

Maochun Cao Announces New Developments in Pool Water Treatment, Emphasizing Intelligent Systems and Green Disinfection

Maochun Cao launches intelligent pH system and chlorine-free solutions, advancing eco-friendly and efficient practices in pool water treatment

BEIJING, CHINA, June 10, 2025 /EINPresswire.com/ -- [Jiangsu Tripodchem Co., Ltd. General Manager Maochun Cao](#) has announced a series of innovations aimed at modernizing the pool water treatment industry. These developments include the launch of an intelligent pH adjustment system and chlorine-free disinfection solutions, both designed to improve water quality management and promote environmental sustainability. Cao's initiatives reflect a broader shift toward technology-driven efficiency and eco-conscious practices in pool operations.

Intelligent pH Adjustment: Precise Control of Water Quality Balance

In traditional pool water quality management, pH adjustment relied on manual regular detection and manual dosing, which was not only inefficient but also struggled to maintain precise water quality stability. Maochun Cao keenly identified this pain point and led his team to invest in the research and development of an intelligent pH adjustment system. Using advanced sensor technology, they achieved real-time and accurate monitoring of the pH value in pool water. Paired with intelligent algorithms and automated dosing equipment, the system rapidly adjusts automatically once the pH value deviates from the preset optimal range, ensuring the water quality remains in a suitable state at all times. This innovative achievement has significantly improved the efficiency and precision of pool water quality management, reduced labor costs and operational errors, and provided pool operators with convenient and reliable water quality solutions, winning wide acclaim in the market upon launch.



Maochun Cao, General Manager of Jiangsu Tripodchem Co., Ltd.

Green Chlorine-Free Disinfection Products: Initiating a New Chapter of Health and Environmental Protection

For a long time, chlorine-containing disinfectants dominated the pool disinfection field, but their irritating odors, potential harm to human skin and respiratory tracts, and negative environmental impacts gradually drew attention. Driven by his persistent pursuit of health and environmental protection, Maochun Cao fully dedicated himself to developing green chlorine-free disinfection products. After numerous trials and formula optimizations, his team successfully launched a series of chlorine-free disinfectants centered on new eco-friendly bactericidal ingredients. These products efficiently kill harmful microorganisms such as bacteria and viruses in pool water while avoiding the many drawbacks of chlorine-containing disinfectants, creating a healthier and more comfortable swimming environment for users and contributing to environmental protection. This has propelled the pool disinfection industry toward a green and sustainable future.

Supply Chain Optimization: Enhancing Efficiency and Competitiveness

In enterprise operations, Maochun Cao understands the criticality of an efficient supply chain. He actively integrated upstream and downstream resources, establishing deep and long-term strategic partnerships with high-quality suppliers to ensure stable and high-quality raw material supplies while reducing procurement costs through scale purchasing and negotiation advantages. In inventory management, big data analysis and intelligent forecasting systems were introduced to plan inventory precisely based on market demand fluctuations and sales trends, minimizing inventory backlogs, stockout risks, and warehousing costs. By optimizing logistics and distribution, collaborating closely with professional logistics partners to plan transportation routes and select optimal delivery methods, product distribution efficiency was improved, ensuring timely and accurate delivery to customers. These supply chain optimization measures have significantly boosted operational efficiency and market competitiveness, setting a replicable benchmark for industry supply chain management.

Innovation in Chemical Formulations and Packaging Upgrades: The Devil is in the Details

In chemical formulation innovation, [Maochun Cao focused on enhancing product performance and user experience](#). Traditional powdered disinfectants were improved into instant granules or gel forms, significantly accelerating dissolution speed and enabling faster, more uniform dispersion of disinfection components in pool water to enhance disinfection efficacy. Special synergistic ingredients were added to strengthen comprehensive functions like algae removal and antibacterial effects, extending the product's effective action time. For packaging upgrades, environmentally degradable materials were adopted to align with green development concepts, while innovative designs made packaging easier to open, seal, and store, reducing product loss during storage and transportation and enhancing quality and customer satisfaction through meticulous details.

Academic Empowerment of Industry: Building a Closed Loop of Theory and Practice

Beyond his practical achievements, Maochun Cao actively engaged in academic research, combining practical experience with theoretical thinking to publish three academic papers: Impact of Household Chemicals on the Environment, Analysis and Comparison of Domestic and International Swimming Pool Disinfection Chemical Markets, and Development Trends and Technological Innovations in Swimming Pool Disinfection Chemicals. These papers provide profound insights and theoretical support for industry development from multiple dimensions, including environmental impact, market landscapes, and technological trends. For example, by analyzing global green disinfection technology trends, he pre-emptively positioned his team to develop chlorine-free products; through studying industrial pain points in chemical formulations and packaging, he drove product iteration. This "practice-theory-repractice" cycle has become a key driver of industry innovation.

Future Outlook: Redefining Industry Heights through Sustained Innovation

Maochun Cao's innovative achievements have all been successfully commercialized, with products selling well domestically and internationally. Highly recognized by pool operators, consumers, and industry experts, they have delivered significant value in practical applications and strongly promoted technological and industrial upgrading in the pool water treatment sector. Looking ahead, he plans to focus on three key directions: first, deepening intelligent integration by developing smart management systems that integrate water quality monitoring, automatic dosing, and fault warning; second, expanding green technology frontiers by exploring biodegradable materials and solar-powered equipment; and third, advancing global collaboration by establishing overseas R&D centers and production bases to introduce Chinese innovation solutions to broader international markets.

Summary

From intelligent pH adjustment to green chlorine-free disinfection, supply chain optimization to academic theory dissemination, [Maochun Cao has set a benchmark for the pool water treatment industry](#) with his multi-dimensional innovative practices, emphasizing "technology-driven, environmental-first, and global vision." His story is not just an enterprise's growth history but also a microcosm of Chinese chemical industry professionals breaking through with innovation and establishing themselves through quality. Amid the dual trends of consumption upgrading and green transformation, Maochun Cao is leading his team to write more possibilities in the pool water treatment field, ensuring every pool becomes a testament to innovation and health.

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