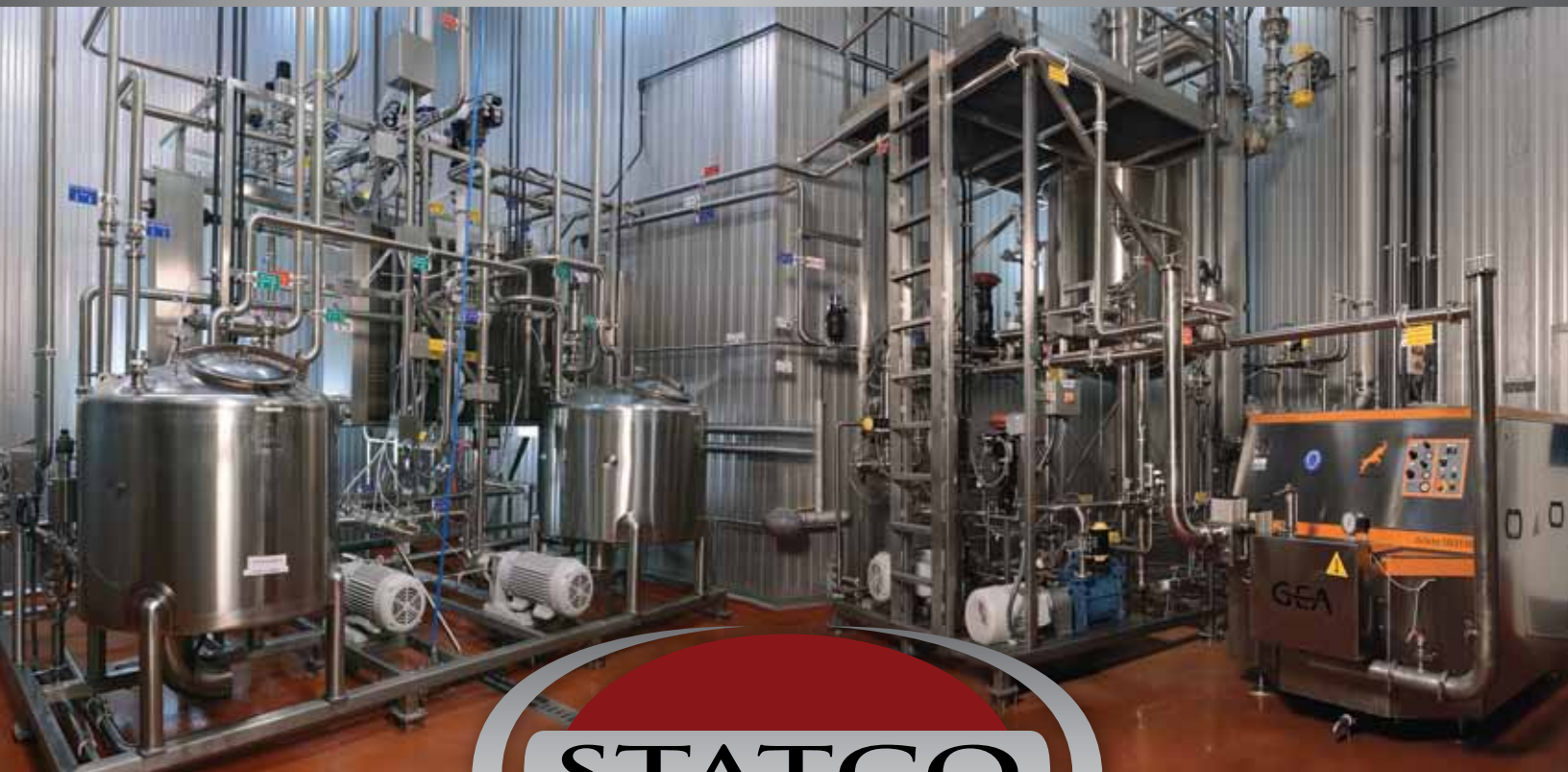




# ESL SYSTEMS



**STATCO**

# The Statco Difference

**Statco** custom designs our process solutions to best fit your needs. We view our business relationship as a partnership. We strive to keep you competitive in your marketplace—embracing the fact that your business succeeds or fails based on these three basic principles:

- Product quality
- Plant throughput
- Operational efficiency



Our system design approach always takes these principles into account. You may hire us as an outside vendor, but you'll feel like we're on your staff because of our commitment to providing you with the best customized solution for your product and production needs. We know that in today's business climate, if you're not successful, we're not successful.



Our nationwide network of seasoned sanitary process professionals will bring you:

**Process knowledge:** Most of our project engineers and sales staff have walked in your shoes. They were plant engineers, operations managers, maintenance supervisors. They bring their hands-on experience to your project and evaluate your complete operation to ensure that you achieve your desired results.

**Design flexibility:** Off-the-shelf solutions make an equipment manufacturer's job easier, not yours. We approach every project as a unique opportunity with unique challenges. From individual components to complete, turnkey systems – custom process design is what we do and we work hard to do it better than anyone else.

**Technical expertise:** We are proud to have 20+ exemplary engineers on staff with a wealth of product and process knowledge. The cohesiveness of this group is emphasized by extremely low turnover, ensuring a high level of commitment to your project.

**Project management experience:** We believe in start to finish involvement. Our project management team is led by a single point of contact throughout all project phases: from process development through engineering and equipment procurement—all the way through installation, start-up and post-production support. **One team, one call, one solution.**

In addition to the proprietary equipment we design and manufacture in-house, Statco represents over one hundred manufacturers in the food, beverage, dairy, and biopharm industries. Our full line of equipment includes:

- Casers
- Fillers
- Valves
- Separators
- Homogenizers
- Heat exchangers
- Conveyor systems
- Instrumentation/controls
- Custom tanks, vessels and silos
- Complete process systems

Whether you need an entire system or to tie one of our components into an existing line, let us link your good name with the best names in the sanitary processing industry.

# Excellence in ESL Processing



## Product applications include:

### Low acid

- Fluid milk
- Ice cream mixes
- Heavy whipping cream
- Non-dairy creamers
- Non-dairy whipped topping
- Non-dairy proteins
- Whey-based products
- Soy-based products

### High acid

- Juices
- Smoothies
- Purees
- Particulate products
- Acidified products

**Statco** is your clear choice for expertise in direct and indirect heating ESL/aseptic systems for low and high acid foods. Whether your product is intended for non-refrigerated storage, vending machines or institutional distribution, we can help you choose the right system to give you longer shelf life and a better value-added product.

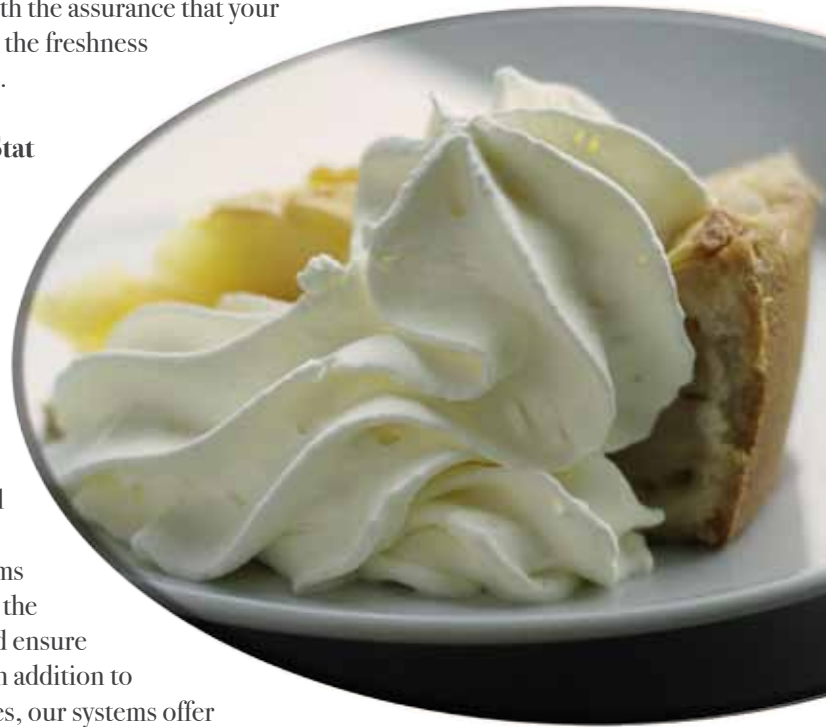
ESL processing gives you the ability to expand your distribution area with the assurance that your product will deliver the freshness consumers demand.

### Statco's Therma-Stat Direct Steam Injection ESL Processing Systems

are built with readily available, domestically supplied components for long term ease-of-maintenance and reduced downtime. We build our systems in-house to control the project timeline and ensure on-time delivery. In addition to these key advantages, our systems offer exclusive features:

- Product-to-product regeneration: raw product heated with ultra-pasteurized product significantly reduces energy usage and system complexity
- Seamless, unrestricted routing to multiple destinations maximizes production runs and minimizes scheduling conflicts
- Optimized design performance reduces utility costs, environmental impact
- Specialized HMI screen graphics and event logging aids in system troubleshooting

Therma-Stat's smooth, quiet operation extends the life of your system between scheduled preventative maintenance routines. And with longer run times, reduced maintenance, and reduced product loss, our ESL/Aseptic systems deliver a maximum return on your investment.



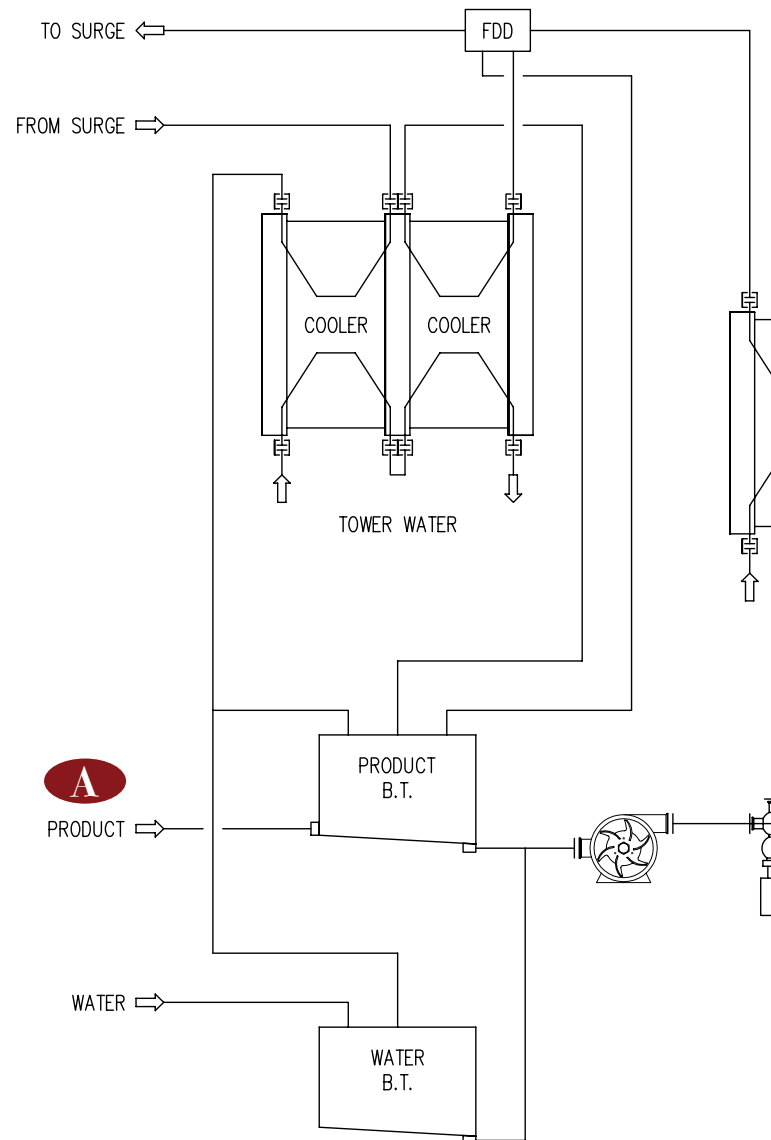
For excellence in ESL processing,  
**Statco is the clear choice.**



# The New Era in Direct Steam Injection ESL Processing Systems

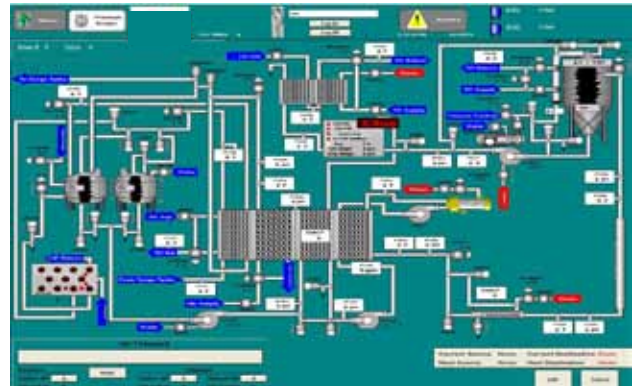
# THERMA-STAT

- A** Raw product from the system balance tank undergoes regeneration heating - vs. ultra-pasteurized product exiting the flash chamber in a plate heat exchanger (PHE).
- B** Raw product exiting the PHE is metered by a legal timing pump through the heater section of the PHE and discharged into the culinary steam injector.
- C** Culinary steam is injected directly into the product stream to produce the desired holding temperature prior to routing through the legal holding tube.
- D** Product exits the holding tube into a flash chamber where the controlled vacuum environment instantly reduces the product temperature and removes the product vapor that was added as culinary steam.
- E** Product exiting the flash chamber is routed through an aseptic homogenizer en route to the ultra-pasteurized side of the PHE, where it undergoes regeneration cooling.
- F** Ultra-pasteurized product exiting the regenerator undergoes final cooling - vs. glycol prior to routing past the legal flow diversion device (FDD) en route to the final product destination.

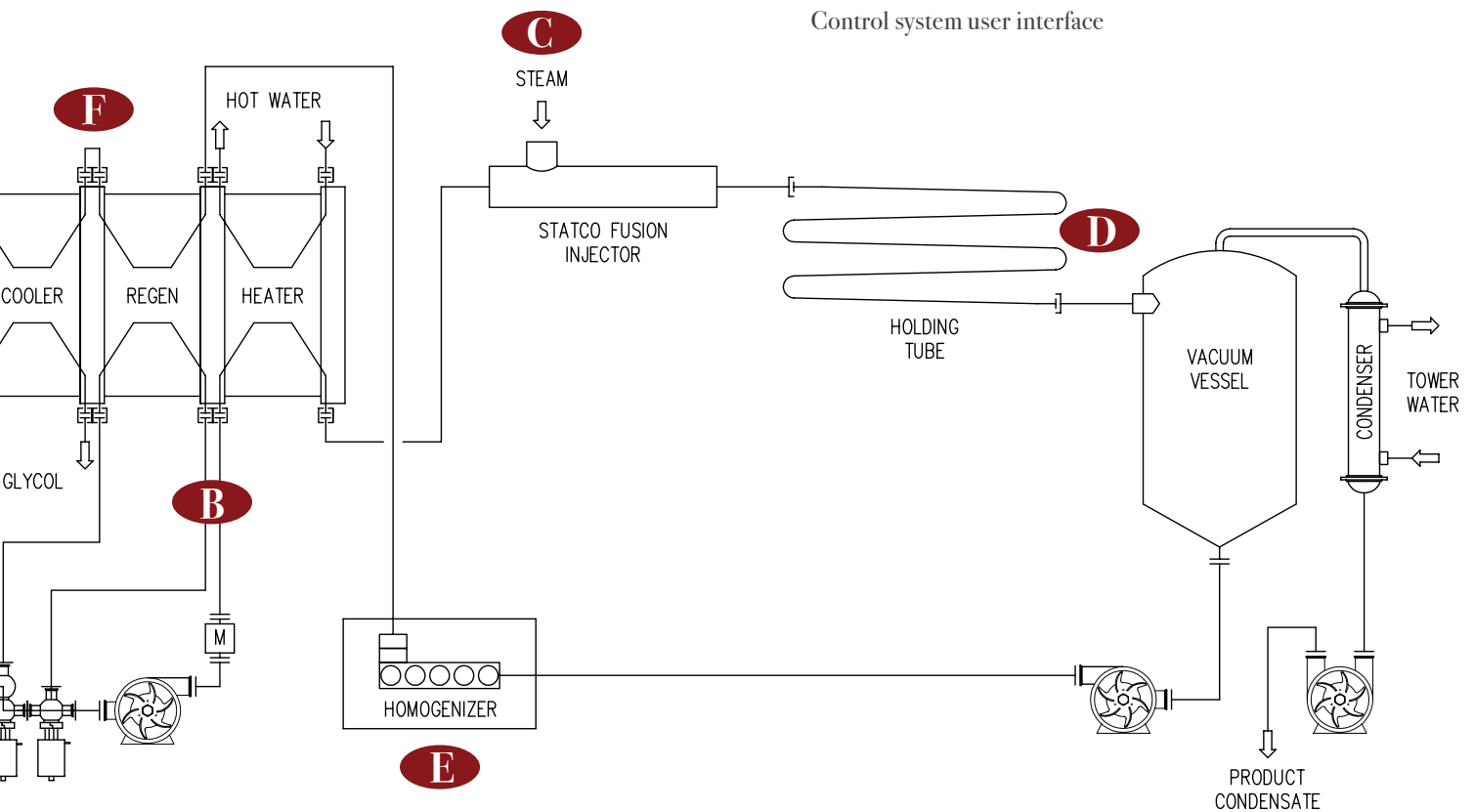




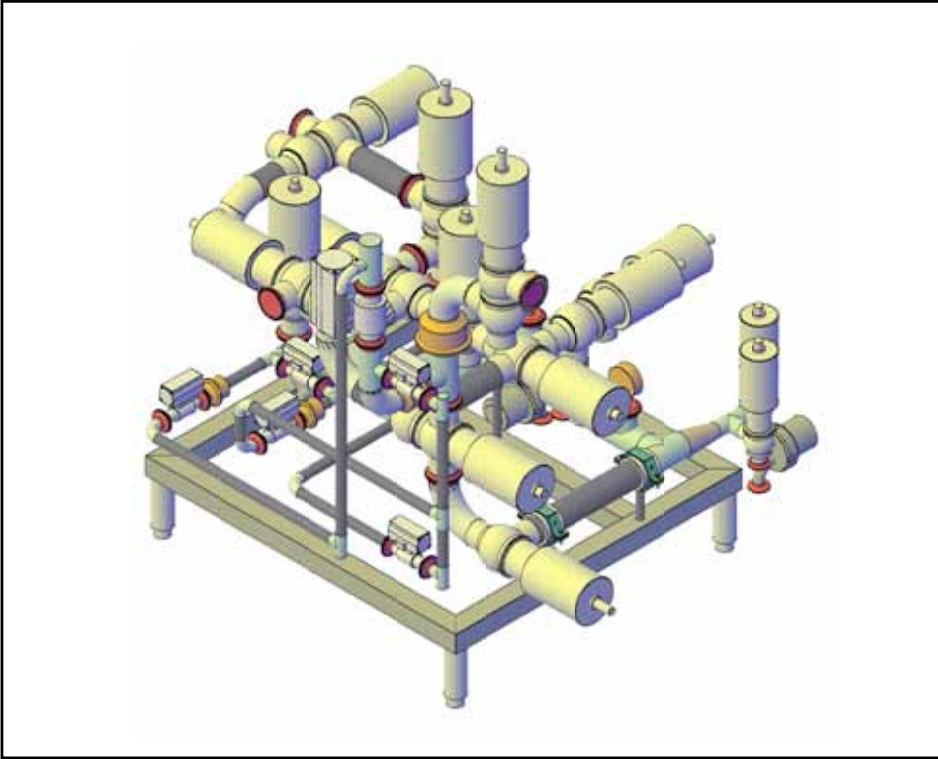
To be on the *leading edge* of your marketplace, you need the *cutting edge* advantages of **Statco's Therma-Stat Direct.**



Control system user interface



# Therma-Surge



Statco's **Therma-Surge** valve solution allows the surge tank on the Therma-Stat Direct to operate independently from the rest of the system to deliver optimum production efficiency. Your product quality is ensured because all product valves can be lifted during cleaning (CIP), leaving no potentially contaminating residue behind.

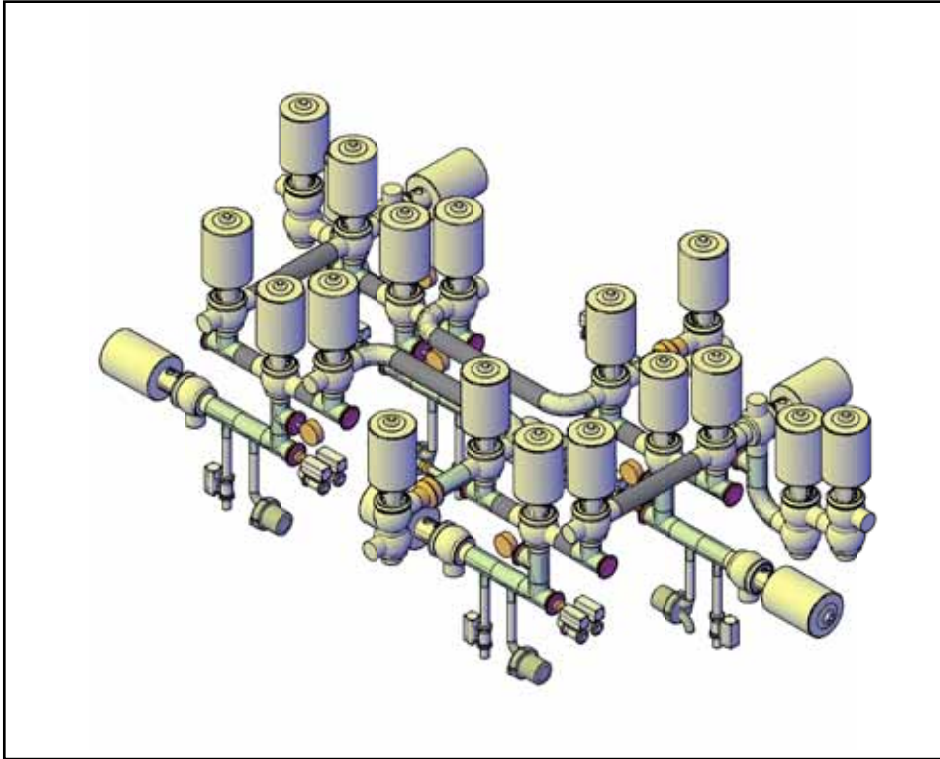


## The Therma-Surge Difference

- Three zone approach, with double block-and-bleed protection
- Complete independence of CIP, sterilization and production from the source system
- All product valves lifted during CIP for thorough cleaning
- Side inlet valve allows fillers to pull product from the surge tank when system transitions from product-to- water or water-to-product
- Optical (NIR) phase detection reduces product loss, increases efficiency
- Cooling water recirculated in outer tank jacket reduces water usage



# Therma-Route



Statco's **Therma-Route** valve solution offers zone protection between ESL surge tanks, filler routing lines and fillers. Valve configurations can be designed to accommodate multiple surge tanks routing to multiple ESL fillers. This seamless product routing capability provides complete independence of CIP, sterilization and production.



## The Therma-Route Difference

- Seamless product routing with complete independence from the ESL surge tank and filler, for CIP sterilization and production
- Double block-and-bleed protection
- All product valves lifted during CIP for thorough cleaning







Contact us today . . . and start taking advantage  
of the Statco difference in ESL processing.

7595 Reynolds Circle / Huntington Beach, CA 92647 / P: 714-375-6300 / F: 714-375-6314



ENGINEERING



PROCESS SYSTEMS

visit our website at [www.statco-dsi.com](http://www.statco-dsi.com)