CURETEC

CURETEC Intelligent Curing Solutions
CURE CONTROL SYSTEM

CURETEC

UNDERSTANDING CONCRETE CURING

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CURETEC Intelligent Curing Solutions

CURE CONTROL SYSTEM

A complete solution designed to work seamlessly across your entire operation.

1. CHALLENGES IN TRADITIONAL CONCRETE CURING— AND HOW CURECONTROL SOLVES THEM

In conventional precast concrete production,
curing faces persistent hurdles that undermine quality, efficiency, and profitability.

Imprecise Temperature & Humidity Control

Operator guesswork and basic timer systems can't match the exact needs of diverse mix designs, ambient conditions, or product types. The result? Inconsistent strength, surface efflorescence, color variations, and costly rejects.

CureControl Delivers Consistent, High-Quality Curing—Automatically

Replace uncertainty with smart, real-time adjustments to temperature, humidity, and airflow, customized for every product on your line.

Concrete stays in its optimal state from start to finish, banishing uneven strength, whitening, and color issues. Every batch hits top standards.

High Energy Use & Low Efficiency

On/off steam or hot-air systems waste energy through constant cycling, while slow mold turnover bottlenecks production.

Slash Energy, Boost Output

CureControl supplies precise heat and humidity only as needed—eliminating waste from outdated controls. Cycles complete 30% faster, accelerating mold and pallet turnover.

Run 2–3 shifts on the same line for dramatically higher throughput.

No Process Traceability

Without detailed logs, replicating success is impossible, leading to quality variability and stalled standardization.

Every Batch Perfectly Documented

CureControl auto-logs every cycle in a clear digital record—no manual notes required.

Repeat a winning run? Pull up the profile and reuse it instantly.

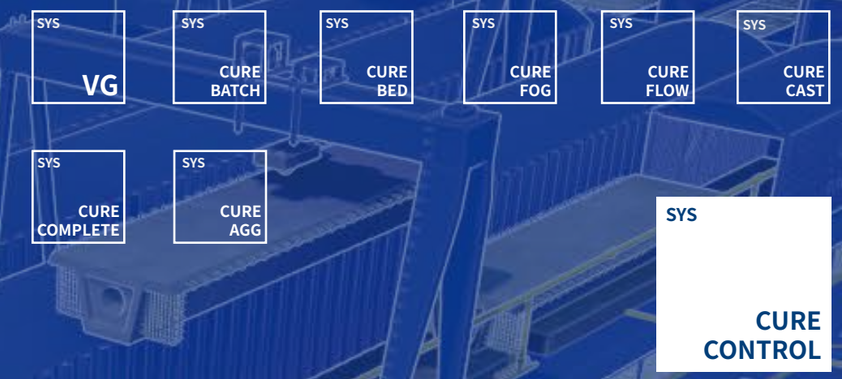
Complex Operation & Maintenance Headaches

Disconnected equipment and inconsistent interfaces delay diagnostics, inflating labor costs and downtime risks.

Full Control from One Intuitive Screen

CureControl unifies steam, heat, humidity, and airflow on a single, user-friendly interface.

Monitor 24/7 with instant alerts and step-by-step fixes—preventing disruptions before they start.



2. HOW CURECONTROL WORKS:

Core Control Functions

1 Precise Dynamic Temperature & Humidity Control

Controllable Ramp Rates:

Adjust heating/cooling from to , avoiding thermal shock and cracks.

Wide Humidity Range:

Maintain RH from 40% to 98% with accuracy—for dry hardening to saturated steam.

Multi-Media Synchronization:

Integrates vapor generators, nozzles, heaters, and fans for seamless, multi-parameter precision.

2 High-Precision Curing Profiles

Program multi-segment profiles with ramp rates from to , ensuring crack-free, uniform hydration.

3 High-Sensitivity, Rapid Response

Industrial sensors sample every second; control loops respond in seconds to disturbances like door opens or loading.

30%
CYCLES COMPLETE 30% FASTER

100+
EXPAND TO 100+ VIA INDUSTRIAL BUSES

1000+
VALIDATED BY 1,000+ LINES

100000+
>100,000-HOUR MTBF

4 Ultra-Stable Holding Phase

Temperature fluctuates just during constant phases, guaranteeing even concrete hydration.

5 Reliable Data Acquisition

Capture temperature, humidity, flow, and status in real time. User-configurable logging stores 1+ year of data with auto-recovery post-power loss.

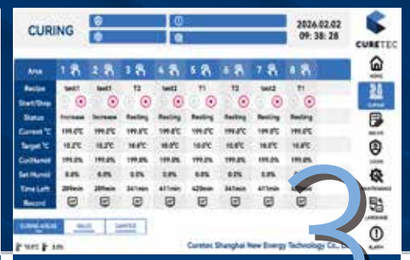
6 Adaptive Control Algorithms

Auto-tuned PID with fuzzy logic and feedforward compensation adapts to load changes, suppressing disturbances for unmatched stability.

7 Scalable Multi-Channel Control

One controller handles 16 isolated units (chambers, hoods, beds); expand to 100+ via industrial buses for massive facilities.

3. INTUITIVE OPERATION:
Zero Learning Curve



STEP 1.
Instant Overview

Power on to a graphical dashboard showing system status at a glance.

STEP 2.
Select or Create Recipes

Load saved profiles or build new ones in 30 seconds via taps.

STEP 3.
One-Touch Start

Confirm and go—full automation handles ramp-up, holding, and cooldown.

Multi-Language Support:

12 languages (Chinese, English, Russian, Spanish+) switch instantly.

Rapid Profile Customization:

Choose from a library by product/thickness/strength, or draw/import via CSV.

Smart Alarms & Diagnosis:

Tiered alerts (Info/Warning/Critical) with fault codes, guides, and 70% faster resolutions.

Proactive Maintenance:

Tracks hours/counts; alerts 7 days early. Exports PDF logs for data-driven upkeep.

AUTO

EN A

4. More Than Simplicity:
Safety, Connectivity, Reliability

Safety by Design
Multi-level authentication, E-stop integration, real-time anomaly detection safeguard people and assets.

Real-Time Monitoring
Continuously logs key energy metrics,with a sampling interval as fast as 1 second, ensuring full traceability of energy usage.

Proven Reliability
Siemens, Schneider, Omron components deliver >100,000-hour MTBF across to.

5. END-TO-END SERVICE ASSURANCE

We Support Your CureControl
From Startup To Long-term Success.

REMOTE DIAGNOSTICS

7/24

Engineers access real-time data/logs
resolve 90% of issues without site visits.

On-Site Commissioning

Standardized installation per safety standards.

Full integration testing and calibration for your mixes/chambers.

Role-based Training

Operators master essentials in 10 minutes, confidence in 1 day.

OUR PHILOSOPHY

- Responsibility ensures quality
  expertise creates value.

Rapid Global Response

24-hour local support via partner network; track requests by device ID.

Robust Warranty

12 months standard; 24 months on core modules.

Covers materials/workmanship: free repairs, parts, labor.

6. CURETEC
DRIVING SMART CURING INNOVATION

From Bremen, Germany, to 1,000+ lines worldwide, we've redefined curing over two decades with German precision, low-carbon efficiency, smart control, and modularity.

MILESTONES

Founding 06 · Innovation 10 · Evolution 15 · Scale 19 · Localization 20 · Digitalization 24 · Leadership 25

MILESTONES

2006 Founding

Founded on mechanical/thermal/automation expertise.

2010 Innovation

Entered precast; pioneered VG vapor generators(seconds to steam, >98% efficiency, low NOx).

2015 Evolution

Roll out of newly designed CureComplete system.

2019 Scale

Achieved Scalable Global Adoption – Industry Recognition Solidified.

2020 Localization

Shanghai localization strategy: integrating German engineering, Chinese manufacturing excellence, and global service capabilities—optimized for Asia.

2024 Digitalization

Full smart system: engineered for stability and equipped with remote diagnostics—serves over 1,000 customers across more than 50 countries worldwide.

2025 Leadership

Global leader in smart curing —your trusted partner.

7. THE TRUSTED CHOICE OF GLOBAL CUSTOMERS
Serving Diverse Precast Segments

Holcim · dbe Group · NEOM · EBAWE PROGRESS GROUP · REG 中国中铁 · 中国交建 · CRCC 中国铁建 · 上海隧道 · CSCEC · 蜀道集团 SDIG · mordimpianti · AND MORE

IN NO PARTICULAR ORDER

8. SMART CONTROL, GLOBALLY PROVEN

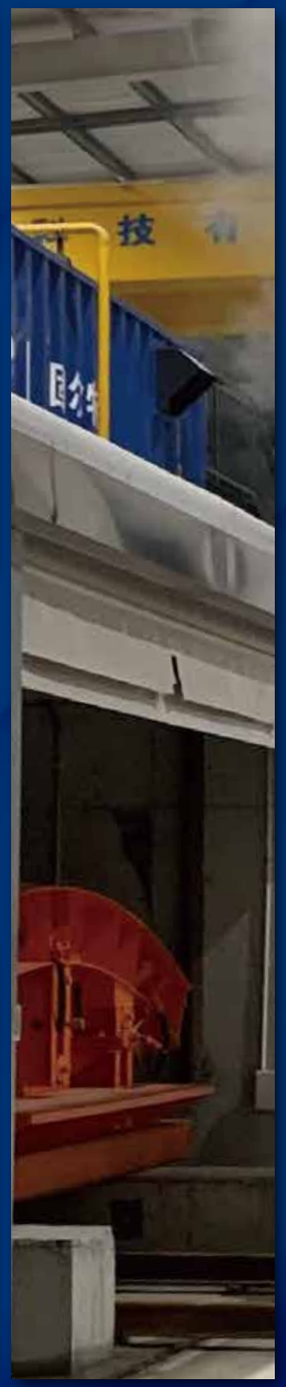
CureTec Control Systems Reliably Manage Every Degree Of Temperature And Humidity.

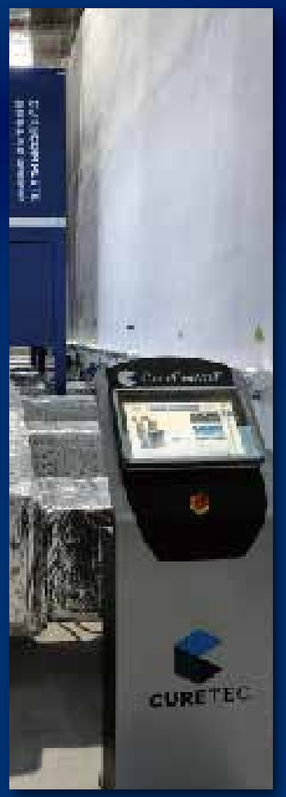
SYS

CURE CONTROL

Real Site, Real Performance

- We Deliver Results





9. VALIDATED BY 1,000+ PROJECTS

- Delivers unwavering quality
- Peak efficiency
- Long-term reliability

TAILORED TO YOUR NEEDS.

AND MORE