Automatic Ultrasonic Vapor Degreasing System for Precision Metal Parts and Components Cleaning

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen, China
- Brand Name: Skymen
- Certification: CE, RoHS, FCC
- Minimum Order Quantity: 1 Unit/Units
- Price: Negotiation
- Packaging Details: 1pcs / wooden case packing



Product Specification

- Highlight: **Automatic Ultrasonic Vapor Degreasing System , Ultrasonic Cleaner for Precision Metal Parts, Automatic Ultrasonic Components Cleaning**



More Images



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Our Product Introduction

Product Description

Fully Automated Ultrasonic Vapor Degreaser

The Skymen automatic ultrasonic vapor degreasing system delivers multi-stage precision cleaning for metal parts and components. Combining immersion, vapor degreasing, ultrasonic cleaning, spray cleaning, and drying in a single closed-loop platform, it ensures consistent, high-purity results for demanding industrial manufacturing environments.

Product Highlights

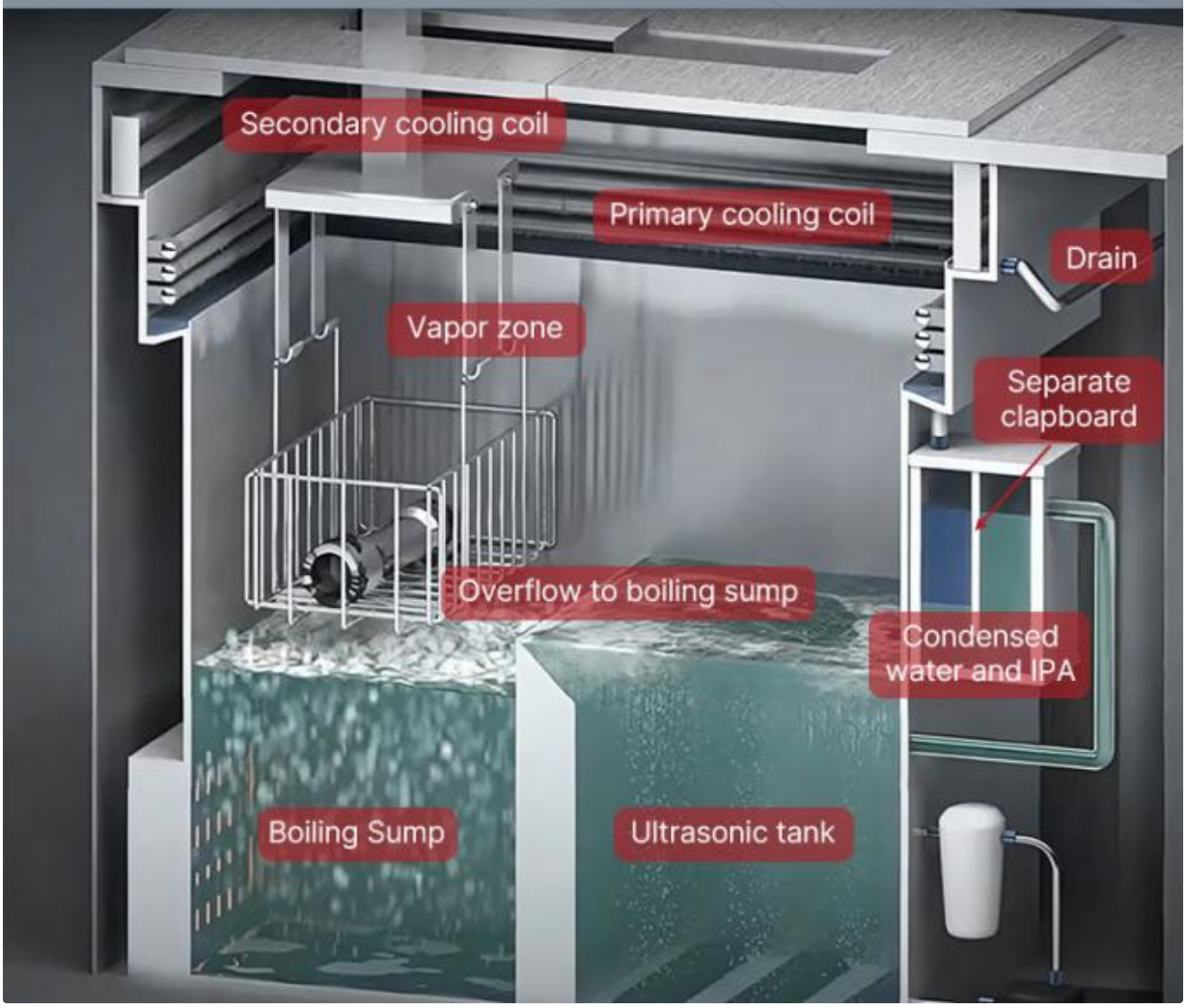
- **Multi-Stage Cleaning:** Integrates immersion, vapor degreasing, ultrasonic cleaning, spray cleaning, and drying in one continuous process.
- **Closed-Loop Design:** Reduces solvent evaporation through automatic covers and dual-stage condensation.
- **PLC Automation:** Robotic transfer system with touchscreen HMI enables fully automated operation.
- **Solvent Recovery:** Continuous distillation and water separation help reduce solvent waste and operating costs.
- **Precision Filtration:** 5 μm filtration maintains solvent cleanliness during continuous operation.
- **Flexible Configuration:** Multiple ultrasonic frequencies and customized cleaning processes available.

System Gallery

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Compositoin & Function

The process uses solvent immersion, combined with vapor cleaning and ultrasonic cleaning, to remove all types of oil, grease, wax, flux, and particulate.



Boiling Sump

Equipped with electric heater in boiling sump, the solvent in the boiling sump is constantly heated to boil, and produce a large amount of vapor above the sump.

Ultrasonic tank

Equipped with ultrasonic emmiters on the bottom of sump, controlled by a generator, ultrasonic power is adjustable, default ultrasonic frequency is 40kHz, suitable for most of the parts, 28kHz, 17kHz, 20kHz, 25kHz, 33kHz, 80kHz, 132kHz, 28/40kHz, 40/80kHz, is also available.

Overflow to boiling sump

There is overflow dam on the right side of ultrasonic sump, the clean solvent from condensed coil 1 flow into ultrasonic sump, when ultrasonic sump is full, the solvent will overflow to boiling sump.

Vapor zone

The vapor produced by boiling sump gathered above the tank and under condensed coil 1, forming a vapor blanket.

Primary cooling coil

The vapor encounters condensate coil 1, condenses into clean solvent ans some water on the condensed coil 1, and flows into water separator through the groove below the condensed coil 1.

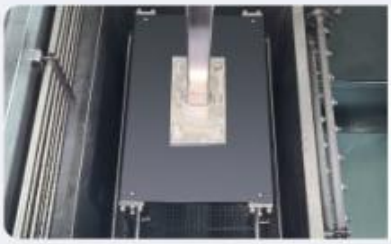
Secondary cooling coil

Condensed coil 2: Contain the further diffusion of vapor;
Quickly vaporizes the liquid attached to the surface of the workpiece, so as to achieve the purpose of drying.



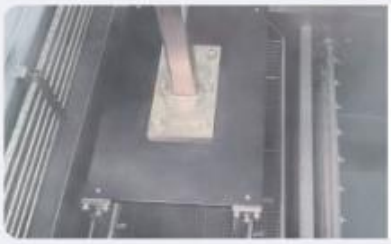
❶ Loading

The automatic lid sealing device ensures a closed and safe cleaning environment.



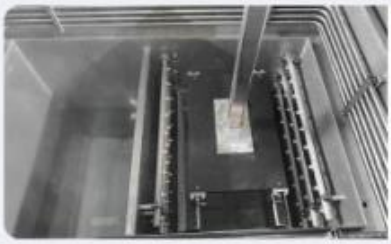
❷ Boil Soaking

The cleaning process begins in the boiling sump where contaminants are loosened and removed.



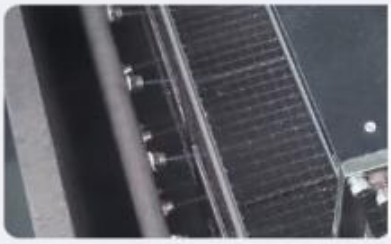
❸ Vapor Degreasing

High-temperature solvent vapor quickly dissolves oils, grease and contaminants from part surfaces.



❹ Ultrasonic Cleaning

Ultrasonic cavitation penetrates deep holes, blind holes and complex structures to remove stubborn contaminants.



❺ Spray Cleaning

Spray cleaning removes residual contaminants and improves surface cleanliness.



❻ Condensation Drying

The condenser system accelerates solvent evaporation, leaving parts clean and dry.



❼ Unloading

Automatic Basket Transfer
The basket lifting and transfer system completes the process automatically.

Typical Industrial Applications



Semiconductor



Precision Hardware



Medical



Aerospace



Optics



Automotive

Our Advantages

We are a direct manufacturer and factory with mass production capability.

Our in-house R&D department ensures products remain technologically advanced and innovative.

We own the Skymen brand and provide custom manufacturing for distributors.

Skymen offers a wide range of industrial cleaning equipment:

- Standard Ultrasonic Cleaning Machines (Single Tank or Multi-Stage from 38 to 1500 L)
- Immersible Ultrasonic Transducer Modules
- Extra Large Ultrasonic Cleaning Equipment (over 20,000 L)
- Semi-Automatic Ultrasonic Cleaning Machines with Translation & Lifting Systems
- Automatic Ultrasonic Cleaning Machines with PLC Control
- Special Function Cleaning Machines, such as Rotary Basket Spraying Cleaning Machine, Heated Soak Tank, Anilox Roller Ultrasonic Cleaner, Explosion-Proof Ultrasonic Cleaner, and more
- Plasma Surface Treatment Machines

Our products comply with international safety and environmental standards, with certifications including CE, FCC, RoHS, PSE, and Ex. We also follow strict quality management systems, including ISO 9001, ISO 14001, ISO 45001, and SA8000.

1-year warranty for all goods.

Authorized Online Agent **Skymen Technology Corporation Limited**

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