CONSILIO

FINITE TANK PLANNING WITH S/4HANA AND EMBEDDED PP/DS

Full transparency on tanks, mixers, or kettles across all production stages with tank planning developed by CONSILIO and SAP.

In the process industry, production planning can quickly become complex, especially with liquid or gaseous materials. Each tank, mixer, or kettle must constantly perform multiple tasks.
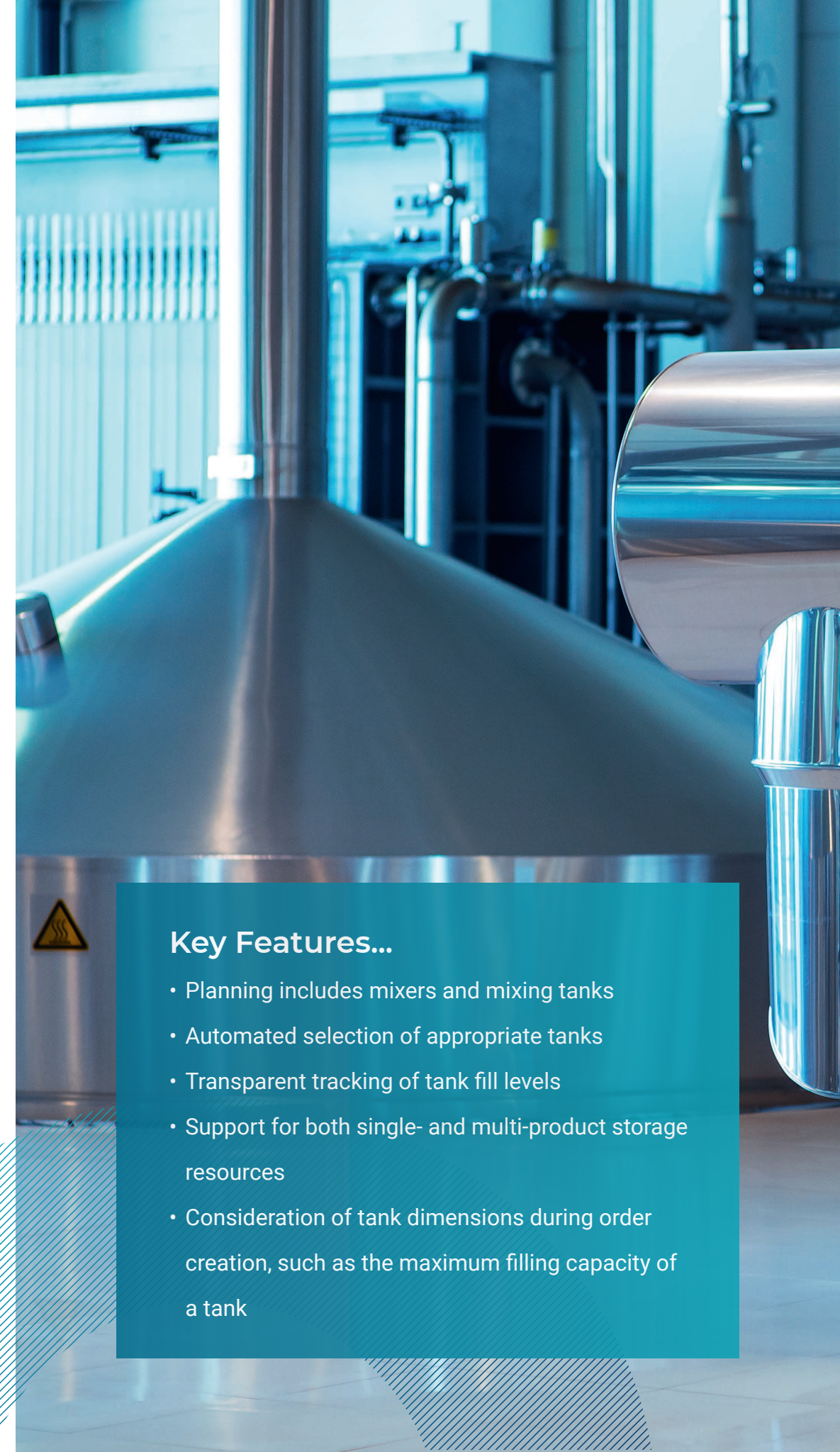
Companies must consider numerous parameters, as various substances with different physical states are processed, filled, stored, and transported to the next plant or the end customer.
To maximize efficiency, every parameter must be meticulously tracked and managed: from fill levels and contents to safety regulations and substance interactions.

SAP has partnered with CONSILIO to develop these solutions, ensuring that even the most complex production environments are streamlined for effective resource management and compliant with safety regulations. With its extensive process expertise and system know-how, CONSILIO employs methods that allow for precise planning of existing storage capacities using SAP ePP/DS, optimizing utilization and reducing the need for additional investments in tank and container capacities.

Key Features...

- Planning includes mixers and mixing tanks
- Automated selection of appropriate tanks
- Transparent tracking of tank fill levels
- Support for both single- and multi-product storage resources
- Consideration of tank dimensions during order creation, such as the maximum filling capacity of a tank

Challenge

Production planning in the chemical and food industries, particularly in the beverage sector and dairies, follows process-driven parameters, often involving tanks. It is possible to use multiple source and target tanks during production, making it complex to model and implement a feasible production plan while considering capacity limits for storage resources and mixers. To ensure planning reliability, tracking the product within the tank is necessary.

Tanks can be categorized as single-product or multi-product storage resources, where products can be stored temporarily. A tank serves both as a warehouse (for inventory management) and as a resource (for capacity planning), managing its capacity over time and volume. Once a tank reaches its maximum filling level, it is no longer available for use. To utilize the product in subsequent planning with SAP Extended Production Planning and Detailed Scheduling (SAP ePP/DS), details regarding the quantity and tank stock must be captured and recorded in the system via product flow definitions and indicators in the PP-PI resource master.

> Embedded PP/DS enhances transparency in tank planning, helping companies achieve seamless production and logistics operations.
>
> Mike Miller and Tom Wloch,
> both Solution Consultants SCM at CONSILIO

FILLING AND REMOVAL SCENARIOS:

· Remove product from the container at the start of the activity
· Remove product from the container at the end of the activity
· Remove product continuously from the container
· Add product to the container at the start of the activity
· Add product to the container at the end of the activity
· Add product continuously to the container

INTEGRATED FUNCTIONS IN PP/DS

· Tank selection is included in the PP/DS optimization run
· Compliant pegging for container resources, allowing the same tank to be used for both filling and emptying
· Supports both single- and multi-product storage resources

SAP Gold Partner

CONSILIO