



CURETEC Intelligent Curing Solutions CURE CONTROL SYSTEM

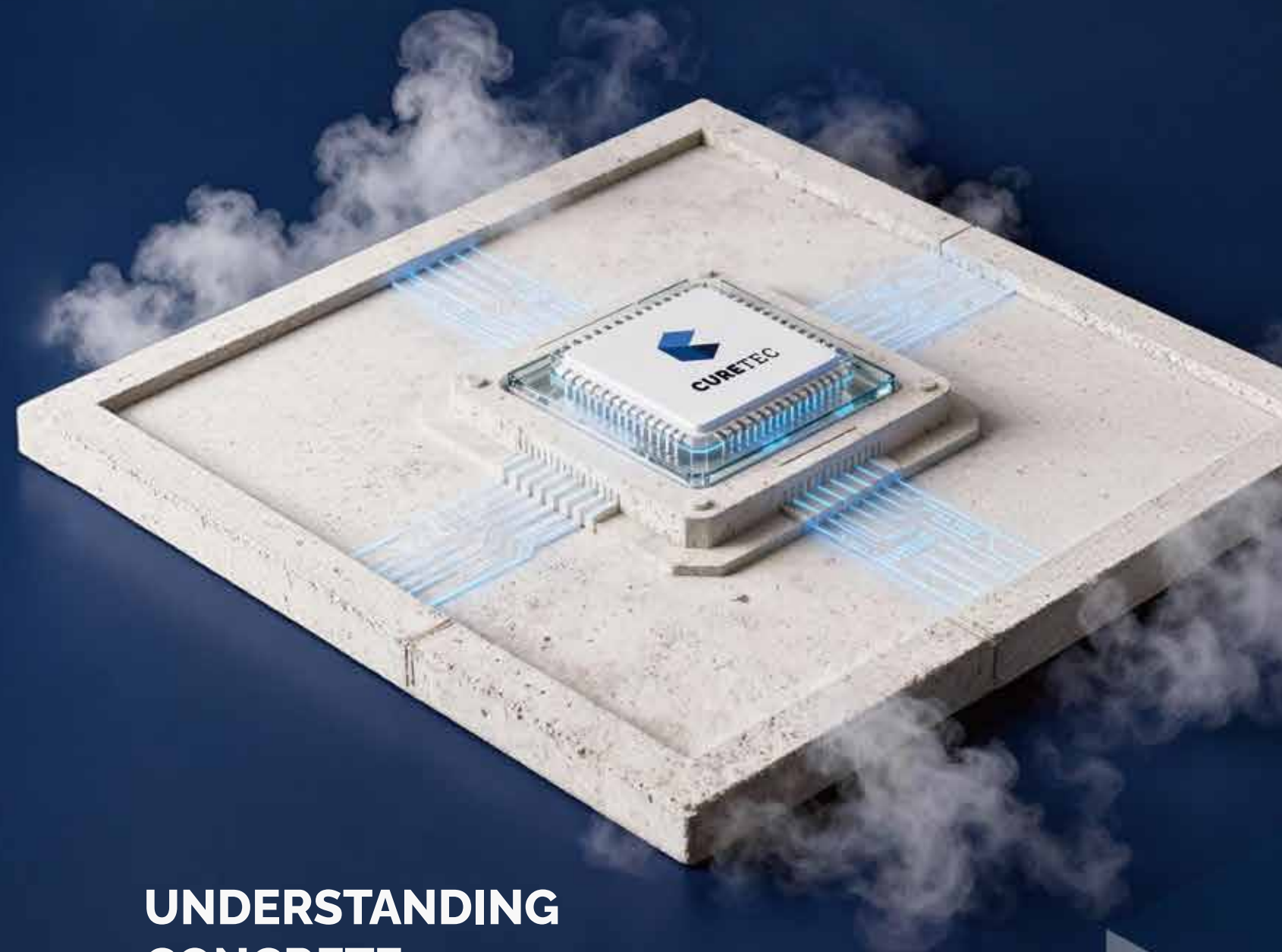


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UNDERSTANDING CONCRETE CURING

Curetec Shanghai New Energy Technology Co.Ltd

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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CureControl supplies precise heat and humidity only as needed—eliminating waste from outdated controls.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

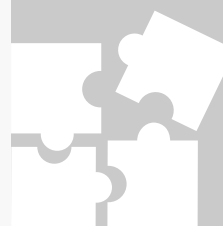
Without detailed logs, replicating success is impossible, leading to quality variability and stalled standardization.



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.

30%
CYCLES COMPLETE 30% FASTER

100+
EXPAND TO 100+ VIA INDUSTRIAL BUSES

1000+
VALIDATED BY 1,000+ LINES

100000+
>100,000-HOUR MTBF

> 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.

SYS
VG

SYS
CURE
BATCH

SYS
CURE
BED

SYS
CURE
FOG

SYS
CURE
FLOW

SYS
CURE
CAST

SYS
CURE
COMPLETE

SYS
CURE
AGG

SYS
CURE
CONTROL

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 dash-board 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 auto-mation handles ramp-up, holding, and cooldown.

- 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.



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.

4

More Than Simplicity:

Safety, Connectivity, Reliability

Safety by Design

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



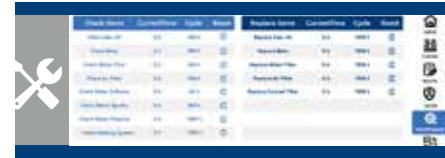
Real-Time Monitoring

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



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

7/24

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

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.

MILESTONES

Founding
06

Innovation
10

Evolution
15

Scale
19

Localization
20

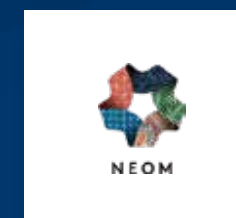
Digitalization
24

Leadership
25



7. THE TRUSTED CHOICE OF GLOBAL CUSTOMERS

Serving Diverse Precast Segments



IN NO PARTICULAR ORDER

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.



BOX CULVERT



PRESTRESSED CONCRETE



India



PRECAST CIRCULAR COLUMN



TUNNEL SEGMENTS



TUNNEL SEGMENTS



PRE-STRESSED CONCRETE



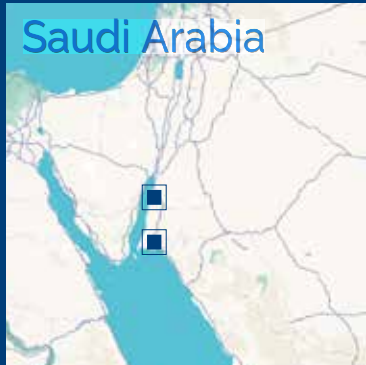
TRACK SLAB



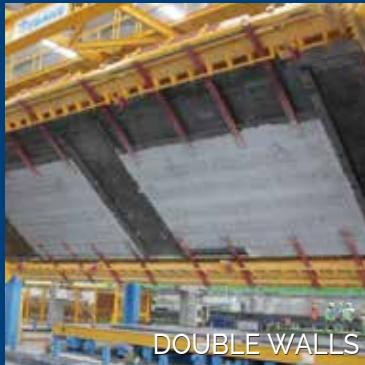
PIPES & MANHOLES



SOLI WALLS & SLABS



Saudi Arabia



DOUBLE WALLS



Australia



BLOCK



CHINA



OMAN



COLORFUL PAVER



ELEMENT SLABS



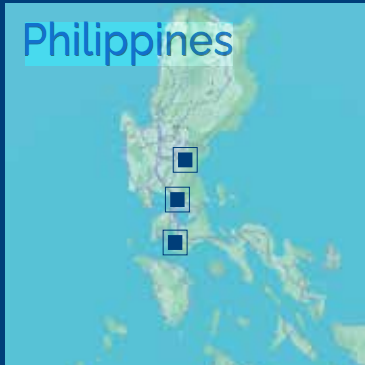
WETCAST PRODUCTS



PRECAST BEAM



HOLLOW CORE COMPONENTS



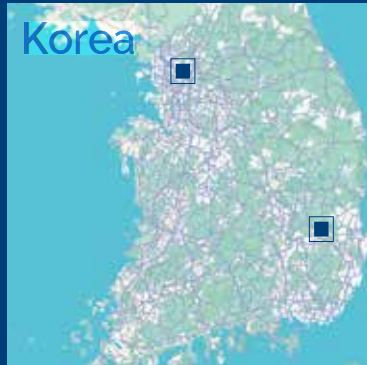
Philippines



PAVING STONES



PAVER



Korea

9. > VALIDATED BY 1,000+ LINES

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

TAILORED TO YOUR NEEDS.

AND MORE



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

