

# IDEAS POWERED BY CHEMISTRY

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CTI is “not just an ink company” but an “innovator who helps grow and differentiate brands.” The key essence of CTI is its commitment to **“Improving lives through chemistry that alerts, protects and surprises.”**

CTI is located in Colorado Springs, CO, and its innovation is fueled by Ph.D. chemists, artists, inventors and consumer researchers all focused on creating **“IDEAS POWERED BY CHEMISTRY.”** CTI is the world’s largest manufacturer of thermochromic inks.



Coca-Cola - 100 Year Contour Bottle Celebration Can

## ADVANTAGES

**DISCOVERY** – It all starts with listening and understanding the customer and their consumer. Before CTI starts any work or sells any idea, it spends time learning customer needs. The purpose is to solve real problems, not guess!

**PROPRIETARY CHEMISTRY** – CTI’s Ph.D.’s innovate EXCLUSIVELY on creating and perfecting chemistry that alerts, protects and surprises. Much of our technology is unique to CTI and difficult (or impossible) to source from other companies.

**FLEXIBLE TECHNOLOGY** – CTI’s photochromic, thermochromic, security and trigger technologies can be employed from metal to paper to plastic.

**COMMERCIAL LEADERSHIP** – CTI sales and marketing teams are led by veteran Fortune 500 consumer products and innovation leaders. The team brings real-life, consumer perspective to customers.

**DESIGN TEAM** – CTI’s in-house design team focuses on bringing ideas to clients (rather than just technology). The creative team provides customers with elegant designs and ready-to-execute ideas to speed implementation.

**INSIGHT** – If a customer wants a big idea, it starts with a terrific insight. CTI has committed itself to knowing more about consumer needs and opportunities in the area of sensing, alerting and surprising through chemistry, inks and coatings.

**TECHNICAL SUPPORT** – Ph.D. chemists are available to solve tough technical challenges to help create competitive advantages for select customers.

**INNOVATION INCUBATOR** – Ideas are another form of currency inside an organization. A powerful pipeline of ideas predicts increased profits for tomorrow. CTI’s Innovation Incubator offers customers a proprietary talent pool of inventors, chemists, artists and consumer researchers to invent solutions for select customers.

**CATEGORY EXCLUSIVITY** – CTI seeks ‘first-mover’ partnerships in categories and will provide *category exclusivity* for select clients.

# PACKAGING INNOVATIONS

**TEMPERATURE INK**      **SUNLIGHT INKS**      **REVEAL INKS**



*From left to right : Thermochromic ink warm state and then cold state. Photochromic indoors and then outside in the sun.*

*Reveal inks : Warm state then the cold state and then after consumption.*

### NEW HIGH VELOCITY TEMPERATURE INK (THERMO)

This is new thermo technology designed for high-speed can printing lines (2000 cans per minute). High Velocity Ink is the most powerful thermochromic can ink in the world. It runs efficiently with less waste and brighter colors.

### NEW THERMO TABS, CROWNS AND CLOSURES

CTI developed new chemistry to ensure tabs, crowns and closures turn chilly blue, green or red when a beverage is ice cold and ready to drink.

### NEW SUNLIGHT INKS (PHOTOCHROMIC)

Another CTI breakthrough is the invention of photochromic inks for packaging. These inks change from clear to the selected color (multiple colors are available). The ink changes quickly when exposed to sunlight and then changes back to original clear when removed from sunlight (within a few minutes). The process repeats itself.

### LEVEL INDICATOR

A variety of colors and symbols are available on the side of a can or label to reveal the level of the beer or soda inside. Wait staff, party hosts and buddies will always know when it's time for another beverage.

### GLOW IN THE DARK

Become the night's 'most refreshing beverage' by adding glow-in-the-dark symbols or messaging to your package.

### CHEERS PILSNER GLASS

CTI offers yellow, gold or amber ink colors to replicate a glass of taste-appealing beer on the side of a can. As the consumer drinks the can, the pilsner glass shows the beer emptying from glass. A great way to make the beer a hero on a can! There are also versions for sodas.

### REVEAL INKS (HYSTERESIS TECHNOLOGY)

These inks reveal the message AFTER consumption. A message is hidden when the product is placed on shelf or when the consumer opens the package (cold), BUT reveals itself after consumption. This is a game-changer for beverages that hasn't been done before.

### SOCIAL MEDIA INKS (HYSTERESIS TECHNOLOGY)

CTI chemistry can be used on a package to activate a social media engagement or launch a custom app experience. Consumers use a smartphone to activate the social media connector and are provided information such as the location of the nearest party, beer special, trivia, photo sharing, sweepstakes etc. CTI has developed custom mobile apps that interact with its chemistry, and brands may license their use.

## CTI CUSTOMER-NEEDS PLATFORMS

### DRIVE PURCHASE



### KEEPING PEOPLE SAFE



### ENGAGING KIDS



From left to right : Thermochromic ink turns on as the power levels decrease. Photochromic ink reminded consumers to re-apply sunscreen when out in the sun. Memory ink on kids playmats allow for kids to paint with warm water with zero mess.

### CTI IS FOCUSED ON “NEEDS PLATFORMS”

CTI doesn't think of its business in terms of “thermo or photochromic inks,” but rather on developing solutions for targeted “needs platforms.” Instead of thinking, “What ink do we sell?” CTI focuses on, “What problem do we solve?”

#### CONVINCE CONSUMERS TO BUY

The first two moments of truth for a consumer are when they see a product on the shelf and when they reach for it. CTI technology creates competitive advantages for “the moments of truth.”

#### ENSURE DRINKS ARE COLD

CTI got its start providing a “Rocky Mountain cold refreshment guarantee,” ensuring that when the mountains on a Coors Light can are blue, the beer is as cold as the Rockies. CTI now knows more about what consumers think about cold beverages than any other supplier.

#### ENGAGING KIDS

CTI wants to use the magic of chemistry to move kids from “the screen” to helping them create, learn, write, imagine and interact with other kids.

#### STOP COUNTERFEITING

CTI is working with government agencies and brands to authenticate documents, currency and brands.

#### DRIVE TRAFFIC TO SOCIAL MEDIA

Today's millennial generation stays connected through social media. CTI provides companies with technology to drive interaction and connection with their consumers.

#### KEEP PEOPLE SAFE

CTI offers food packaging tamper-evidence and “return to fridge” alerts.

#### PRODUCT SUMMARY:

- Thermochromic (Temperature Activated)
- Photochromic (Sunlight Activated)
- Hybrid Thermo/Photochromic Products
- Glow-in-the-Dark
- PHOTOTAG™
- Social Media Triggers
- Reveal Technology (Hysteresis)
- Tamper-Evident Symbols
- Formaldehyde-Free Solutions (prop. 65 compliant)
- Social Media Activation
- Custom Chemistry