

**Rotor Clip Company** • 187 Davidson Ave. • Somerset, New Jersey 08873  
 Phone 800-557-6867 • Fax 732-469-7898 • www.rotorclip.com

## Science Meets Art in Sculpture Aided by Retaining Ring

**W**here does science meet art? Most technical people would regard this as an impossible question to answer or, at the very least, irrelevant. However, there are those whose connection to the physical world awakens a creative spirit that finds expression in their art.

For example, a jazz drummer analyzes heart beat rhythms and tries to correct irregular beats by manipulating the sound of the rhythm and feeding it back to the patient in the form of music. An artist places sand in a flat disk and through vibration simulates what happens to certain sediments during an earthquake.

Reven Marie Swanson of Denver, Colorado, creates kinetic sculptures using steel and mixed materials for outdoor and public installation that follow simple scientific principles to create motion for her work. Her most recent sculpture, "Aspens and Moon," on display

at Hanna Springs Park in Lampasas, Texas, features a series of colorful shapes affixed to the end of flexible metal "branches" and mounted on top of a pole. The top of the pole rotates in response to the wind or a push from the finger tips that makes it "spring" to life."

The pole relies on a bearing as it turns and is retained by an internal retaining ring, an engineered, non-threaded fastener manufactured by Rotor clip Company. Swanson requested samples of the ring from Rotor Clip during work on her project and found it to be the most efficient way of retaining the bearing in her sculpture.

Bearing retention is one of the most common uses for internal retaining rings. Rotor Clip features a full line of such rings in a range of sizes as small as 1/8 inch in diameter to as large as 35 inches. They are also available in metric sizes from 1mm to 800mm.

*please turn to page 113*



*Clockwise, left to right: "Aspens and Moon" sculpture by Reven Swanson featuring shapes that respond to the wind. A Rotor Clip internal retaining ring retains the bearing that enables the top part of the sculpture to rotate. The work is currently on display in Hanna Springs Park, Lampasas, Texas.*



**ROTOR CLIP**, from page 88

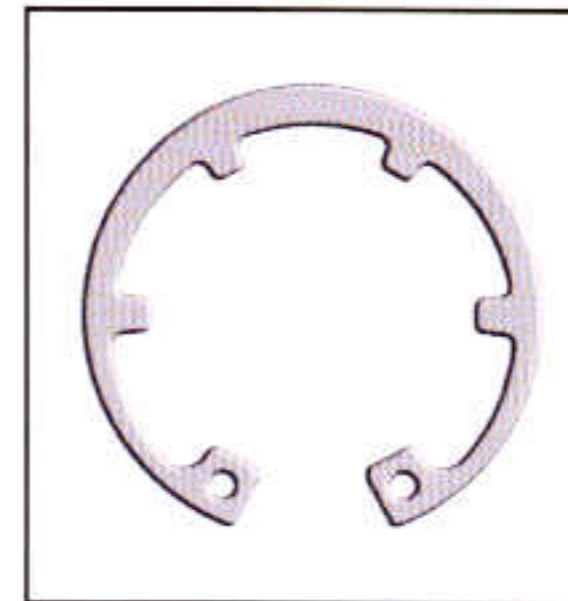
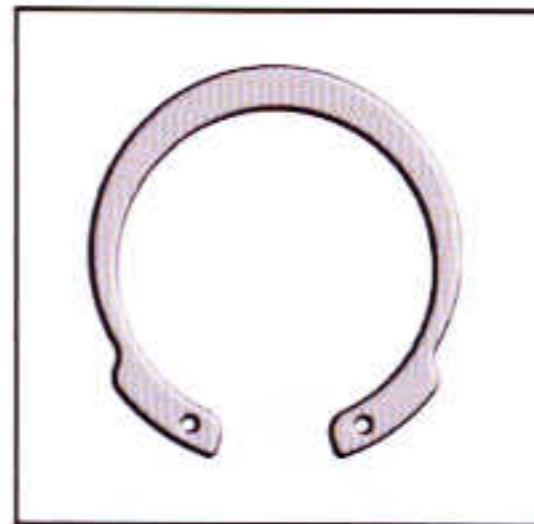
Variations on the basic internal retaining ring can meet a variety of application issues. The standard HO is available in an extra thick version (DHR) to withstand higher thrust load forces. The inverted HOI version reverses the lugs to allow for greater clearance, should this be a concern.

The DHT internal retaining ring features “teeth” equally distributed along the circumference of the ring that provide increased shoulder for more effective retention.

According to Ms. Swanson, her artwork is about change, movement, balance, and growth. Her works are typically suspended or mounted above ground to imply flight, movement, and transitional experiences of growth.

To learn more about her work, visit her website at [www.revenswanson.com](http://www.revenswanson.com).

To learn more about Rotor Clip retaining rings, visit their website at [www.rotorclip.com](http://www.rotorclip.com). 



*Rotor Clip internal retaining ring (left) is an efficient and effective way to retain bearings in a variety of applications. Variations of the internal ring include the inverted HOI (center) with inverted lugs for better clearance and the “teeth” internal ring (right) for additional retention power.*