

Consumer products and retail

Campari

Brand spirits leader digitizes its business operations with the SIMATIC IT suite

Product

SIMATIC IT

Business challenges

Implement a product specification management system on a global scale

Simplify and standardize data collection and validation

Accelerate response to information requests from the market and government institutes

Take initial steps towards the Digital Enterprise

Keys to success

SIMATIC IT for complete product specification management

Results

Developed a unified repository for all product specifications, accessible via web to internal stakeholders

Achieved standardization of contents, collection and validation processes, and generated documents

Managed approximately 21,000 product specifications

Received reporting tools for real-time response

Using Siemens technology, Gruppo Campari has created a unified repository for all product specifications and increased the efficiency of product development and manufacturing processes

Building lifestyle brands

With so much talk about securing the Italian control of key businesses, a few companies play offense and take the Italian lifestyle and "Made in Italy" all over the world. Among them is Gruppo Campari, which closed 26 acquisitions in the spirits industry in the past two decades to become the world's sixth player, with over 50 premium and super-premium brands. Besides aperitifs of international renown (Campari, Aperol), the portfolio includes bitter liqueurs (Averna, Cynar,

Braulio) and spirits (Skyy, Grand Marnier, GlenGrant, Wild Turkey, Appleton). In 2016 the group exceeded €1.7 billion in consolidated revenues, with most sales in Americas and the Southern Europe, Middle East and Africa (SEMEA) region.

Progressive integration

With each acquisition, Gruppo Campari needs to integrate new products, plants and assets into its operations management systems. Recent examples include J. Wray & Nephew, a company with more than 2,000 employees producing Jamaica's 225-year-old top rum Appleton Estate, Grand Marnier in France acquired in 2016 and Bulldog London Dry Gin in 2017. Currently, the group operates 58 sites: 18 owned factories, 22 co-packers and 18 distribution centers, counting up to thousands of materials and specifications.



A bottling line producing Campari.

Specification List

423740 [1] - Liquid Information : Descriptors [Read Only]

Remove Remove All Collapse Refresh Help

423740 [1] CAMPARI BITTER 24/200 28.5°/57F

- Header
- Bill of Material
- Liquid Information
 - General Information
 - Legal Requirements
 - Sensory Description
 - Descriptors
 - Consumer Information
 - Nutritional Information
 - Preservation Recommendations
 - Packaging and Pallet Information

General Descriptors List

Page: 1 Total rows: 10 / Total pages: 1

| | Attribute | Min | Max | UoM |
|--------------------|---------------|----------|----------|-----------|
| Alcoholic Strength | @ 20 °C | 28.20000 | 28.80000 | % v/v |
| Colour | Abs. @ 430 nm | 2.20000 | 2.30000 | AU |
| Colour | Abs. @ 508 nm | 3.40000 | 3.80000 | AU |
| Colour | Abs. @ 628 nm | 0.14000 | 0.20000 | AU |
| Inverted Sugars | /100 m L | 0.20000 | 0.40000 | g/100 m L |
| pH | | 4.50000 | 5.70000 | |
| Specific Gravity | 20 °C/20 °C | 1.05600 | 1.06500 | |
| Sucrose | /100 m L | 24.00000 | 25.00000 | g/100 m L |
| Total Dry Extract | /100 m L | 25.00000 | 26.00000 | g/100 m L |
| Turbidity | Nephelometric | | 2.00000 | N.T.U. |

Other Descriptors List

Page: 1 Total rows: 2 / Total pages: 1

| | Attribute | Min | Max | UoM |
|--------------|-----------|----------|----------|-------|
| Conductivity | | 45.00000 | 50.00000 | µS/cm |

End of Section

SIMATIC IT Interspec screenshot – example of technical specifications of Campari.

Results (continued)

Integrated management of analysis on products, incoming goods acceptance process and release to production

Realized data acquisition and management of plant efficiency and performance data

The turning point for the management of such a complex and constantly evolving organization came in 2012. Until then, Gruppo Campari had maintained an unstructured approach to the management of product specifications, which were created locally using Microsoft Word documents or Microsoft Excel® spreadsheets. Besides creating documents in different formats and languages, there was no standard workflow for document authoring and validation, and information was shared via email or phone.

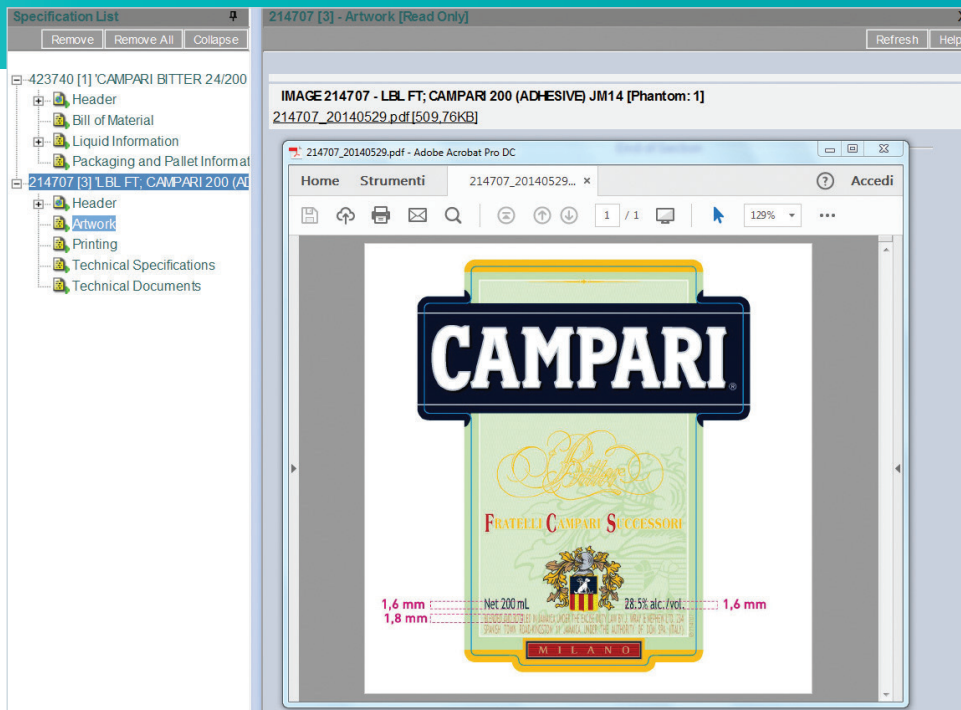
In 2012, the Group launched an extensive digitalization of operation processes, selecting SIMATIC IT Interspec from Siemens PLM Software, a configurable solution for product specification management in process industries, and embracing the Siemens “digitalization” philosophy. SIMATIC IT Interspec allows the company to develop, configure and manage all product specifications (raw materials, intermediate and finished products and packaging materials), storing all specifications in a single, controlled data repository.

In Gruppo Campari, SIMATIC IT Interspec interfaces with the SAP® enterprise resource planning (ERP) system to acquire material information, but it can also be

used standalone to input material codes directly into SIMATIC IT Interspec to manage all useful business information. The latter option was valuable for situations like Grand Marnier, before the SAP has been launched in June 2017. In the meanwhile, the company has been able to globally deploy SIMATIC IT Interspec, harmonizing finished product information for the preparation of product spec sheets for marketing, sales and export activities.

Process standardization and fast response

The project using SIMATIC IT Interspec responds to the need of standardizing and streamlining data acquisition, while accelerating response to product information requests submitted by consumers and regulators. The Siemens PLM Software solution covers not only all Campari sites around the world, but also co-packers and 18 distribution centers, which receive and distribute finished products, sometimes executing minor secondary operations or changing the palletizing scheme according to customer preferences. “At present, SIMATIC IT Interspec manages the technical information of 95 percent of products stored in SAP,” says Marco Rocca, Global Quality, Health, Safety and Environment (QHSE) Content Manager at Gruppo Campari.



SIMATIC IT Interspec screenshot – example of technical specifications of Campari label.

“With SIMATIC IT Interspec, when a product is manufactured, all documents are available, validated and accessible to all stakeholders, all over the world.”

Marco Rocca
Global QHSE Content Manager
Gruppo Campari

“As the Group expands, we really need to standardize product information and collection methods, defining clear and consistent approval flows to confirm the correctness of collected data and their efficient distribution all over the world.”

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The process begins with the collection of quality and quantity information: ingredients and raw materials, intermediates, packaging components and finished products. A global corporation with over 50 brands needs to code, purchase, produce and sell thousands of stock keeping units (SKUs) and components, which means managing over 21,000 specifications and

related information. “As the Group expands, we really need to standardize product information and collection methods, defining clear and consistent approval flows to confirm the correctness of collected data and their efficient distribution all over the world,” Rocca adds. “Most documents are also relevant for external partners; some of them are shared with

Open Request Wizard - Details

Request Details for JM21-1704-R0395

| Parameter | Low Spec | Value | High Spec | Unit | Target |
|--------------------------------|----------|-------|-----------|-------|--------|
| Alcoholic Strength (@ 20 °C) | 28.2 | 28.73 | | % v/v | |
| Colour (Abs. @ 430 nm) | | 2.24 | | | |
| Colour (Abs. @ 628 nm) | | 0.17 | | | |
| Colour (Abs. @ 508 nm) | | 3.77 | | | |
| pH | | 4.50 | | | |
| Sucrose (/100 mL) | | 24.84 | | | |
| Total Dry Extract (/100 mL) | | 25.21 | | | |
| Turbidity (Nephelometric) | | 0.96 | | | |
| Inverted Sugars (/100 mL) | | 0.33 | | | |
| Specific Gravity (20 °C/20 °C) | | 1.06 | | | |

Parameter Group: General Descriptors List

Parameter Group: Other Descriptors List

Parameter Group: Sensory Description

SIMATIC IT Unilab screenshot – example of sampling analysis of Campari liquid, tablet view.

suppliers for the definition of requirements for raw materials and packaging components. Other documents related to finished products include useful information for distribution and sales, such as liquid descriptors, legal label information about allergens or consumer information such as specific diets and nutritional values. Besides the characteristics of

intermediates and products, specifications sometimes also include the working cycle, that is, how liquids are made.”

Today at Gruppo Campari, such information is collected and stored in a unified global repository, accessible via the internet to 140 contributors (specialists who input and approve data) and some 400 readers in different roles, mostly outside engineering, who access the web portal to read information and to extract documents and reports. Data acquisition is based on standard forms and formats according to the type of material, using consistent rules and language (English) all over the world. Users create specifications in SIMATIC IT Interspec each time an item code is created in SAP. The specification approval cycle is managed on a regional scale, and for critical material types, such as finished liquids, additional validation at the global level is required. All documents for external communications have also been standardized, especially product sheets and palletizing cards requested by distributors, co-packers and customers, as well as

Open Request Wizard - Filter Results

| Request Code | Request Type | Request Description | Batch / Lot Number | Creation Date | Status |
|-----------------|---------------|----------------------------------------|--------------------|-----------------------|----------|
| JM21-1704-R0395 | R_JM21_306409 | LIQUID CAMPARI BITTER LIQUEUR FINISHED | KFB16V97 | 4/25/2017 11:40:01 PM | Released |

| Sample Code | Sample Type | Sample Description | Creation Date | Status | Sampling Date |
|----------------------|---------------|-------------------------|-----------------------|----------|---------------------------|
| JM21-1704-R0395-S001 | S_JM21_306409 | LIQUID CAMPARI BITTER L | 4/25/2017 11:40:03 PM | Accepted | 2017-04-10T00:00:00-05:00 |

Results of Sample JM21-1704-R0395-S001

General Descriptors List

| Parameter | Unit | Low Spec | Value | High Spec | Target | Status | Note |
|--------------------------------|----------|----------|----------|-----------|--------|----------|------|
| Alcoholic Strength (@ 20 °C) | % v/v | 28.20000 | 28.73000 | 28.80000 | | Accepted | |
| Colour (Abs. @ 430 nm) | AU | 2.20000 | 2.24000 | 2.30000 | | Accepted | |
| Colour (Abs. @ 628 nm) | AU | 0.14000 | 0.17000 | 0.20000 | | Accepted | |
| Colour (Abs. @ 508 nm) | AU | 3.40000 | 3.77000 | 3.80000 | | Accepted | |
| pH | | 4.50000 | 4.50000 | 5.70000 | | Accepted | |
| Sucrose (/100 mL) | g/100 mL | 24.00000 | 24.84000 | 25.00000 | | Accepted | |
| Total Dry Extract (/100 mL) | g/100 mL | 25.00000 | 25.21000 | 26.00000 | | Accepted | |
| Turbidity (Nephelometric) | N.T.U. | 0.96000 | 0.96000 | 2.00000 | | Accepted | |
| Inverted Sugars (/100 mL) | g/100 mL | 0.20000 | 0.33000 | 0.40000 | | Accepted | |
| Specific Gravity (20 °C/20 °C) | | 1.05600 | 1.05790 | 1.06500 | | Accepted | |

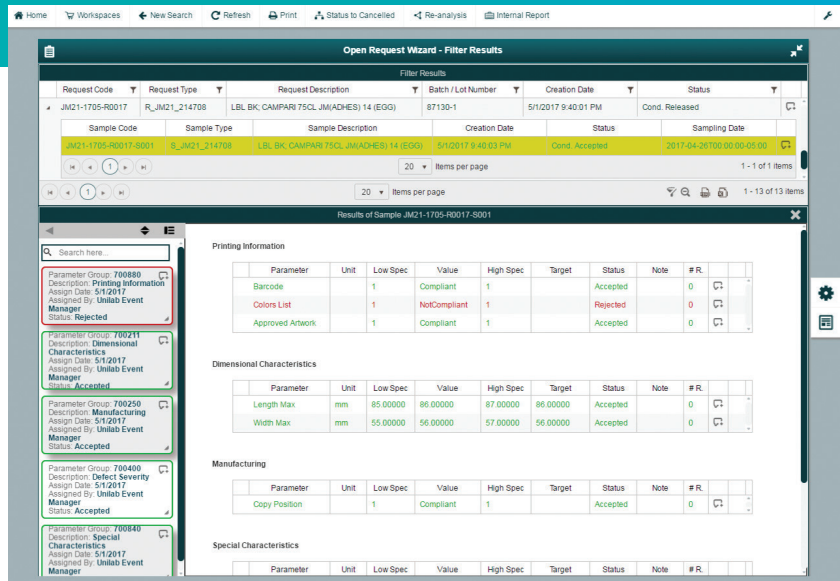
SIMATIC IT Unilab screenshot – example of sampling analysis of Campari liquid, full view.

ingredient and packaging material documents to be shared with suppliers.

“We have also developed a simple web-based application to allow nontechnical users to access documents without using SIMATIC IT Interspec, through a user-friendly portal with real-time information,” Rocca adds. “So when a product is manufactured, all validated documents are available to all stakeholders, all over the world, with no need to make phone calls, send email requests or wait for answers for several days. It normally took seven days to reply to new product information requests; now it’s all in real time.” This was accomplished by using SIMATIC IT Report Manager.

Flexibility and independence as key benefits

Among several solutions, SIMATIC IT Interspec was selected for its flexibility and operating independence. “We chose SIMATIC IT Interspec because it has proved to be the most flexible solution from the beginning,” Rocca states. “We can configure the systems independently, add properties, create new frames, and edit contents – virtually everything can be configured with no customization. Alternative solutions were more rigid and required a system engineer to do that.



SIMATIC IT Unilab screenshot – example of sampling analysis of Campari label, full view.

With SIMATIC IT Interspec it was enough to attend a short training course to be virtually independent. The tool has been around for a few decades, so it’s proven, tested and stable.”

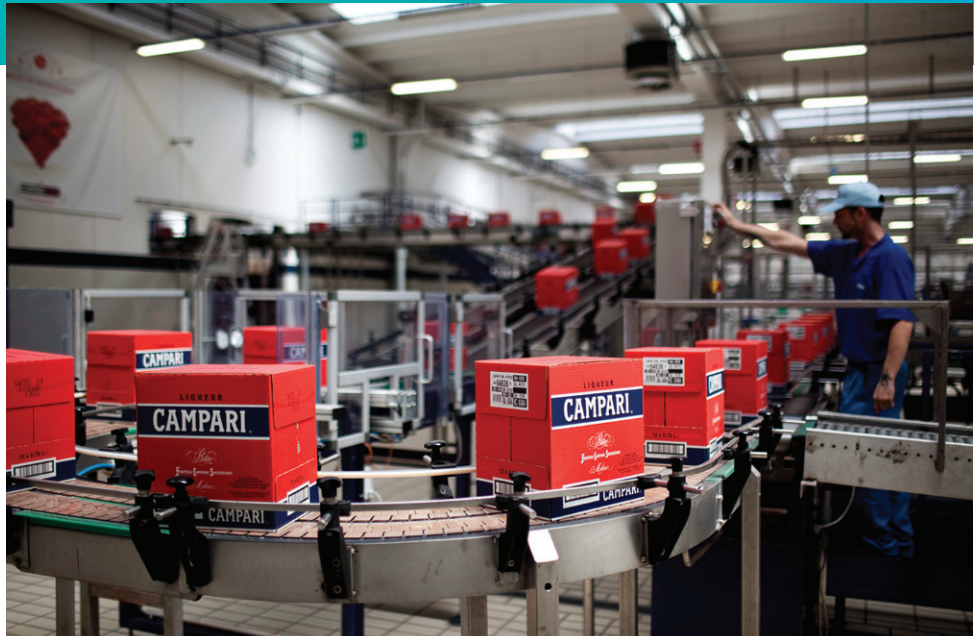
The SIMATIC IT Interspec implementation started from Italy and took approximately six months, from installation to go-live. The most critical task in the first phase was the definition of frames, the standard templates used for specification data. “The most time-intensive activity was data input,” Rocca explains, “which took almost

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A bottling line producing Campari finished cases.

four months because many documents were printouts or, in the best case, Word or Excel files to be adapted to the new formats.”

After the Italian sites, the rollout was extended to Scotland, Mexico, Jamaica, Kentucky, Ireland, Greece, Brazil, Argentina, Australia and France. By the end of 2017, Canada and France will be added, but the program is almost completed, with 21,000 specifications, 8,000 packaging designs and almost 7,000 documents from external suppliers (safety sheets, allergen and ingredient declarations).

“Despite this huge work, most implementations at the local level were carried out with no additional resource, thanks to the efficiency and flexibility of SIMATIC IT Interspec,” Rocca emphasizes. “The rollout in South America, involving three plants in Brazil and Argentina and 1,550 item codes in total, was carried out by a local team of 15 people, mostly committed to collect and input data.”

Integrated concept

The adoption of Siemens technology at Gruppo Campari is not limited to SIMATIC IT Interspec. The company has implemented additional SIMATIC IT modules,

including SIMATIC IT R&D Suite for research and development and SIMATIC IT Unilab, one of the most popular and appreciated laboratory information management systems (LIMS) in the process industry. SIMATIC IT Unilab interfaces on one side with SAP and on the other with SIMATIC IT Interspec. When a product comes in from a supplier or internal production, SAP sends to SIMATIC IT Unilab a sample verification request, then the operator sends back to SAP a “released” or “blocked” decision. The interface to SIMATIC IT Interspec is one-directional to transfer specifications from SIMATIC IT Interspec to the laboratory. “The implementation of SIMATIC IT Unilab started in 2015 in Scotland, in a small plant where we produce Glen Grant, one of our whiskeys,” Rocca says. “Now we are extending it to the site in Jamaica, much more complex by dimensions and product mix. SIMATIC IT Unilab is another step forward in process digitalization and integration, as it helps streamline our operations and automate communications among different functions and previously manual tasks.”

Gruppo Campari also uses the SIMATIC IT Report Manager module to extract different types of reports from SIMATIC IT

Solutions/Services

SIMATIC IT
www.siemens.com/mom

Customer's primary business

Gruppo Campari is the world's sixth-largest company in the global brand beverage industry with over 50 premium and super-premium brands.
www.camparigroup.com

Customer location

Sesto San Giovanni, Milan
Italy

Interspec, accessible via internet or intranet to different users according to profile, geography, role, permissions and other criteria.

Measuring efficiency

The architecture implemented by Gruppo Campari includes another element: equipment performance monitoring using SIMATIC IT overall equipment effectiveness (OEE) technology. "The project with Siemens started from the urgent need to manage technical specifications," says Carlo Bidoglia, global application director PSC, Gruppo Campari. "From the beginning, the roadmap also included a module to measure quality and overall equipment effectiveness."

Until then, OEE had been measured by manually collecting data into an Excel spreadsheet and applying internal computing models and rules. With the Siemens solution, the company has developed an OEE project for standardized and simplified data collection and processing across three Italian sites, creating dashboards to view

production line performance, and most of all to provide maintenance with more accurate information and indicators than in the past.

"We started with a pilot site at Canale d'Alba, collecting data manually with no automation, and later we connected the SIMATIC IT system to the plant via Ethernet cards mounted on the equipment to collect information about stops and causes," Bidoglia explains. "With this approach we have OEE measurement in real time: each stop is justified by the operator during the working shift, and at the end of the day we generate a final report of production and waste to get the actual OEE coefficient."

"Using the Siemens OEE solution, we can identify possible areas of improvement and define corrective actions during plant maintenance or process revision, in order to increase production efficiency," he summarizes.

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Carlo Bidoglia
Global Application Director PSC
Gruppo Campari

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