The End of One Era, The Dawn of Another

For decades, our kitchens have been defined by a "consumable"—the traditional nonstick pan. We grew accustomed to its fragility, accepted its "replace every six months" fate; we worried about harmful substances it might release at high temperatures, and carefully avoided using metal spatulas.

Today, we declare that era over.

What we bring is not another patch to traditional coatings, but a fundamental transformation. We present to you an ideal kitchen tool—a cooking vessel that can truly be used for the long term, even passed down through generations.

Welcome to the "Diamond Age" of kitchen cooking.

Core Technology: Vacuum Active Fusion-Bonded Diamond Surface

The foundation of our technology comes from advanced processes in ultra-hard materials and aerospace—**vacuum active fusion bonding**.

Traditional coatings, whether Teflon (PTFE) or ceramic, merely "adhere" to the pan body like paint. They form a weak physical bond with the base, which means they will wear and peel.

Our technology, at temperatures exceeding 1000°C in a vacuum environment, uses our proprietary **low-fluidity copper-based fusion alloy** to achieve molecular-level metallurgical bonding between millions of micron-scale diamond crystals and the stainless steel pan body.

> • **This is not "adhesion," but "fusion":** The diamond is no longer an independent coating—it has truly "grown" into the metal substrate and become an inseparable part of the pan itself.
>
> • **"Low-fluidity" fusion process:** We overcame the challenge of uniform fusion on curved and vertical surfaces. Our specially formulated solder effectively resists gravity in the molten state, ensuring uniform diamond coating from bottom to sidewall.

Dual-Layer Composite System with Superior Performance

A pure diamond surface provides excellent hardness, but to achieve an ideal daily cooking experience, we designed a clever dual-layer composite structure.

Layer 1: Diamond Wear-Resistant Skeleton (The Diamond Skeleton)

This is the pan's "immortal body." The protruding diamond crystal tips form an indestructible protective skeleton that bears almost all physical friction. You can confidently use any metal spatula or even steel wool for cleaning without worrying about scratches. Meanwhile, diamond's high thermal conductivity (several times that of copper) ensures heat spreads instantly and evenly across the entire pan, effectively reducing smoke and improving cooking efficiency.

Layer 2: Food-Grade Silicone Infill (The Performance Infill)

We use high-performance food-grade silicone resin to fill the microscopic gaps in the diamond skeleton. It delivers:

- **Superior initial nonstick performance:** In the new-product stage, it provides smooth, easy-clean nonstick experience.
- **Superior health and safety:** Completely free of PTFE, PFOA, PFAS, or any fluorinated substances; it releases no harmful fumes even at high temperatures.
- **Passive protection:** Because it "hides" in the "valleys" of the diamond skeleton, it is well protected. Its nonstick performance degrades dozens of times slower than traditional ceramic pans, achieving long-lasting nonstick.

Five Core Advantages of the New Diamond Fusion Nonstick Pan

1. Comprehensive Health and Safety

Zero PTFE, PFOA, PFAS. Our product releases no harmful substances throughout its lifecycle, at any cooking temperature.

2. High Durability for Long-Term Use

Forget the anxiety of "coating peeling." The diamond surface lasts as long as the pan body—scratch-resistant, non-peeling. A one-time investment for long-term peace of mind.

3. High Heat Resistance for Chinese Stir-Frying

Traditional PTFE coatings begin to decompose above 260°C. Our new pans withstand temperatures exceeding 400°C, suited for the pursuit of "wok hei" and stir-frying in Chinese cuisine.

4. Efficient, Uniform Heat Conduction

Experience professional-grade cooking results. Diamond's superior thermal conductivity means faster preheating and more even temperature distribution—consistent heating, better results.

5. "Elegant" Long-Lasting Nonstick

Our pan offers a new nonstick experience. It has superior initial nonstick performance. Even after years of use, when the surface silicone layer naturally wears, the sturdy diamond base remains. Then, like a quality cast-iron pan, a simple "seasoning" lets oil penetrate the microscopic pores to form a natural oil-film nonstick layer, continuing to serve you.

"Diamond Age" Nonstick Pan

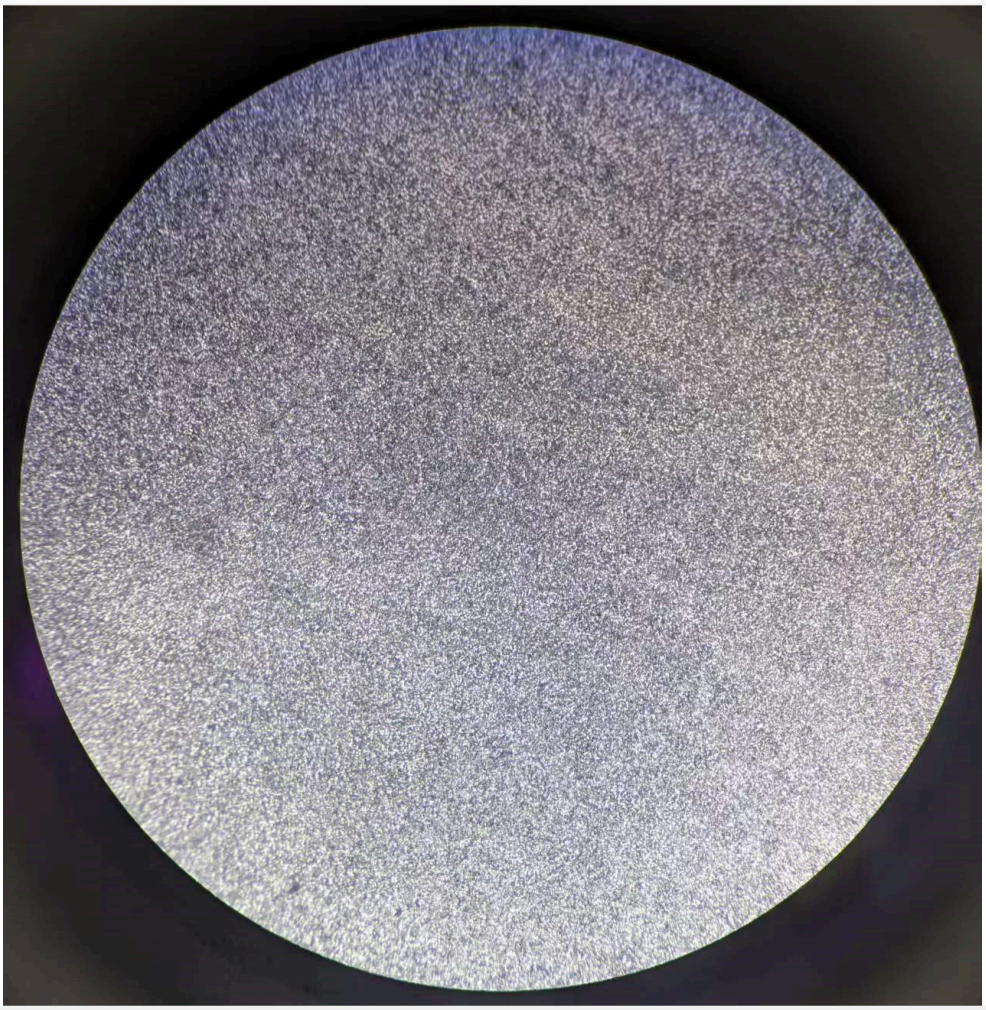
Technical Specifications

Item	Specification
Base Material	Food-grade 304/316 stainless steel composite
Core Technology	Vacuum active fusion bonding
Surface Material	Micron-scale synthetic diamond crystals
Fusion Alloy	Custom low-fluidity copper-based active fusion alloy
Infill Material	Food-grade high-temperature cured silicone resin

Item	Specification
Safety Certification	Free of PTFE, PFOA, PFAS, GenX
Max. Operating Temperature	> 400°C
Compatible Cooktops	Gas, induction, electric, oven—all cooktops

This is not just a new pan—it is a new philosophy of cookware.

We believe the best tools should serve people, not the other way around. Welcome to a new era of healthier, more durable, and freer cooking.



Diamond Fusion Surface Microstructure

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