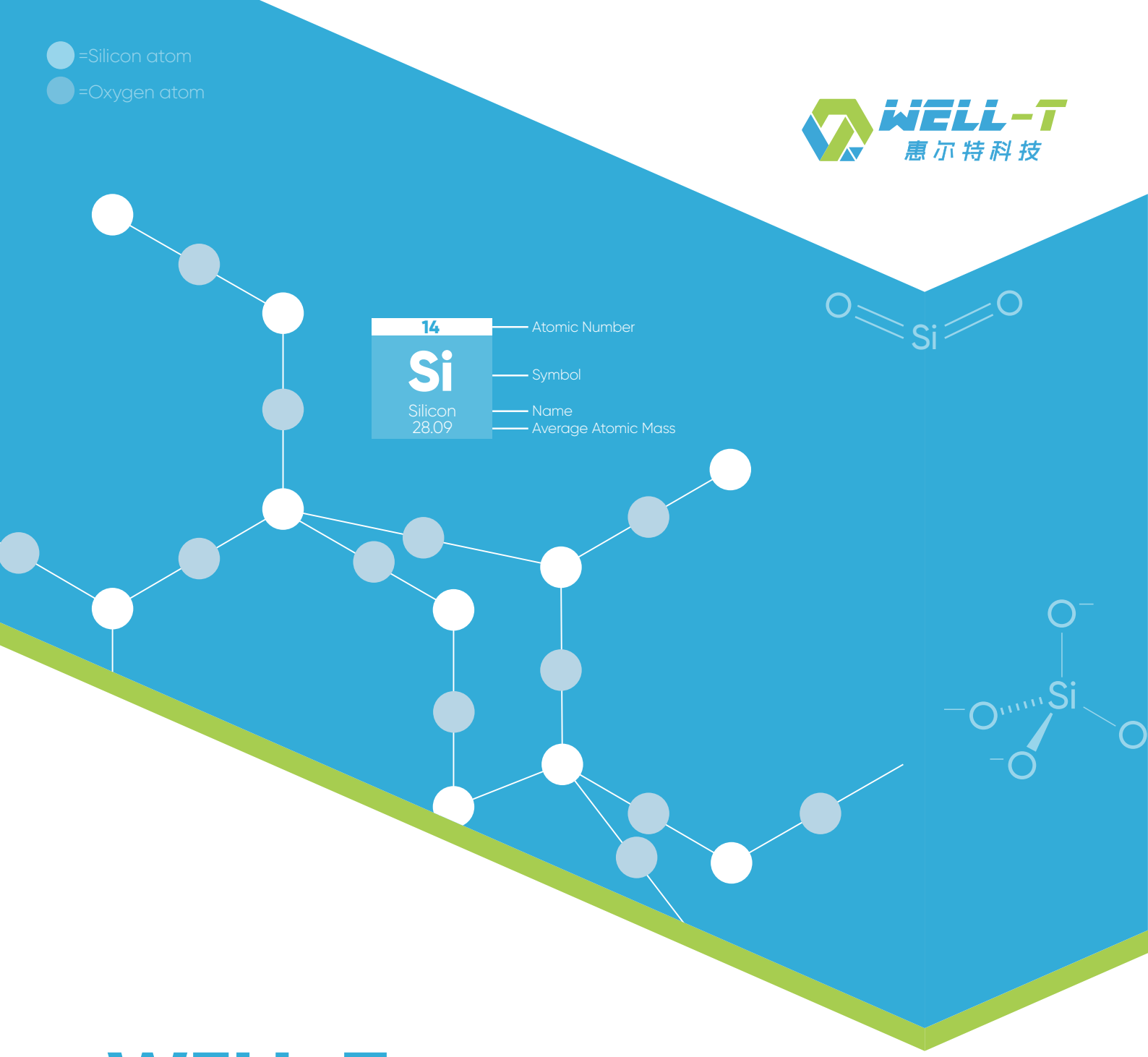


WELL-T COLLOIDAL SILICA

YOUR DEDICATED COLLOIDAL SILICA PARTNER SINCE 1998

COLLOIDAL SILICA

Two Natural Components, One Powerful Dispersion

Since 1998, Well-T's mission has always been to transform two natural components – silica and water – into a versatile, high-performance additive, making it an essential solution across industries.



Simple Ingredients Low VOC



Non-classified chemicals composed of silica and water

Small Particle, Big Advantages



Dispersion of amorphous silica particles

A Functional Additive for Every Market



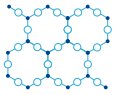
High surface area with excellent stability

Made from just two natural components, our colloidal silica delivers a low-VOC, eco-friendly solution that meets today' s demand for cleaner, greener formulations.

Well-T transforms these ingredients into nanoscale silica particles with controlled distribution – essential for delivering performance as a chemical intermediary.

Binder ›

Creates a rigid, **high-strength** silica structure that enhances **adhesion** and **thermal resistance**, making it ideal for demanding industrial binding applications.



Key Markets:

Investment Casting | Refractories | Petrochemical Catalysts | Silicate Paints | Concrete

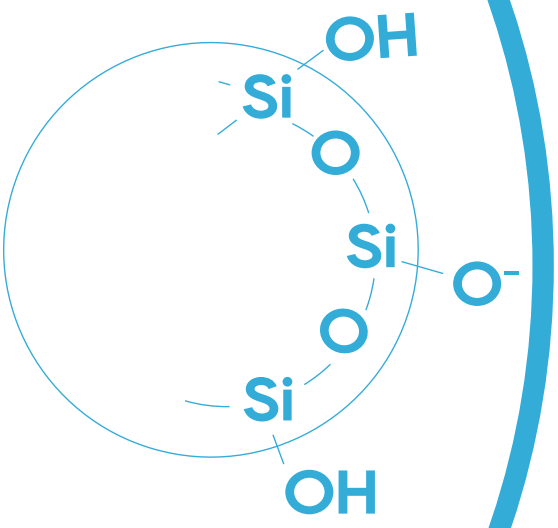
Surface Polishing ›

Acts as a **precision abrasive** for ultra-smooth, defect-free finishes. **Uniform particle size** ensures consistency, while chemical interactions enable finer control.



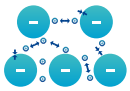
Key Markets:

CMP | Precision Metals | Optical & Ceramic Components



Retention, Drainage & Flocculation ›

With **high surface area** and **charge properties**, Well-T's colloidal silica optimizes drainage, improves filler distribution, and aids contaminant removal.



Key Markets:

Pulp & Paper | Water Treatment

Surface Functionalization ›

Customizable with **silane groups, charge modifications**, and **polymer** coatings for enhanced reactivity, bonding, and dispersion—expanding silica's capabilities.

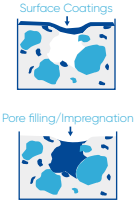


Key Markets:

Adhesives & Coatings | Hydrophobic & Hydrophilic Treatments

Surface Treatment ›

Enhances **scratch resistance, water repellency**, and adhesion by forming a thin silica film or interacting with coatings. Fills surface pores for improved gloss and smoothness.



Key Markets:

Ceramic Tiles | Architectural Coatings | Concrete Flooring | Paper Coats | Textiles

UNLOCKING KEY FUNCTIONALITIES FOR YOUR INDUSTRY

Today, Well-T's broad range of colloidal silica products serves 10+ industries worldwide. With our diverse portfolio, Well-T is uniquely positioned to help clients explore, innovate, and enhance performance across various applications. Below is an overview of our key markets and featured products.

Coatings

Our products serve as functional fillers, additives, and binders to improve adhesion, durability, and surface properties in various coating formulations.

Applications:
Silicate Paints, Acrylic Paints, Industrial Coatings, Ceramic Coatings, Pigments Dispersion



Products
S-1430
SD-8045
SD-10050
SW-1630
SGC-6030
SGH-1430

Concrete & Cement

Our products improve workability, early strength, and durability as additives. They are also used in curing aids and densifier composition for long term performance.

Applications:
Shotcrete, Self-Leveling Concrete, Oilfield Cementing, High Performance Concrete



Products
S-515
S-830
SD-10050
SGA-1430

Investment Casting

Our products act as binders during shell formation in investment casting, which ensures exceptional dimensional accuracy in cast parts.

Applications:
Turbines, Valves, Aerospace Parts, Automotive Parts
Medical Implants



Products
S-830
S-1430
SKP-G30
SKP27-3
SKP-K1

Pulp & Paper

Our products improve fiber retention, enhance dewatering efficiency and optimize paper formation, which improves process efficiency on the wet end of papermaking.

Applications:
Print Paper, Recycled Paper, Kraft Paper



Products
S-515
S-1430A
S-1440
SD-10050
SGC-6030

Petrochemicals

Our products act as binders for zeolites and molecular sieves, ensuring thermal stability, controlled porosity, and high adsorption capacity.

Applications:
Zeolites, Molecular Sieves, Catalysts



Products

- S-1430
- S-1440
- SA-1430
- SA-1440

Refractory Materials

Our products act as binders to improve workability, setting properties, and durability in high-heat environments, increasing compressive strengths and thermal resistance.

Applications:
Monolithic, Vacuum-Formed Shapes, Precast Shapes, Ceramic Fiber



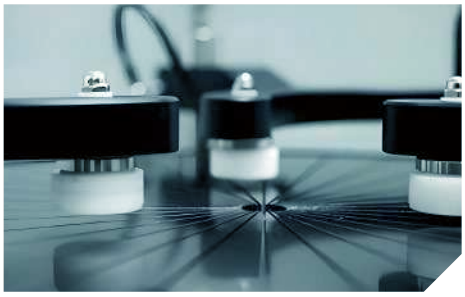
Products

- S-1430
- S-1440
- SA-1440
- SD-5040
- SD-10050
- SGH-1430

Surface Polishing

Our products act as abrasives in precision polishing, enabling controlled material removal and surface refinement. They help achieve ultra-smooth, defect-free surfaces with excellent consistency and stability.

Applications:
Silicon Wafers, Semiconductors, Metals, Sapphire, Precision Substrates



Products

- SD-5040
- SD-8045
- SD-10050
- SD-12040
- SK-6050

Surface Treatment

Our products help enhance gloss and stain resistance through pore-filling treatments, creating a smoother surface They also improve water repellency through hydrophobic surface modification.

Applications:
Ceramic Tiles Gloss, Industrial Floor Repair, Concrete Curing and Densifier, Architectural Coatings



Products

- S-830
- S-1430
- SD-10050
- SGH-1430

Other Applications

More industries are discovering the potential of colloidal silica, unlocking new applications and performance benefits – with even more to come. Our products are also used in the following markets:

01 Fire-Resistant Glass

02 Lead-Acid Battery

03 Papers Coating

04 Textiles

05 Water Treatment

Consult with us for more detailed product and application information.

LEADING TECHNOLOGY, PROVEN PERFORMANCE

With nearly 30 years of experience in colloidal silica, Well-T delivers cutting-edge technology and solutions for every industry. We push the boundaries of innovation, developing solutions engineered for each industry that enhance efficiency and performance.

Rapid Shell Drying System

SKP-K1 provides an all-in-one engineered solution for faster, more efficient **shell building** in investment casting.

Robust Drainage & Retention

S-515 features ultra-small particles optimized for superior **drainage and retention** in paper machines.

High-Temperature Stability

SA, SN and **SK** series **minimize sodium** content for excellent stability for refractories and catalyst supports.



Modified for Surface Treatment

SGH series is **silane modified** to overcome compatibility issues in waterborne coating or hydrophobic systems.

Cationic Modification

SGC-6030 delivers improved fixation and coating uniformity on **negatively charged substrates**.

Ultra-High Purity for CMP

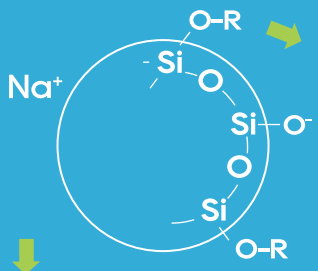
PPB-grade colloidal silica ensures **defect-free planarization** for precision semiconductor processes.

Surface Engineering Technology

At Well-T, we go beyond the limits of traditional silica. By surface engineering technologies, we deliver solutions that optimize performance and unlock new possibilities.

Silane-Modified Silica Particles

Typical silica particles are hydrophilic with reactive hydroxyl groups, which results in poor compatibility and weak adhesion in various waterborne coatings.



What we did

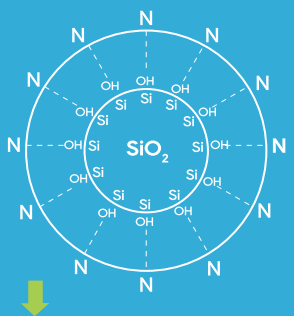
In our SGH Series, Well-T introduces functional silane groups on the particle surface to promote stronger cross-linking with binders and substrates.

The result?

Improved compatibility, dispersion, and adhesion — ensuring stronger bonding and longer-lasting performance in various surface treatments.

Polymer-Enhanced Silica Particles

Traditional silica particles have exposed reactive sites that can easily interact with impurities, leading to instability in ceramic slurries used for cast parts.



What we did

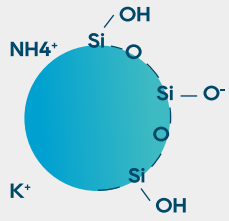
In our SKP27-3 and SKP-K1 products, Well-T coats each particle with a protective polymer layer, shielding the surface and preventing unwanted reactions in the slurry.

The result?

Improved slurry stability, stronger shells, and a cleaner casting process with fewer defects.

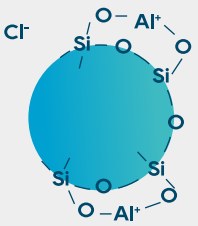
Full Suite of Solutions

SA Series: Ammonia Stabilized



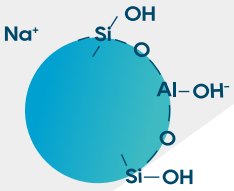
Ammonium or Potassium stabilized silica particles with minimal sodium.

SGC Series: Cationic Particles



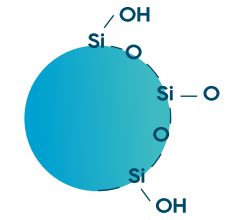
Cationic colloidal silica for enhanced interaction with negatively charged surfaces.

SGA Series: Aluminate Modified



Aluminate-modified silica particles feature improved electrostatic stability.

SW Series: Deionized Modified



Acidic colloidal silica for systems where low pH is desired.

GLOBAL STANDARDS ENGINEERED FOR EXCELLENCE

Product quality is paramount to us. With our experience, technology, and scale, our products are developed to meet even the highest global standards.

Customized Specs at Lightning Speed

Well-T provides a wide range of customized silica dispersions that differ by the following characteristics:

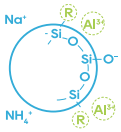
- **Particle Size:** 3-150+ nm
- **Solid Weight:** 8-55%
- **pH:** 2-12
- **Modifications:** Polymers, Silane, Aluminate, Cationic
- **Stabilizing ions:** Na^+, $NH4^+$, K^+, Cl^-, Deionized
- **Distribution:** Narrow or Wide
- **Quality:** Standard, High Purity, Ultra High Purity



3-150nm



SiO_2 8-55%



Modifications



Automatic Production Lines



State of the Art Facilities

Featured Products

Product	Features	Density (g/cm^3)	Particle Size(nm)	Surface Area(m^2/g)	SiO_2%	Na_2O%	pH	Viscoity (mm^2/s)
SMALL PARTICLE SERIES [1]								
S-515	Sodium-Stabilized High Surface Area	1.1	3-5	650	15%	≤1.0	10.0-11.5	≤5
S-830		1.2	8-10	300	30%	≤0.5	9.5-10.5	≤8
S-1430		1.2	10-16	250	30%	≤0.5	9.0-10.5	≤8
S-1440		1.3	10-16	250	40%	≤0.5	9.0-10.5	≤12
LARGE PARTICLE SERIES [2]								
SD-5040	Sodium-Stabilized High Solids Content	1.4	40-60	80	40%	≤0.5	9.0-10.5	≤6.5
SD-8045		1.4	70-90	60	45%	≤0.3	9.0-10.5	≤6.5
SD-10050		1.4	90-110	50	50%	≤0.3	9.0-10.5	≤7
SD-10055		1.5	90-110	50	55%	≤0.3	9.0-10.5	≤12
SD-12040		1.3	110-130	40	40%	≤0.5	9.0-10.5	≤6.5
MODIFIED SERIES								
SGH-1430	Silane-Modified Broad pH Range	1.2	9-12	/	30%	≤0.5	2.0-11.0	≤10
SGH-1630		1.2	12-20	/	30%	≤0.5	2.0-11.0	≤10
SGC-6030	Cationic-Modified	1.2	40-80	/	30%	/	2.0-5.0	≤20
SGA-1430	Aluminate-Modified	1.2	10-16	200	30%	≤0.25	8.0-10.5	≤8
LOW / NON SODIUM STABILIZED								
SN-1430	Low Sodium	1.2	10-16	250	30%	≤0.15	7.5-9.0	≤10
SN-1440		1.3	10-16	250	40%	≤0.15	7.5-9.0	≤14
SA-1430	Ammonia-Stabilized	1.2	10-16	200	30%	≤0.1	9.0-10.5	≤14
SA-1440		1.3	10-16	200	40%	≤0.1	9.0-10.5	≤16
SK-1430	Potassium-Stabilized	1.2	10-16	250	30%	≤0.1	9.0-10.5	≤10
DEIONIZED ACIDIC SERIES								
SW-1630	Deionized Acidic	1.2	15-20	160	30%	/	2.0-4.0	≤10
SW-3030	Deionized Acidic	1.2	≥30	80	30%	/	2.0-4.0	≤10
INVESTMENT CASTING SERIES [3]								
SKP-G30	Face Coat Specific	1.2	10-16	250	30%	≤0.5	10.0-11.0	≤4
SKP27-3	Polymer Enforced	1.2	10-20	/	30%	≤0.6	10.0-11.0	≤8
SKP-K1	Rapid Drying System	1.2	10-20	/	30%	≤0.6	10.0-11.0	≤8
CMP SERIES								
SK-6050	Low-Sodium, High-pH	1.4	60-90	70	50%	≤150ppm	9.0-10.5	≤25
SD-10050	Near-PPB Purity	1.4	90-110	50	50%	≤10ppm	9.0-10.5	≤25

(1) Supplied in standard industrial grade, with higher purity options available upon request.
(2) Supplied in standard industrial grade, with higher purity options available upon request. Monodisperse version supplied as standard; polydisperse grades also available.
(3) SKP27-3 and SKP-K1 contain polymer emulsions, appearing opalescent or milky white.

YOUR DEDICATED COLLOIDAL SILICA PARTNER SINCE 1998

With nearly 30 years of expertise in colloidal silica, Well-T delivers cutting-edge nano-technology and engineered solutions for every industry. We push the boundaries of silica innovation, developing high-performance colloidal silica that enhances efficiency and reliability across diverse applications.

Well-T's Leadership in Numbers

- **6** PLANTS — ISO Certified Facilities
- **30** YEARS — Years of Experience
- **200,000** MT/A — Annual Outputs
- **150,000** SQM — Total Site Area
- **INFINITE** — Customer Solutions

Excellence & Precision in Every Step



Development



Processing



Production



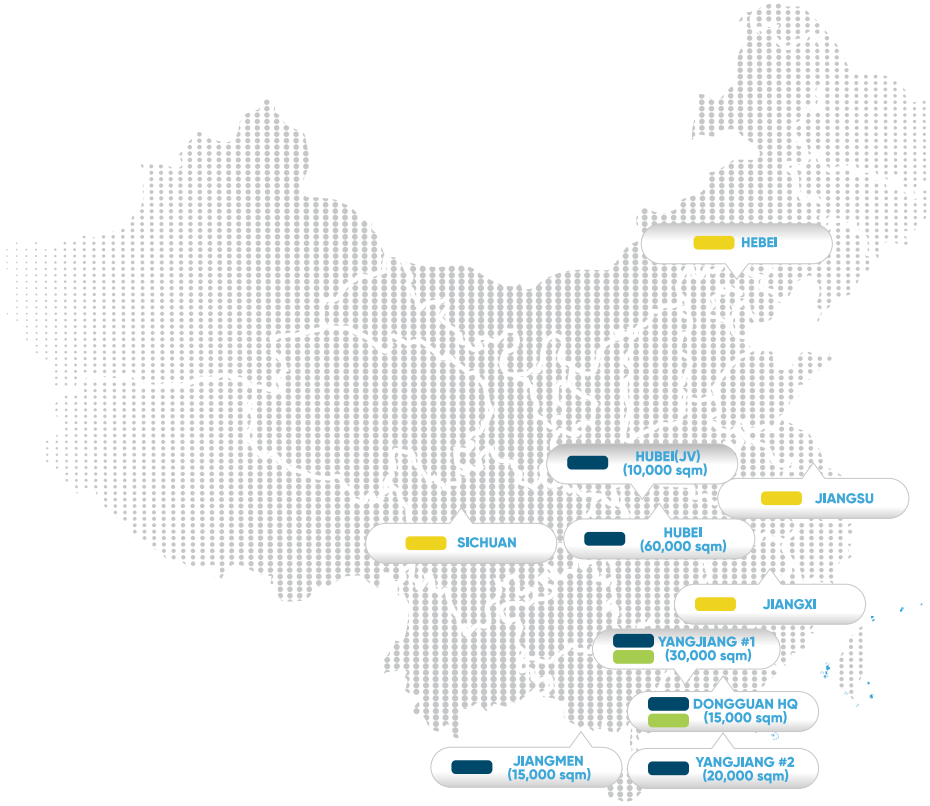
Storage & QC



Packaging



OUR MISSION:
FROM CHINA, FOR THE WORLD



Well-T's Footprints

- MANUFACTURING PLANTS
- R&D CENTER
- DISTRIBUTION CENTER

What's your colloidal silica challenge today?

FIND OUT AT well-t.com.cn

well-t.com.cn

GUANGDONG WELL-NANOTECH CO., LTD. ("WELL-T") IS A GLOBAL LEADER IN THE DEVELOPMENT AND MANUFACTURING OF COLLOIDAL SILICA. FOUNDED IN 1998, WELL-T HAS GROWN TO EMPLOY 300 PROFESSIONALS ACROSS TEN LOCATIONS, SUPPLYING UP TO 200,000 METRIC TONS OF COLLOIDAL SILICA ANNUALLY THROUGH A ROBUST LOCAL AND GLOBAL DISTRIBUTION NETWORK. WELL-T IS COMMITTED TO DELIVERING HIGH-QUALITY SOLUTIONS, CONTINUOUS INNOVATION, AND UNPARALLELED TECHNICAL SUPPORT TO MEET THE EVOLVING NEEDS OF INDUSTRIES WORLDWIDE.

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