

Sidel is a leading provider of equipment and services solutions for packaging beverage, food, home and personal care products in PET, can, glass and other materials.

With over 40,000 machines installed in more than 190 countries, we have nearly 170 years of proven experience, with a strong focus on the factory of tomorrow with advanced systems, line engineering and innovation. Our 5,500+ employees worldwide are passionate about providing solutions that fulfill customer needs and boost the performance of their lines, products and businesses.

Delivering this level of performance requires that we stay flexible. We continuously ensure we understand our customers' changing challenges and commit to meeting their unique performance and sustainability goals. We do this through dialogue and by understanding the needs of their markets, production and value chains. In turn, we apply our solid technical knowledge and smart data analytics to ensure lifetime productivity reaches its full potential.

We call it **Performance through Understanding.**

XXXX – The information in this document contains general descriptions of technical options available, which do not always have to be present in each individual case. The required features should therefore be specified in each individual case at the time of closing the contract. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without previous written approval by the Sidel Group. All Sidel Group's intellectual property rights, including copyright, are reserved by the Sidel Group. All other trademarks are the property of their respective owners.

www.sidel.com

**Performance
through
Understanding**

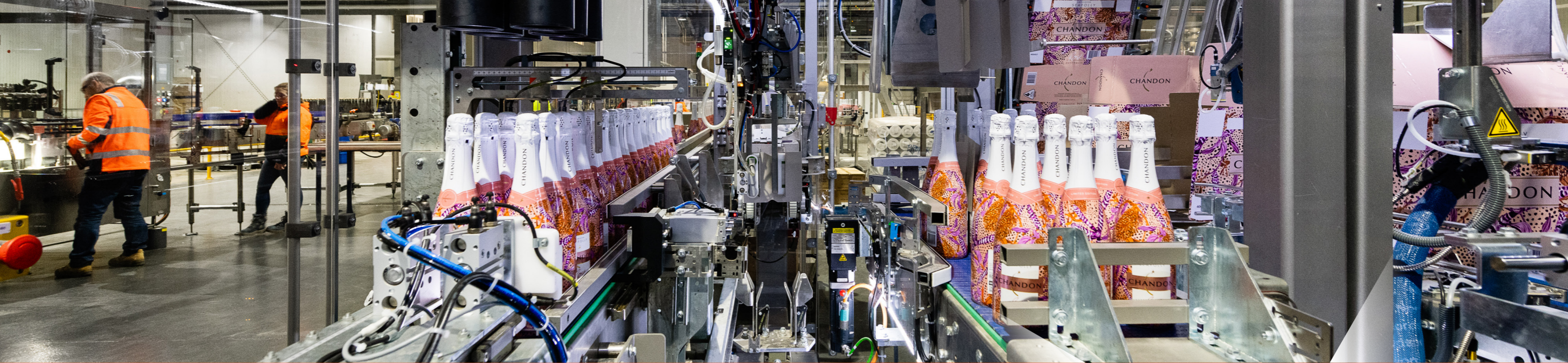


YOUR PRODUCTS ARE YOUR PASSION TAKING CARE OF THEM IS OUR MISSION



**Performance
through
Understanding**





YOU ARE UNIQUE...

In today's world, market trends are changing at an ever-faster pace. The challenge is twofold: to cater for the rising demand from millennials with their enthusiasm for new products, whilst also securing the traditional mature consumer market.

This is complicated further by increasingly diverse competition, multiplying product launches and rising product premiumization and diversification. **As a consequence, packaging is more and more driving value as a genuine differentiator.**

The impact of all these factors on production is far-reaching. You need to achieve greater flexibility to address the vast array and increasing complexity of bottle shapes. At the same time, container care has become key to preserve the attractiveness of your products.

In a nutshell, your daily activity is all about solving a unique and complex packaging equation. At the same time you ensure to keep track of your core business **that is to nurture the passion for your products and create customer satisfaction.**

... AND SO ARE OUR SOLUTIONS

There are multiple solutions out there, but only a few will actually build your competitive advantage.

Your industrial assets need to be optimized to work as a seamless whole, combining your specific packaging designs, the best line concept and the most appropriate packaging technologies. That's why we always focus on a holistic approach to your performance whilst constantly striving to initiate innovative thinking.

With always one objective: to help you earn that extra competitive edge.

Our mission: to design, build and maintain advanced and customized packaging solutions offering high flexibility, full product care and superior performance all along the line.

To do so, on the strength of a 40-year historic presence alongside the Wine and Spirits industry, we have built a unique set of complementary areas of expertise.



COMPLETE LINE INTEGRATION

Customized packaging line solutions



BRANDING & PACKAGING DESIGN

- Brand strategy
- Brand identity
- Packaging design



LINE ENGINEERING

- Plant design
- Process & Utilities
- Controls & automation
- Packaging line design



PRODUCT FLOW MANAGEMENT

- Line control
- Product handling
- Accumulations



END-OF-LINE TECHNOLOGIES

- Packing
- Palletizing
- Intralogistics



PERFORMANCE SOLUTIONS

- EIT
- Audits

CREATIVE DESIGN FOR TAILORED PERFORMANCE

We deliver solutions that are both innovative and customized. Customized because they are based on an in-depth analysis of your objectives and your business. Innovative because they transcend the conventional framework to create engaging packaging designs, to invent new production models and to capitalize on new technologies.

To achieve this, we have set up a global, pluridisciplinary network of several hundred specialised technicians and engineers recruited and trained permanently according to a common project management and customer relations culture.



YOUR PACKAGING IS MORE THAN A CONTAINER.

It is a storyteller that stages the product and makes it stand out from the crowd. But every storyteller needs a great story to tell. This is where our Branding experts and Packaging designers come on stage.

BRAND STRATEGY

- Current brand and competitors positioning & personality analysis
- New positioning & personality definition
- Tagline, tone of voice

BRAND IDENTITY

- Logotype & brand icon
- Color palette, typography
- Corporate touchpoints creation

PACKAGING DESIGN

- Product concept creation & visual identity (label, secondary packaging, cans)
- Product engineering: 3D model and technical drawing
- Real packaging samples (blown bottle, printed label & cans)



ENGINEERING IS ABOUT UNDERSTANDING YOU

Because your uniqueness must be a winning asset, our engineering experts combine a thorough knowledge of your key performance factors with design flexibility to deliver you solutions answering your specific needs.

PLANT DESIGN

- Plant layout & optimization
- Structural, architectural & civil engineering
- Mechanical & electrical engineering
- Construction management
- Warehouse & logistics

CONTROLS & AUTOMATION

- Electrical engineering
- Control panel design & manufacturing
- Balanced line flow
- PLC & HMI programming

PROCESS & UTILITIES

- Clean & mechanical room design
- Compressed air, steam, water
- Waste water treatment, CIP
- Heat transfer, cooling, refrigeration
- Product blending / batching

PACKAGING LINE DESIGN

- Production line design, relocation or conversion
- Production requirement analysis, master planning
- Procurement assistance, installation bid packages
- Line / systems integration
- Embedded engineer, site management



INTEGRATION IS THE ART OF PULLING EXPERTISE TOGETHER

At the end of the day, your strategy needs to be rolled out profitably. This is why we entrust the execution of your integration projects to multitalented, expert frontline teams and offer you freedom of choice in the contractual form of our partnership.

TECHNICAL DESIGN

- **Mechanical design**
 - Detailed line design
 - Equipment specification, selection and integration
- **Control & automation systems**
 - Network design & programming
 - Line updating and optimization
 - Complete description of operation
- **Human-Machine/Line Interface**
 - HMI/HLI design
 - Technical maintenance, process and network control
 - Easy line management
 - Production and Logistics Automated System

PROJECT EXECUTION

- **Design**
 - Scope definition
 - Design: mechanical, electrical & control, process, utilities, structural, drains
 - Detailed layouts and drawings
 - Equipment specifications, RFQ
 - Project scheduling, cost budgeting & tracking
- **Execution**
 - Purchasing assistance, procurement, expediting
 - Bid package preparation and installation contract management
 - Technical integration between vendors and disciplines
 - Software programming: PLC, HMI, EIT
- **Management**
 - Installation, start-up management & supervision
 - On site vendor coordination
 - Operation and maintenance training
 - Line commissioning
 - As-built drawings and documentation



MANAGING CONTRACTOR : THE CONTRACTUAL ALTERNATIVE

A complete line project management method offering the best balance between dependence and guarantee level.

SUPPLIED SERVICES AND EQUIPMENT

- Feasibility & ancillary studies, line & systems designs
- Equipment selection based on specifications
- Line systems, control design & programming
- Conveyors supply
- Complete project management up to commissioning

COMMITMENTS

- **Concept:** to design a concept that will work
- **Equipment:** to select equipment complying with specifications
- **Means:** to supply competent staff for the project
- **Result:** to guarantee the performance contractually defined



MAXIMISE YOUR EFFICIENCY THANKS TO SEAMLESS PRODUCT FLOWS

During 60 years, we have developed a two-fold expertise in conveying systems: first to transport your bottles while guaranteeing their integrity whatever their design, second to optimize your line's uptime by ensuring a smart regulation of product flows.

CONVEYING ENGINEERING

- Complete solution design
- Line control and automation
- Definition and simulation of accumulation solutions

PRESSURELESS CONTAINER HANDLING

- Mass or single-lane accumulation systems
- Combining and distribution
- Dividing, laning, train formation
- Automatic guide adjustment system

SECONDARY PACKAGING CONVEYING

- Transport, curves, inclines and declines
- Magnetic roller or Low Back Pressure accumulation
- Pack turners
- Automatic guide adjustment system

GEBO AQFLEX®

A breakthrough product handling technology delivering unique flexibility and continuous packaging line performance Gebo AQFlex® supplies smooth single-lane conveying with full automatic changeover capability. Designed to fully respect fragile and premium containers, it gives you greater freedom to conceive attractive packaging shapes. And with built-in accumulation, Gebo AQFlex® delivers continuous performance, greater efficiency and controlled production quality for maximized profitability, whatever the speed. With an all-in-one design offering space and energy savings, Gebo AQFlex® is setting new industry standards.



CAREFUL HANDLING OF YOUR BOTTLES AND PERFECT PACKAGING

Sidel's case packing machines, systems and add-ons provide a comprehensive response to your packing needs, however complex your products. Traditional or robotic, bottom, side or top loading, pick and place, wraparound: our range of solutions is one of the broadest on the market.

PACKING

- **Product collating systems**
 - Regulated flow selection system
 - Product selection system
- **RSC case packing**
 - Case erectors
 - Gantry packers and robotic arms
 - Flexible pick & place packer
 - Traditional pick & place packers
 - Case gluers
- **Wrap around blank packing**
 - Wrap around case and tray packers
 - Continuous wrap around case packer
- **Product traceability complete solution**

DE/PALLETIZING

- **Depalletizing**
 - Automated high/low level depalletizer for loose containers
 - Robotic depalletizer for loose bottles
- **Palletizing**
 - Automatic layer-by-layer palletizing
 - High-speed, high-level inline palletizer
 - High-speed single column palletizer
 - Flexible robotic palletizing cell
 - Robotic palletizers for loose bottles
- **Pallet handling**
 - Transport (chain, free or motorised roller, modular belt)
 - Orientation tables (transfer, rotation, repartition) and shuttles
 - Storage: elevators, consolidation tables, stacking tables, empty pallet magazines
 - Pallet inspection system

INTRALOGISTICS

- **Automated guided vehicles**
 - Fork over legs AGV
 - Counterbalanced AGV
 - Powered conveyor AGV
- **AGV supervision system**

CERMEX FLEXIPACK

Bottle integrity, high flexibility and operability concentrated in an agile Pick & Place packer for RSC cases

Cermex FlexiPack is an auto-adjustable case packer that guarantees the integrity of glass bottle design and decoration thanks to advanced speed regulation through automation programming and four conveying zones. The solution also offers fast, reliable and repeatable changeovers, high operability with autonomous step-by-step creation of new format on a user-friendly Human Machine Interface, allowing your production to be even more agile.



MORE THAN DATA, ACTIONABLE INFORMATION

In production as in business, time is of the essence and knowledge is power. Our audit solutions and Efficiency Improvement Tool provide you with actionable information, giving you an edge for discovering and addressing key issues in order to reach your production targets.

EFFICIENCY IMPROVEMENT TOOL (EIT®)

Maximize awareness, increase responsiveness and optimize effectiveness!

Leveraging expertise as a line integrator and OEM, in 1996, Sidel developed its own data acquisition and line monitoring system. From operations to maintenance and engineering to management, with its built-in intelligence and operational insight, EIT helps you meet your production daily challenges and bring productivity to higher levels by providing you key information to optimize analysis and decision-making.

• Core modules

- Data acquisition service
- Performance focus & user interface
- Database configuration tool

• Peripheral modules

- Global access
- Monitoring of accumulation
- Multi-plant reporting
- Video recording
- Line status visual display
- Trending of analog values
- Production order tracking
- Energy and utility consumption
- Vocal synthesis messages for operators
- Alerts and notifications
- Reject counts analysis

AUDITS

- Diagnostic visit
- Technical visit
- Spot audit
- Desk audit
- Full audit
- Energy audit
- EIT use optimization
- Shock/pressure audit
- Packaging audit

