

Inficon Vortex Dual

Inficon Vortex Dual - Refrigerant Recovery Machine User Manual

Model: Vortex Dual

1. INTRODUCTION

This user manual provides comprehensive instructions for the safe and efficient operation, maintenance, and troubleshooting of the Inficon Vortex Dual Refrigerant Recovery Machine. The Vortex Dual is engineered for rapid refrigerant recovery, featuring a powerful 1 HP dual piston compressor and an advanced micro-channel condenser for sustained performance.

2. SAFETY INFORMATION

Always read and understand all safety warnings and instructions before operating the Inficon Vortex Dual. Failure to do so may result in serious injury or equipment damage.

- Ensure proper ventilation when operating the machine to prevent accumulation of refrigerant vapors.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when handling refrigerants.
- Do not operate the machine with damaged cords or hoses. Inspect all components before each use.
- Connect the machine only to a grounded power outlet of the correct voltage.
- Avoid contact with hot surfaces during and after operation.
- Do not mix different refrigerants in the same recovery cylinder.
- Refer to local regulations for proper refrigerant handling and disposal.

3. PRODUCT OVERVIEW



Figure 3.1: Front view of the Inficon Vortex Dual Refrigerant Recovery Machine, showing the control panel with pressure gauges, blue and red valves, and the main cooling fan grille.

The Inficon Vortex Dual is a high-performance refrigerant recovery machine designed for efficiency and durability. Key features include:

- **1 HP Dual Piston Compressor:** Provides industry-leading recovery rates for fast and efficient operation.
- **Micro-channel Condenser:** Ensures exceptional heat exchange, maintaining recovery rates even in high ambient temperatures.
- **Oversize Fan:** Delivers superior cooling to prevent overheating and sustain performance.
- **Simple Two-Valve Operation:** Streamlined controls for ease of use.
- **Full-Size Protected Gauges:** Clearly display both suction and tank pressure, protected from damage.

4. SETUP

1. **Unpacking:** Carefully remove the Vortex Dual from its packaging. Inspect for any shipping damage.
2. **Placement:** Position the machine on a stable, level surface in a well-ventilated area, away from direct sunlight or heat sources.
3. **Power Connection:** Connect the power cord to a grounded electrical outlet (AC power source, 746 watts). Ensure the voltage matches the machine's requirements.

4. **Hose Connections:**

- Connect the appropriate refrigerant hoses to the system being recovered from and to the recovery tank.
- Ensure all connections are tight to prevent leaks.

5. **Recovery Tank Preparation:** Ensure the recovery tank is empty and has sufficient capacity for the refrigerant being recovered.

5. OPERATION

The Inficon Vortex Dual features simple two-valve operation for efficient refrigerant recovery.

5.1. Standard Liquid/Vapor Recovery

1. Ensure all hose connections are secure and the recovery tank is properly prepared.
2. Open the valve on the recovery tank.
3. Turn on the Inficon Vortex Dual machine using the power switch.
4. Slowly open the appropriate valves on the machine (blue for suction, red for discharge) to begin the recovery process. Refer to the gauge readings for pressure monitoring.
5. Monitor the gauges during recovery. The machine will automatically shut off or indicate when recovery is complete, or when the tank is full.
6. Once recovery is complete, close the machine valves, then close the recovery tank valve.
7. Turn off the Inficon Vortex Dual.
8. Disconnect hoses carefully, being mindful of any residual pressure.

5.2. Push/Pull Recovery (if applicable)

For larger systems, the push/pull method can be used to recover liquid refrigerant more quickly. Consult specific industry guidelines and the machine's detailed instructions for this advanced procedure.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Inficon Vortex Dual.

- **Filter Drier Replacement:** The machine is equipped with an internal filter drier. Replace it periodically as recommended by Inficon or if recovery rates decrease significantly.
- **Cleaning:** Keep the exterior of the machine clean. Regularly clear any debris from the cooling fan grille to ensure proper airflow and prevent overheating.
- **Hose Inspection:** Inspect all hoses and fittings for wear, cracks, or leaks before each use. Replace damaged components immediately.
- **Gauge Calibration:** Periodically check the accuracy of the pressure gauges. If discrepancies are noted, consult a qualified technician for calibration.
- **Storage:** When not in use, store the machine in a clean, dry environment, protected from extreme temperatures.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your Inficon Vortex Dual.

Problem	Possible Cause	Solution
Machine does not start.	No power, tripped circuit breaker, faulty power cord.	Check power connection, reset breaker, inspect power cord for damage.
Slow recovery rate.	Clogged filter drier, low refrigerant charge in system, high ambient temperature, restricted hoses.	Replace filter drier, ensure sufficient refrigerant in system, operate in cooler environment, check hoses for kinks or blockages.
Machine overheats.	Blocked fan grille, prolonged operation in high temperatures, insufficient ventilation.	Clean fan grille, allow machine to cool, ensure adequate ventilation.
Refrigerant leaks.	Loose hose connections, damaged O-rings, faulty valves.	Tighten all connections, inspect and replace O-rings, contact service for valve issues.

If the problem persists after attempting these solutions, contact Inficon customer support or a qualified service technician.

8. SPECIFICATIONS

Attribute	Value
Model Number	Vortex Dual
Compressor	1 HP Dual Piston
Wattage	746 watts
Cooling Method	Forced Air
Item Weight	35 pounds
Product Dimensions	1"L x 1"W x 1"H
Power Source	AC
Country of Origin	USA
UPC	645759322173

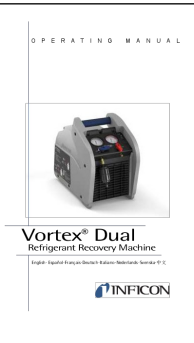



9. WARRANTY AND SUPPORT

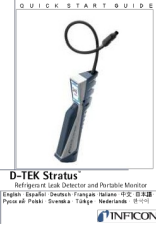

For specific warranty terms and conditions, please refer to the documentation included with your purchase or contact Inficon directly. Inficon offers various protection plans for extended coverage.

For technical support, service, or parts inquiries, please visit the official Inficon website or contact their customer service department. You can also visit the [Inficon Store on Amazon](#) for more information.

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Related Documents - Vortex Dual

	<p>INFICON Vortex Dual Refrigerant Recovery Machine Operating Manual</p> <p>Comprehensive operating manual for the INFICON Vortex Dual Refrigerant Recovery Machine, covering safety, specifications, setup, operation, maintenance, troubleshooting, and EPA requirements. Essential guide for HVAC/R professionals.</p>
	<p>INFICON Vortex Dual Refrigerant Recovery Machine Operating Manual</p> <p>This comprehensive operating manual details the functionality, setup, and safe operation of the INFICON Vortex Dual Refrigerant Recovery Machine. Designed for professional use, this machine is essential for efficient and compliant recovery of refrigerants from HVAC/R systems.</p>
	<p>INFICON Vortex Dual Refrigerant Recovery Machine - Specifications and Features</p> <p>Detailed specifications, features, advantages, and ordering information for the INFICON Vortex Dual refrigerant recovery machine. Includes performance data for various refrigerants and model details.</p>
	<p>INFICON HVAC/R Service Tools Catalog: Leak Detectors, Vacuum Pumps, and More</p> <p>Explore the comprehensive range of INFICON HVAC/R service tools, including advanced refrigerant leak detectors (D-TEK series, TEK-Mate), vacuum pumps (QS5), recovery machines (Vortex Dual), combustion analyzers (FLUE-Mate), and carbon monoxide meters (CO Check).</p>

	<p>INFICON D-TEK Stratus Refrigerant Leak Detector Quick Start Guide</p> <p>Quick start guide for the INFICON D-TEK Stratus Refrigerant Leak Detector and Portable Monitor, covering operation, modes, battery, sensor, and filter replacement.</p>
	<p>Wey-TEK Refrigerant Charging Scale Operating Manual - INFICON</p> <p>Comprehensive operating manual for the INFICON Wey-TEK Refrigerant Charging Scale, covering features, controls, operation, specifications, warranty, and RoHS compliance.</p>