

VYQ2 Double Chamber Vacuum Oil Quenching Gas-cooled Furnace



The Main Purpose

- The VYQ2 is designed for precision heat treatment processes such as oil quenching and gas cooling, specifically targeting tool steel, mold steel, bearing steel, spring steel, and stainless steel. It's particularly well-suited for applications demanding high-quality surface finishes and properties, like in the aerospace, automotive, and precision tool industries.

Technical Characteristics

- Advanced Heating Elements:** The VYQ2 employs state-of-the-art, high-purity graphite or molybdenum elements, providing even heating that's crucial for achieving the finest heat treatment results. This precision ensures every part undergoes optimal processing for uniform material properties.
- Superior Insulation:** With its advanced graphite soft felt or composite metal screen insulation, the VYQ2 maximizes thermal efficiency, significantly reducing energy consumption while maintaining consistent interior temperatures.
- Versatile Cooling Medium:** Tailored to diverse cooling needs, the VYQ2 offers a selection between vacuum quenching oil, high-purity ammonia, or argon, facilitating rapid and even cooling essential for maintaining material integrity and enhancing mechanical properties.
- High Automation Level:** Featuring a highly automated, environmentally friendly system, the VYQ2 meets strict energy conservation standards, ensuring a sustainable operation that aligns with modern ecological expectations.
- Durable and Reliable Operation:** Thanks to its frequency conversion speed regulation and multi-speed capabilities, the VYQ2 promises an extended operational lifespan, maintaining reliability across countless cycles.
- Cost-Effective and Wide Application Range:** The VYQ2's design minimizes operational costs through the reuse of quenching oil and accommodates a wide variety of materials, demonstrating unparalleled versatility and efficiency.

Main Advantages

- Enhanced Material Properties:** The VYQ2 guarantees exceptional hardness and mechanical strength, surpassing rigorous industry benchmarks and ensuring materials meet the highest quality standards.
- Eco-Friendly Operation:** Engineered with a focus on energy efficiency, the VYQ2 minimizes environmental impact, representing Vulcan Furnace's commitment to sustainable manufacturing practices.
- Operational Safety:** Advanced fault self-diagnosis, along with sound and light alarms, ensure a safe working environment, while comprehensive protective measures guard against operational hazards.
- Customizable Treatments:** Capable of adjusting to the specific needs of various materials, the VYQ2 enables tailored treatments for achieving high-quality finishes across a diverse range of applications.
- Certified Excellence:** The VYQ2's compliance with ISO9001:2008, CE, and AAA certifications underscores its quality and reliability, making it a distinguished choice in the heat treatment industry.
- Extended Durability:** Constructed with premium materials and leveraging cutting-edge engineering, the VYQ2 is designed for longevity, ensuring consistent performance over time.

Additional Configuration

- Low-Temperature Convection Heating:** An optional addition for handling materials that require meticulous temperature management, enhancing the VYQ2's adaptability.
- Hot Chamber High Vacuum System:** This upgrade broadens the furnace's utility for high-demand scenarios, offering improved vacuum levels for cleaner, more controlled heat treatments.
- Customizable Effective Area Size:** The VYQ2 can be tailored to accommodate specific production scales, offering flexibility for projects of any size.
- Computer Control System:** Integrating advanced computer controls for precise, user-friendly management of heat treatment cycles, the VYQ2 streamlines operations, ensuring optimal outcomes every time.

Furnace Size

Model	mm Valid Zone	(°C) Maximum Temp	(Kw) Heating Power	(Pa) Ultimate Vacuum	(Bar) Gas Cooling Pressure
VYQ2-40	450x300x300	1320	40	4*10 ⁻¹	2
VYQ2-65	600x400x400	1320	65	4*10 ⁻¹	2
VYQ2-80	700x500x500	1320	80	4*10 ⁻¹	2
VYQ2-150	900x600x600	1320	150	4x10 ⁻¹	2

- Chamber size and temperature according to customer need;
- Control System: Computer control, touch screen control, micro-computer control.