Creative Machines Ball Machine Sculptures
“Ball Machine Sculptures embody almost every basic element of machinery, combined in a bewildering variety of ways. There's a level of mechanical genius behind inventing complex mechanisms.”

-James Seawright, Princeton University’s Emeritus Director of Visual Arts
Ball Machine Sculptures delight people of all ages and backgrounds with their swooping tracks, ingenious devices, sound producing elements, and charming miniatures. Today, there are nearly 250 Ball Machine Sculptures located in airports, hospitals, science museums, shopping centers, private collections, and public spaces around the world.

Whether you are an expert collector or just discovered Ball Machine Sculptures for the first time, the following pages outline a brief history of ball machines and our process for designing, fabricating, and installing these unique and playful sculptures.

Therefore, we invite you to explore these pages and contact us with specific questions and comments.
Our ball machine lineage began with painter, sculptor, and one of the first American origami masters, George Rhoads. Born and educated in Chicago, his artwork is part of many private collections and eminent art museums including the Museum of Modern Art and the Art Institute of Chicago. However, Rhoads is best known for spending the last forty-five years designing large audiokinetic ball machine sculptures that are beloved by people throughout the world. In the late 1950s, Rhoads began showing welded steel sculptures and kinetic copper fountains. His first audiokinetic pieces were small, some involving the use of rolling balls to impel various sound and motion devices. In 1970, Rhoads moved to upstate New York and began working closely with Bob McGuire and Rockstream Studios to perfect and construct his ball machines. In 2007, George Rhoads selected Creative Machines to continue the tradition of his artwork. Today, we work with him to design and fabricate all of the Ball Machine Sculptures pushing, the designs in exciting new directions.
We continue to use the techniques developed by George Rhoads in our ball machine sculptures, incorporating fabrication methods, design elements, and strategies for making reliable, long-lasting sculptures. In addition, we are exploring new methods of integrating technology and interactivity into the sculptures.
Every Ball Machine Sculpture is unique.

We love to work with clients to develop a theme that matches their specific needs. Theming can be as simple as choosing a color palette or as complex as using a machine to accurately depict a cancer-fighting drug’s method of action.
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Each one contains a number of “devices.”
These devices can bounce, catch, spin, capture, or release balls. Some devices are music elements that use organ pipes, xylophone bars or bells to add a playful layer of sound to a machine, while others are mechanized like an egret flying overhead or a tiny hot air balloon floating through the tracks.
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Sculptures can include interactive features

We specialize in meaningful interactivity and are always cultivating new ways for viewers to enjoy and explore these sculptures. We have created ball machine sculptures with Dumpers where people can turn a knob and release balls all at once into a Loop-the-Loop or use a wheel to change a ball’s pathway deciding which balls climb up or roll down in a chaotic fashion.
Ball Machine Sizes

Ball Machine Sculptures can range in size from small wall-mounted pieces to machines that fill entire rooms and span multiple stories. Our ball machines fit into 6 general categories, listed below. While nearly every machine has custom dimensions designed to fit client specifications, these categories give you a broad idea of the price point for each size. Final pricing is dependent on both the complexity of design and the overall volume of the sculpture. The complexity of design is defined by the number of devices, the level of theming, and the integration of interactive features. We are happy to discuss the details of a project and provide an estimate.

Limited Edition
We offer a limited edition series as our smallest ball machine. This sculpture is 3’ x 5’ x 10” deep and can be wall mounted or built into a freestanding case. We are creating 100 sculptures in this series in two different color palettes: 50 “warm” and 50 “cool.” Each limited edition sculpture is approx. $20,000 USD.

Small
These machines typically sit on a large base or are wall-mounted making them easier to view considering their small size. Unlike the Limited Edition, they can include unique theming and handpicked devices. Small ball machines are under 250 cubic feet and range in price from $50,000 to $100,000.

Medium
Medium machines often sit on a small base, but feel more three-dimensional than small machines. These sculptures are less complex and have fewer devices than large machines. Medium ball machines are often between 250 and 350 cubic feet, and their prices range from $100,000 to $150,000 USD.

Large
These sculptures feel grander in size and easily become the focal point in a space. Large machines contain a great variety of devices and complexity. Large ball machines are typically between 350 and 450 cubic feet. Their prices often range between $150,000 to $250,000 USD.

Monumental
Monumental ball machines include our most ornate and showstopping sculptures. These machines are typically larger than 450 cubic feet and often include elaborate overhead devices such as a giant moiré wheel or a multi-story tower with dynamic spinning parts. These machines typically begin at $250,000 USD.
Our Limited Edition is a series of 100 ball machine sculptures. Each sculpture is numbered, signed, and dated by the artist, George Rhoads. The piece includes devices such as Randomizing Pendulums, a Wood Block series, a Bounce & Catch, and Hammer Bells. In this series, we are offering two color palettes: 50 “warm” and 50 “cool” sculptures. Both machines are 3’ x 5’ x 10” and can be wall mounted or built into a case for an additional cost.
Poetry in Motion

Location: Comer Children’s Hospital, Chicago, IL
Dimensions: 7’ L x 1.5’ W x 7’ H (including base)
Budget: $65,000 USD

Poetry in Motion is a playful ball machine sculpture with an animal theme inspired by a series of seven poems. The goal was to make these poems come to life. Inspired by poets from Matsuo Basho to Ogden Nash, the sculpture manifests the lively quality of their words. This small sized ball machine features personalized theming, handpicked devices and a large base.

The personalized theming on this ball machine includes fun, children-friendly painted images of a fish, turtle, bright red cardinal, and green wooden frogs. The colorful animals pop against the white track. Poetry in Motion contains handpicked devices such as Helices, Hammer Bells, a Pin Board, and Loop-Loop and some variations on devices such as the Nodding Dragon and the Snake Kinky Tube. There is also a large 2’ base which lifts the ball machine off the ground giving the illusion of a larger machine at a lower cost. The base was painted dark blue to complement the light blue wall behind it.
Symphony of the Spheres

**Location:** Private Collection, Naples, Florida

**Dimensions:** 9’ L x 3’ W x 6’ H

**Budget:** $113,000 USD

Symphony of the Spheres is a whimsical ball machine sculpture we created for a private collector in Naples, Florida. The sculpture has three tracks and includes nearly twenty devices. This medium-sized ball machine covers the majority of the wall and creates a fun focal point in the room. A curvilinear exterior frame, arched connections between track and a rotating screw ball lifter were all customized for this machine. Fanciful theming was used for the Symphony of the Spheres and includes the Wood Block Frogs, a Nodding Dinosaur, Chinese Dragon Dumper and a bright color palette. There are also singular devices such as an elevator lifting a hot air balloon, an extra long Helix, and 3&3 Dumper that collects balls and releases them in different directions.
Dream About Shirasagi

**Location:** Japanese Railway, Himeji Station, Himeji, Japan  
**Dimensions:** 6.6' L x 6.6' W x 9.8' H  
**Budget:** $210,000 USD

*Dream About Shirasagi* is a poetic ball machine sculpture based on the fictional story of an egret (shirasagi) circling the sky, appearing to children in dreams and leading them to Himeji castle. The ball machine acts like a dream with the ball moving in random and unpredictable ways. It contains unique devices like large wooden organ pipes that play low resonate tones reminiscent of traditional Japanese instruments. There are also personalized elements like a handmade miniature of the Himeji Castle, a Randomizing Pendulum with a small white egret and a larger egret flying majestically overhead are used to tell the dreamlike story with theming. Viewers can enjoy this large, freestanding ball machine from every angle. People are able to move around the machine exploring the sculpture’s three tracks and discovering new details.
Archimedeans Excogitation

**Location:** Museum of Science, Boston, Massachusetts
**Dimensions:** 8' L x 8' W x 27' H
**Budget:** $536,100 USD

Archimedeans Excogitation is a dynamic ball machine sculpture exploring the theme of “a new way of seeing.” Created for Boston’s Museum of Science, the sculpture uses visual and kinetic elements to explore how we see and offer us new ways of looking at art and the surrounding world. Archimedeans Exogitation contains nearly thirty moving or sound-producing devices with two different ball sizes featuring billiard balls in the bottom section and small bowling balls in the top. It also features a constellation of moving shapes spinning and twirling around the machine. People standing on the stair landing and balcony can experience a unique view of the top section's delightful moving parts. This ball machine stands at a showstopping scale, rising nearly thirty feet into the air and can be enjoyed by viewers at the ground level as balls and devices dance in front of them and over their heads.
**Durability and Warranty**

Every sculpture is tested for 1,000 hours prior to installation and comes with an ownership manual, maintenance supplies and a one-year warranty. We fabricate the machines using welded steel construction, and we use the finest quality materials. Parts are powder coated for maximum durability and long-lasting color. Virtually all 250 machines we have built are still in operation, which is a strong testimony to their durable construction.
We hope that you now have a better understanding of our Ball Machine Sculptures. If you are interested in purchasing one, we would love to hear from you! Design and fabrication times depend on size and complexity, but generally range from four to twelve months. Initially, we will discuss logistics, such as what type of theme you have in mind, what the space looks like and what the budget will be. After this conversation, we can brainstorm and outline your options for moving forward. Even though we can create ball machines similar to those you've seen thus far, we love to work with clients to take them in new out-of-the-box directions. We can create drawings, colored renderings, and three-dimensional models to help you visualize your ball machine. We have a vast library of images of our ball machines, which we can go through to further spark your imagination. We have extensive experience integrating artwork in both public and private spaces and are happy to work with design teams, contractors, and maintenance staff to successfully install your Ball Machine Sculpture in a new or existing location.

We look forward to working with you!