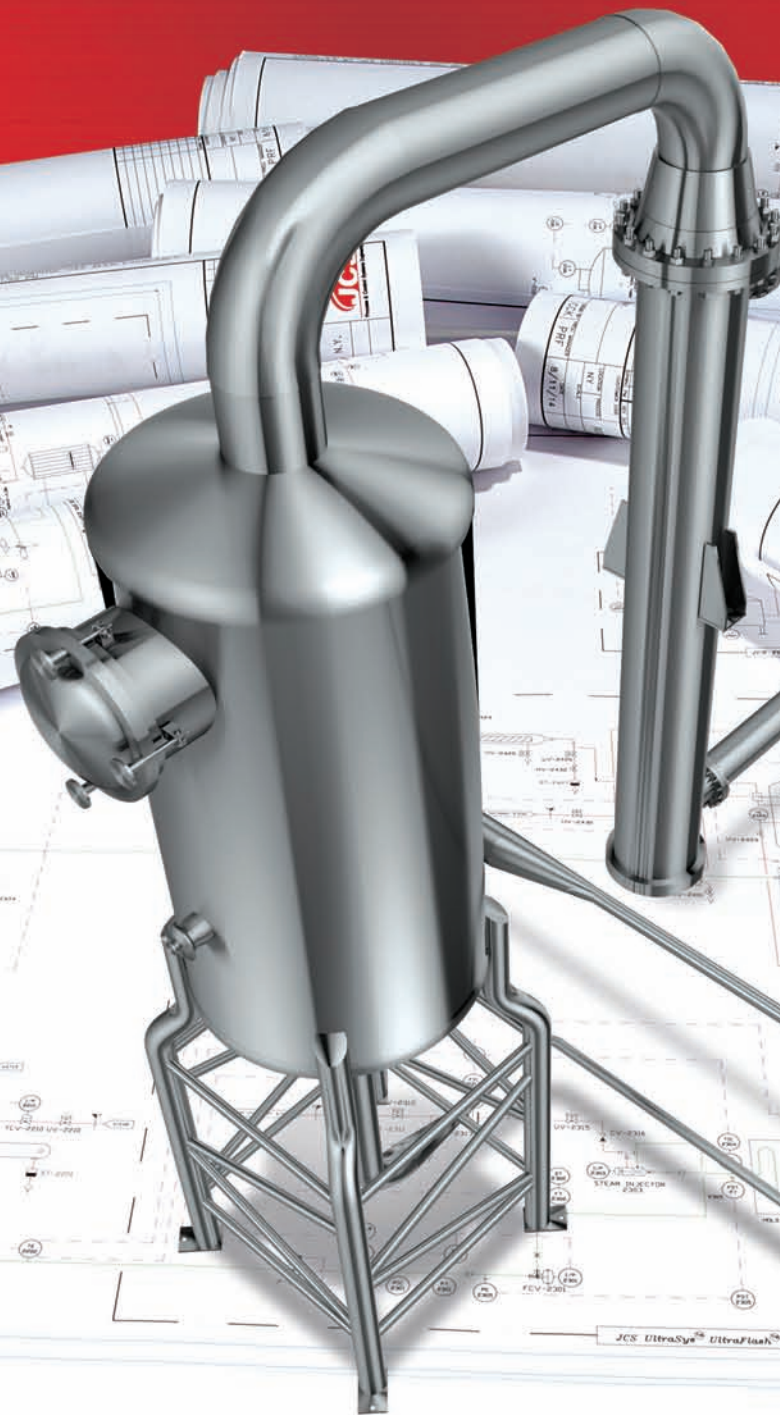


# Analyze. Design. Deliver.



Process & Control Systems Engineering

REV. DATE	DESCRIPTION

JCS	
ROCHESTER, NEW YORK	
P&ID	
125 GPM ULTRASYS	
PROCESS	DRAWN BY
	CCK

## We Know How

## The Inside Story on JCS

For your products – and at JCS – it's what's inside that counts. We specialize in creating superior processes from the inside out. JCS engineers smarter process and control systems thanks to the professionals, expertise, and technological innovation that we bring to our customers.

We engineer concept-to-reality solutions for so many global and American brands because "We Know How." From process design and development to construction, implementation, and start-up, we are innovative, creative, and flexible experts.

Discover the inside story on the unsurpassed know-how of JCS and all the ways our analyze/design/deliver approach can provide superior processing solutions for your quality products.



## From Concept to Reality

We don't try to be everything to everyone, preferring to work closely with customers with whom we can develop trusted, ongoing relationships. We always follow our analyze/design/deliver process to ensure that we "get smart" about your business and product first, before we start the creative design and implementation process.

We objectively choose the most suitable designs and equipment to safely, expertly perform each task, because we know how important customizable flexibility is when you're aiming for greatness day after day.

We never limit customers by recommending an off-the-shelf solution if it will compromise their ability to utilize best-of-breed components in every area of a process. And we are serious about delivering what is promised, when expected, "done right" the first time.

We never disappear, we're always here to talk with you, resolve issues, and consult through every step of the process. **Evaluation, design, testing, approvals, controls, automation, training, start-up, production, safety, compliance, refinements, scalability, savings, satisfaction, and beyond.** You will not find a more knowledgeable, experienced, flexible, personable process engineering partner that will be with you from concept to reality.



## Every Step of the Way

Yes, we do that.

- **Engineering studies** to define current and future processing needs
- **Product development R&D** from formulation to shelf-life improvement
- **Control system design** to meet individualized operational and EIM requirements for today and tomorrow
- **Advanced control systems** using mass and energy balance algorithms – combined with feed-forward and feed-back process modeling – to improve efficiency and increase yields
- **Installation supervision** of both turnkey systems and supervision of user-supplied contractors
- **Process start-up and commission** to validate design criteria and enter commercial production
- **Customer training** for operations, laboratory, maintenance and sanitation
- **Post-commissioning maintenance and service** for maximized efficiencies with minimal downtime

## Low- and High-Acid Aseptic Processing/ESL/UHT and HTST

- Full line of Pasteurizers and Ultra-Pasteurizers to meet your products and production needs
- Multiple proven solutions/technologies to extend shelf life and ensure safety with direct and indirect heating methods
- Low- and high-acid processes assuring pathogen elimination
- UHT solutions offering unrefrigerated shelf life of up to 12 months



## Continuous Product Standardization

- Continuous standardization perfected
- All ingredients metered and controlled simultaneously to assure in-spec blends continuously
- For production of juices, beverages, non-dairy creamers, milk standardization, cream products, sauces, ketchup, salad dressings, beer, spirits and more



## Engineering Services

- JCS provides pre-engineering evaluations, detailed bid specifications, electrical, mechanical, process, controls and automation engineering along with superior project management
- JCS provides custom processing skid manufacturing services, installation services, field supervision, commissioning, service, support and training.



## The Power of Continuous Product Standardization Know-How

JCS created the only inline alcohol standardization system in the US where a spirit is permitted to be produced and bottled via continuous blending by the TTB.

- First time a spirit achieved +/- .03% ABV accuracy through continuous blend
- Designed as a high proof to filler continuous inline blend system
- Vodka now being continuously produced at 240 gpm rate and automatically directed to up to four fillers at one time

## Because We Know How, Our Customers Achieve More

Beyond understanding the unique needs and regulatory requirements of the food and beverage industries, we know how to get results and create fast-track, automated solutions that are innovative, cost-effective, technically advanced, and that deliver superior performance. Discover how JCS' analyze/design/deliver process can offer you more so that you can achieve and produce more. We will partner with you to perfect the value and safety of what's inside your products. Because we truly understand it's what's inside that counts.

## About Us

JCS was founded by Phil Frechette in 1988. As a Christian, he named the company JCS (Jesus Christ Saves) and built it on integrity and a win-win or "no deal" attitude. JCS stands behind every system we design with customer support being our #1 objective.

## Vision Statement

To be a World Class Food & Dairy Engineering Company that is recognized as a top quality innovative contributor of advanced technologies for the Betterment of Public Health, the Profitability of our Customers, the Advancement of our Employees, and the Profitability of our Shareholders.

## Mission

To make a positive impact in the areas of public health and safety by designing and delivering robust and reliable processing systems that meet and or exceed the highest standards of the food and dairy industry.

To promote an environment that encourages our employees to grow technically and professionally.

To use our engineering expertise and experience to analyze our customer's needs and provide them with reliable processing solutions that enable them to achieve higher operating efficiencies, improved product quality and reduced production costs.

To maintain profitability and steady corporate growth through strict adherence to project methodology, employing better business practices, and making strategic investments.

