to ensuring consistent output, optimising TCO and maximising its value.

Our diversified maintenance solutions offerings are based on a preventive approach that enables maximum equipment availability, reduces unscheduled stoppages, downtime and emergencies, and maintains high standards of both safety and final product integrity.

Sidel Services™:
- Packaging
- Training
- Maintenance
- Line Improvement
- Line Conversion & Moulds
- Spare Parts & Logistics

ENTER THE FUTURE OF FACTORY PRODUCTION

As a key player in the "Factory of the Future" movement, our Agility 4.0 capabilities bring Smart Factories to life.

We are speeding up the pace of consumption behaviours, balancing mass production with mass customisation at affordable cost. Ultimately, we deliver solutions that will enhance the transformation of packaging.

At the Sidel Group, the technology behind the factory of the future is known as "Agility 4.0™" and is supported by five pillars:

Virtual factory
Control your costs and make the right decisions with high-precision 3D scans, simulation-based modelling and virtual-reality tools.

- Optimise capital expenditure (CAPEX) and maximise your return on investment
- Maximise asset utilisation with simulation
- Increase execution success rate
- Improve safety and operability with correct ergonomics

Smart factory
Maximise operation flexibility and efficiency with smart, innovative robotic technologies and intelligent equipment that predicts, solves and self-regulates.

- Improve performance over time
- Improve safety, ergonomics and operability
- Ease of operation and a high operability
- Get the benefit of affordability

Connected factory
Sustain high performance and achieve high flexibility with efficiency-improvement tools, data acquisition, line monitoring, remote assistance and smart monitoring of your equipment.

- Sustain maximum performance over time
- Detect, assess and resolve issues quickly
- Reduce repair time with fast troubleshooting and remote access
- Prevent unplanned stoppages
- Maximise asset utilisation
- Ensure easy and effective maintenance

Sustainable factory
Reduce energy and water consumption with smart energy management and the use of new materials, line-energy simulation, 3D-printed components and more.

- Optimise energy consumption and material usage for reduced waste
- Link energy consumption and line performance via line-energy simulation
- Identify unusual water consumption

Extended factory
This innovative "dematerialised layout" approach revolutionises traditional packaging line and factory concepts through late customisation and automated guide-vehicle capabilities.

- Achieve maximum flexibility
- Improve performance over time and maximise asset utilisation
- Customise your mass production
- Increase your SKU portfolio
- Achieve a shorter time to market
- Reduce waste, storage and repacking

COMPLETE LINE SOLUTION

A SOLUTION THAT ACHIEVES YOUR UNIQUE GOALS

ONE PARTNER FOR ALL YOUR PRODUCTION NEEDS

By integrating your Sidel Super Combi into a complete line solution, you can strengthen your entire production, boosting speed and maximising both flexibility and uptime – while minimising TCO.

A fully connected line helps you to optimise performance and make smarter decisions over your line's lifetime. Our flexible approach to complete line design is dedicated to meeting all of your needs as a water or CSD producer.

A lifelong partner
A complete line solution represents a long-term commitment to your business as a beverage producer, and partnering with Sidel gives you the benefit of single-supplier control over the entire project. With a holistic view of the production cycle and line performance, we help you achieve the exact performance required to ensure that your goals are reached, or even exceeded.

Taking care of your beverage and production
Careful packaging design and detailed equipment planning are both needed when developing a line for optimal output, reliable performance and total safety compliance. At Sidel, we work with you to manage the process before, during and after handover, so you can continue focusing on what matters most: your final product.

Sidel Water Complete Line Solution:

Boosting speed and hygiene
Consumers expect convenience and variety at the lowest cost, so it is important to ensure production speed and product quality while reducing consumption at every possible stage. A smarter, more dynamic system increases productivity and efficiency, improves bottle-handling and minimises waste of both raw materials and energy.

Sidel's complete water lines offer:
- Hygienic production with lower chemical usage
- Gentler bottle- and product-handling at higher speed
- Reduced energy consumption

Sidel CSD Complete Line Solution:

Enhancing flexibility and consistency
When producing carbonated soft drinks, speed is important – but flexibility is even more important. Choosing a line that can consistently handle multiple SKUs, with quick changeovers and total hygienic compliance from one cycle to the next, allows you to produce a beverage that consumers can trust. Sidel's versatile CSD lines reduce beverage resource consumption while producing high quality products at high speed and efficiency.

Sidel's complete CSD lines offer:
- Faster production speed
- Smaller footprint
- Improved hygiene and product quality
- Maximum flexibility with quick, easy changeovers

GET A SIDEL SUPER COMBI AT **SIDEL.COM/SUPERCOMBI**

The Sidel Group is formed by the union of two strong brands, Sidel and Gebo Cermex. Together, we are a leading provider of equipment and services for packaging liquids, food and personal care products in PET, can, glass and other materials.

With over 37,000 machines installed in more than 190 countries, we have nearly 170 years of proven experience, with a strong focus on advanced systems, line engineering and innovation. Our 5,000+ employees worldwide are passionate about providing complete solutions that fulfil customer needs and boost the performance of their lines, products and businesses.

Delivering this level of performance requires that we continuously understand our customers' challenges and commit to meeting their unique goals. We do this through dialogue, and by understanding the needs of their markets, production and value chains. We complement this by applying our strong technical knowledge and smart-data analytics to support maximum lifetime productivity to its full potential.

We call it *Performance through Understanding.*

sidel.com

Performance through Understanding

Sidel