



tapflo®

SYSTEMS PORTFOLIO

FROM COMPLEX FLUID-HANDLING SKIDS TO FULLY INTEGRATED SYSTEMS, OUR EXPERIENCED ENGINEERS DESIGN, BUILD, AND DELIVER CUSTOM SOLUTIONS.

PROCESS ENGINEERING & DESIGN

DELIVERING TAILORED FLUID-HANDLING SOLUTIONS BUILT TO MEET YOUR EXACT REQUIREMENTS.

Whether you need high-level control systems, precision dosing, automated flow regulation, specialised pump configurations, or full compliance with FDA, EHEDG, and ATEX standards, we provide everything you need to streamline and optimise your processes.



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SYSTEMS TAILORED TO YOUR REQUIREMENTS

ONE PARTNER. ONE POINT OF ACCOUNTABILITY. FROM CONCEPT TO COMMISSIONED SYSTEM AND BEYOND.

At the heart of every successful process system is smart, scalable engineering. With over 40 years of experience in fluid handling and process system design, we engineer, build, and automate everything from standalone pump units to fully integrated, multi-skid production plants, all tailored to your process.

Whether you're pumping dairy through a hygienic line, dosing volatile chemicals, or scaling up a pharmaceutical facility, our systems are engineered to perform reliably, meet every compliance requirement, and grow with your business and requirements.



Industries We Serve

WE BRING SPECIALIST EXPERIENCE AND INSIGHT ACROSS A WIDE RANGE OF INDUSTRIES:



Food & Beverage



Pharmaceutical & Biotechnology



Chemical & Hygienic Processing



Cosmetics & Personal Care



Industrial & Manufacturing



Agriculture & Environmental

What Can We Do For You?

Dosing & Control

Precision Chemical Dosing Skids	safe, accurate ingredient addition
Slurry Handling Systems	abrasive or viscous media
Bleach & Detergent Systems	fully automated and recipe-driven

Process Automation

PLC/SCADA Systems	unit-level or full-plant automation
Batching & Recipe Control	repeatability with minimal error
Fully Integrated Manufacturing	blending, dosing, CIP, and automation in turnkey form

Blending & Processing

Liquid Blending Systems	for chemicals, cosmetics, dairy, hygiene
Homogenisation Units	high-shear mixing for stable emulsions
Carbonation Systems	for beverage production
SLES Dilution Plants	high-accuracy surfactant dilution

Cleaning & Product Recovery

CIP (Clean-in-Place) Systems	for GMP, dairy, pharma
Pigging Systems	maximise product recovery
Hygienic Transfer Skids	sanitary closed-loop transfer

Material Intake & Handling

Drum & IBC Unloading Skids	filtration, safety & closed-loop control
Chemical Decanting Systems	safe handling of hazardous or high-value liquids
Bulk Unloading & Pre-Mix	centralised raw material supply

Modular & Skid-Mounted

Modular & Skid-Mounted	Pre-assembled, tested units for blending, dosing, or transfer
Modular & Skid-Mounted	Plug-and-play CIP skids for centralised or decentralised use

Case in Point: Bleach Blending System AUTOMATED DOSING, MIXING & DILUTION

Our modular Bleach Blending System showcases how we solve complex production challenges through advanced process control systems and automation. This fully automated system eliminates human error, reduces waste, and ensures consistent, high-quality output.

- ✓ Precise ingredient control
- ✓ Real-time monitoring and remote access
- ✓ Recipe-driven efficiency
- ✓ Built for chemical and hygienic environments






Scan for more information



CUSTOM CLEAN IN PLACE SYSTEMS

DESIGNED TO AUTOMATE INTERNAL CLEANING OF PROCESS EQUIPMENT


Boost hygiene, efficiency, and compliance across industries like Food, Beverage, Healthcare, and Cosmetics with minimal downtime. CIP involves the circulation of cleaning agents through tanks, pipes, and other equipment to remove residues and contaminants. This method offers several critical advantages such as enhanced Hygiene, prevents cross-contamination and ensures compliance. Automates cleaning, reducing downtime and labour and minimises chemical exposure for workers and ensures adherence to regulatory requirements such as FDA, HACCP, and cGMP

-  Reduced Costs
-  More Production Time
-  Automation
-  Energy Efficiency
-  Regulatory Compliance
-  Data Monitoring
-  Minimises Mistakes
-  Keeps Employees Safe







-  Artisanal Food Production
-  Micro Breweries
-  Cosmetics Labs
-  Healthcare



-  Food & Beverage
-  Breweries
-  Cosmetics Labs
-  Healthcare



-  Food & Beverage
-  Breweries
-  Cosmetics Labs
-  Healthcare

Mobile CIP System

Our Mobile CIP System is a compact and versatile cleaning solution tailored for smaller operations or facilities requiring flexibility. With skid-mounted and wheel-mounted options available, it offers portability and efficiency without the commitment of a centralised system.



Tank Configuration:	350L
Mobility:	Compact unit with skid or caster wheel mounting
Temperature Range:	20 – 90°C
Automation:	Basic PLC controls with monitoring capabilities
Material:	Food-grade Stainless Steel (304/316)

Modular CIP System

This System offers a versatile and efficient cleaning solution for industries with varied cleaning requirements. Designed for flexibility, this pre-assembled system minimises downtime, reduces installation complexity, and ensures consistent cleaning performance across diverse applications.



Tank Configuration:	1,000L up to 10,000L+, depending on application
Flow Rates:	Flows from 5m³/hr up to 25m³/hr+
Pressures:	1 – 6 Bar+
Temperature Range:	Operates effectively up to 90°C for caustic cleaning
Material:	Constructed using FDA-compliant Stainless Steel (304/316), ensuring durability & sanitation

Multi-Tank CIP System

This system offers an advanced, high-capacity cleaning solution designed for operations requiring frequent sanitation, efficiency, and sustainability. Designed to enable recovery and reuse of cleaning agents, these systems are ideal for large-scale or multi-stream processes where hygiene, cost-efficiency, and resource optimisation are critical. Configurable as 2, 3, 4 (or more!) tank systems, they provide unmatched flexibility for custom setups.



Tank Configuration:	2-4 tank systems for rinse, detergent, and recovery processes
Flow Rate:	Customisable up to 24m³/hr
Temperature Range:	Up to 90°C for alkali cleaning
Cleaning Velocity:	Turbulent flow achieved at 1.5 m/s or higher
Material:	Food-grade Stainless Steel (304/316)

BLENDING & DILUTION SYSTEMS

AUTOMATED DOSING, MIXING & DILUTION FOR PRECISION PRODUCTION

Designed with a modular approach, Tapflo's SLES and Liquid Blending Systems' advanced automation delivers consistent and high-quality production with minimal manual input. Full automation allows the user to complete other tasks while the system is in operation. Automation enables exact ingredient proportions, which eliminates waste.

Both these systems allow for full customisation tailored to your industry and application needs, resulting in reduced downtime and improved reliability. By optimising production time, reducing ingredient waste, and ensuring complete traceability, it enables cost-efficient, scalable manufacturing without compromising product quality.

- Automated Dosing
- Precision
- Significant Cost Reduction
- Streamline Production
- Customisable Features
- Complete Traceability
- Durable Construction
- Flexibility & Continuity Of Production



- Cosmetics
- Household
- Pharmaceutical
- Leather
- Print & Dyes
- Petroleum

SLES Mixing & Dilution Unit

If you're in the market for a reliable and efficient system to prepare a less concentrated SLES (Sodium Lauryl Ether Sulphate) solution for your production line, then our SLES Mixing and Dilution System is the ideal system for you. Our SLES Mixing & Dilution Unit, featuring a Progressive Cavity Pump that feeds the 70% concentrated SLES solution and a Centrifugal Pump for mixing the SLES with water and pumping the final solution, gives operators full control over the dilution process, enabling immediate and precise preparation of a less concentrated SLES solution.



Pumps:	<ul style="list-style-type: none"> • Progressive Cavity Pump for 70% SLES solution feed • Centrifugal Pump for mixing SLES with water and pumping the solution
Control and automation:	<ul style="list-style-type: none"> • Control Unit including PLC with a touch screen • Pressure transmitters • Temperature transmitter • Frequency inverters • Flowmeters • Valves with dedicated control system
Piping:	AISI 316 stainless steel
Frame:	AISI 304 stainless steel
Flow rate (SLES solution):	up to 30 m ³ /h, various sizes available
Discharge pressure:	up to 6 bar-g
Concentration of obtained SLES solution:	0 - 27 %

Liquid Blending System

Our Liquid Blending System is a flexible and fully automated system designed to dose, mix, and dilute multi-ingredient liquids with high accuracy and repeatability. Originally built for complex chemical formulations, such as SLES, its modular and hygienic design also makes it ideal for Personal Care, Household, and Food & Beverage production.



- Food & Beverage
- Cosmetics
- Chemical
- Industrial







Control Automation:	PLC & HMI with remote access
Operation Modes:	Batch or continuous
Container Compatibility:	<ul style="list-style-type: none"> • IBCs • drums • tanks • custom vessels
Flow Rate:	Up to 30,000 l/hour
Ingredients per Recipe:	Unlimited, depending on your application & recipe requirements
Construction Materials:	<ul style="list-style-type: none"> • Polypropylene • Stainless Steel • custom available on request
Trace Heating & Insulation:	Available for viscous liquids

HVS SYSTEMS

AUTOMATED, HYGIENIC AND EFFICIENT

Achieve up to 99% product removal and streamline your unloading processes.





Drum Unloading Systems are purpose-built solutions designed to empty high-viscosity, paste-like, and non-self-flowing media from drums or containers. Unlike traditional Drum Pumps, these systems push product out with high efficiency and cleanliness using inflatable seals and powerful hygienic pumps.

-  **Sanitary Pumps:** Sealless design with dry-run capability for hygienic, low-maintenance operation
-  **Seal Systems:** Interchangeable lip and inflatable seals for various drum types
-  **Piston & Frame:** Customisable configurations with mobile, easy-to-position frame
-  **Integrated Controls:** Intuitive panel with speed control, auto/manual modes, and E-STOP
-  **Easy Cleaning:** Tri-Clamp fittings and hygienic surface finishes
-  **Scraping Lid:** Maximises product recovery in all drum shapes




-  Food & Beverage
-  Cosmetics
-  Pharmaceutical
-  Industrial



-  Food & Beverage
-  Cosmetics
-  Pharmaceutical
-  Industrial



-  Food & Beverage
-  Cosmetics
-  Pharmaceutical
-  Industrial

High Viscosity Drum Unloading System

The HVS Drum Unloading System is designed for handling high-viscosity media. Equipped with a Sanitary Air-Operated Diaphragm Pump, this system ensures efficient emptying of barrels while boasting features such as being electropolished to Ra <1.6 as standard.



Max Flow (l/min):	590 l/min
Displacement (ml/stroke):	2300 ml/stroke
Max Discharge/Air Pressure (Bar):	8 Bar
Max Solids Passage (mm):	15 mm (Ball Valve) & 42 mm (Flap Valve)
Max Temperature (°C):	90°C for EPDM 70°C for NBR 110°C for PTFE

High Viscosity Quattro Drum Unloading System

Our HVS Quattro Drum Unloading System is designed to efficiently unload high viscosity liquids at 400 l/min, with a removal rate of up to 99%! With a maximum solids passage of 15mm with a ball valve and 42mm with a flap valve, this system has been designed to streamline the unloading process, especially in high-volume applications where multiple drums (typically 4) are stored on pallets.



Max Flow (l/min):	590 l/min
Displacement (ml/stroke):	2300 ml/stroke
Max Discharge/Air Pressure (Bar):	8 Bar
Max Solids Passage (mm):	15 ø mm
Max Temperature (°C):	90°C for EPDM 90°C for NBR 110°C for PTFE

High Viscosity Flexi Drum Unloading System

Our High Viscosity Flexi Drum Unloading System is designed to precisely unload drums filled with highly viscous liquids up to 100,000 cPs. Featuring a Hygienic Progressive Cavity Pump, this system ensures seamless and efficient unloading of 200L drums, IBCs and other container types.



Straight Drums:	The 200-litre straight steel drum stands out as the most common and available choice.
Conical Drums:	In specific industries, conical drums are the number one. This is thanks to their space-saving capabilities achieved by nesting together when empty.
Tailored Drum Solutions:	Regardless of the drum type you employ, our High Viscosity System (HVS) can be easily redesigned to meet your specific requirements.
IBC, Goodpack, and Bag-in-Box® Options:	Our HVS systems can be designed to unload IBC containers, Goodpack multimodal containers, or Bag-in-Box® containers.

MIXING SYSTEMS

RELIABLE MIXING SOLUTIONS FOR IBCS AND DRUMS

Industrial Mixers, also known as IBC Mixers or IBC Agitators, as well as standard drum mixers, are manufactured for use across the Industrial sector.

This simple and reliable mixing solution makes storing and transporting various liquids easy and cost-effective, and by using mixers, you're able to skip the intermediate tanks, making your process quicker and more reliable.

- ⚙️ Allows you to mix directly in an IBC or drum
- 🔒 Safety interlock switch included
- ⚡ Electrically or air-driven options for enhanced versatility
- ∞ Flexible configuration options to meet your process requirements
- ⚠️ Suitable for use in ATEX zones, enhancing safety in hazardous applications
- 📦 Standard configuration mixers readily available from stocks in Europe



IBC Mixers

Support Frame:	With two variants available, either stationary (floor and wall mounted) or mobile.
Holding Arm:	Equipped with a position switch, it disables the mixer from rotating when it is not in a lowered position.
Powered:	Electric, Pneumatic, or Manual Control
Controls:	Control Cabinet with Frequency Inverter and Timer
Viscosities:	up to 20,000 cP



Pneumatic Mixing & Emptying System

Total Solution:	One device covers both the mixing and pumping process
Efficiency:	Allows products to be mixed and batched when required
Configuration:	Suitable to various sized containers and liquids of different viscosities
Enhanced Safety:	The sealed design reduces spillages and contamination



IBC Mixing Station

Support Frame:	With two variants available, either stationary (floor and wall mounted) or mobile.
Holding Arm:	Equipped with a position switch, it disables the mixer from rotating when it is not in a lowered position.
Powered:	Electric, Pneumatic, or Manual Control
Controls:	Control Cabinet with Frequency Inverter and Timer
Viscosities:	up to 20,000 cP



Mixing & Pumping Station

Drum Compatibility:	Multiple sizes and shapes of drums (eg. 200L) are available
Mounting Options:	Can be mounted via a dedicated drum lid, clamp or wall support
Powered:	Electric or Air-Powered Drive
Controls:	A user-friendly interface, easy to adjust the speed and mixing time with simple control options.
Mixing Tools:	Various types of mixing blades or paddles



IBC UNLOADER

DELIVERING HIGH FLOW RATES UP TO 200 L/MIN

Designed to unload IBCs, containers, barrels and other storage vessels of varying sizes, this system provides efficient and safe tank emptying. ATEX-available, this system is operated by a Diaphragm Pump and offers flow rates up to 200 l/min, efficiently managing low and high-viscosity products across industries such as Chemical, Food and Wastewater.








-  **Mobile Design:** 4-wheel frame for easy transport and positioning
-  **Universal Compatibility:** Fits standard containers and custom vessels
-  **Pneumatic Operation:** Diaphragm pump with actuator control
-  **High Flow:** Up to 200 l/min (standard & ATEX models)
-  **Durable Build:** Made from chemical-resistant materials (PE, PTFE, SS)
-  **Simple Controls:** Basic START/STOP or custom batching
-  **Adjustable Efficiency:** Air needle valve for quick control
-  **Automated Operation:** Auto-lowering lance with E-STOP
-  **ATEX Certified:** Safe for Zone 1 (Ex II 2G IIB T3)



IBC Unloader

Experience efficient and safe tank emptying operations with our flexible IBC Unloader. Designed to handle IBCs (Intermediate Bulk Containers), Mauser, Goodpack or Bag-in-Box® containers, totes, drums, barrels, and various other storage vessels, this system efficiently manages both low and high-viscosity products across a wide range of industries.







System Components:	Air Operated Double Diaphragm Pump (e.g., Tapflo TK200 PTT) with PTFE diaphragms and valve balls, and an integrated pulsation dampener.
Compatible containers:	Drums and barrels
Lance Positioning System:	Both options are available in standard and ATEX-compliant versions

-  Food & Beverage
-  Cosmetics
-  Pharmaceutical
-  Print & Paper
-  Wastewater treatment
-  Surface Treatment
-  Electronics

FILLING MACHINE

FILLING ACCURACY OF LESS THAN 0.1%

Achieve precise and repeatable filling operations with our versatile Filling Machine. Designed for high-accuracy applications, this system efficiently handles various container sizes and product types, from small-volume containers to large industrial drums.





-  **High-Precision Filling:** Accuracy within 0.1% for consistency
-  **Flexible Pump Options:** Suits various viscosities and flow needs
-  **Versatile Weight Scale Configurations:** Fits different container sizes and batches
-  **Durable & Reliable Design:** Stainless steel AISI 316 construction
-  **User-Friendly Control System:** 7-inch touchscreen for easy control
-  **Comprehensive Reporting Capabilities:** Detailed reports for traceability and compliance



Filling Machine

With filling accuracy of less than 0.1% and comprehensive reporting capabilities, our system ensures optimal performance for your production line while maintaining the highest industrial and sanitary standards. Ideal for both high and low-viscosity products, it simplifies the filling process, improves consistency, and reduces waste, enabling significant cost savings over time.

Pumps:	Diaphragms, Centrifugals
Compatible Containers:	Drums & Drums, Jerry Cans, Buckets & Pails, Glass & Plastic Bottles, Stainless Steel Tanks, Flexible Bags & Pouches
System Components:	Stainless Steel Frame, Weight Scales, Plastic drip tray
Safety Features	Container Presence Detection, Overpressure Protection, Dry-Run Protection, Emergency Stop

-  Food & Beverage
-  Bakery & Brewery
-  Chemical
-  Personal Care & Hygiene
-  Industrial



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