

# **Quartz Crystals**

Maximum Lifetime, Stability, Accuracy, Ease of Use

# SUPERIOR CRYSTALS FOR SUPERIOR FILMS

INFICON quartz crystals offer proven quality and reliability—proven by millions of successful process runs with a wide range of materials, applications and industries.

## 100% TESTING AND INSPECTION

To ensure maximum lifetime in your process and stable and accurate rate control, each crystal is examined for:

- Resistance—Resistance is checked to assure measurement stability and longer coating life.
   Resistance is an indicator of electrical contact and electrode adhesion.
- Frequency—Starting frequency within a small specification range is verified to ensure accurate thickness measurement.
- Curvature—An electrical test for curvature is performed to assure resonance stability. Poor curvature results in measurement stability degrading more rapidly.
- Visual Conformity—To ensure maximum crystal life and stability, each crystal is inspected for electrode uniformity, surface flaws, and other imperfections which are indicators of poor electrode adhesion and contamination.

### PRECISELY THE BEST CRYSTAL

Available in 5 and 6 MHz with silver or gold electrodes, INFICON quartz crystals are produced in our clean-rooms to stringent specifications. Each is carefully inspected to assure high yields and reliability in your process. Our AT-cut plano-convex design reduces errors in deposition rate and thickness by minimizing spurious vibrational modes or mode-hopping.

#### **CHOOSING THE RIGHT CRYSTAL**

Our continuing research into quartz crystal characteristics results in ongoing improvements to offer the highest reliability in your process. We recommend gold crystals for most applications. However, silver crystals will provide superior performance in processes with high heat loads, such as sputtering. They may also improve the deposition of oxides, but we recommend trying gold crystals first. Keep in mind that silver tarnishes and cannot be kept in storage for long periods of time.

### **NEW EASY-TO-USE CRYSTAL PACKAGING**

The new INFICON quartz crystal package enables convenient dispensing of the crystals directly from the package to the sensor, minimizing operator handling and risk of contamination. To make the crystal package more cleanroom-friendly, we eliminated the paper and foam inserts and made the packages stackable for easy storage (see other side for dispensing instructions).



#### **ALWAYS A RELIABLE SOURCE**

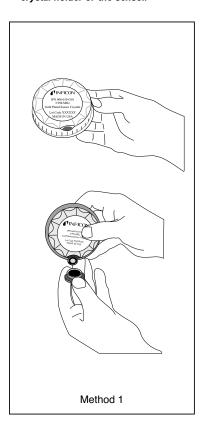
As a world leader in the production of thin film instrumentation and crystals, we maintain a high level of inventory to easily meet your immediate requirements and provide an uninterrupted long-term supply.

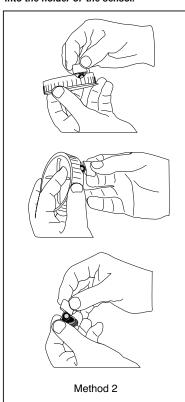
#### A COMPLETE LINE

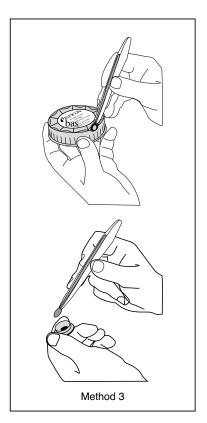
However simple or complex your system—whether it involves thermal evaporation, sputtering or ion beam processes—INFICON makes a complete line of controllers, monitors, sensors and feedthroughs to meet your needs.

### THREE EASY OPTIONS FOR DISPENSING CRYSTALS FROM THE PACKAGE:

- Tilt the package and the crystal drops directly from the package into the crystal holder of the sensor.
- Use the specially designed tool that comes attached to the base of the package as a carrier to conveniently place the crystal into the holder of the sensor.
- 3. Use Teflon® tweezers to remove the crystal from the package and place into the crystal holder of the sensor.







ORDERING INFORMATION		
Description	Part Number	
6 MHz Crystals (10/package) (all INFICON controllers use 6 MHz crystals)	008-010-G10 gold electrode 008-009-G10 silver electrode	
5 MHz Crystals (10/package)	750-225-G2 gold electrode	

750-226-G2 silver electrode

Contact your local sales office for quantity pricing.



Instruments for Intelligent Control™

# GLOBAL HEADQUARTERS:

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