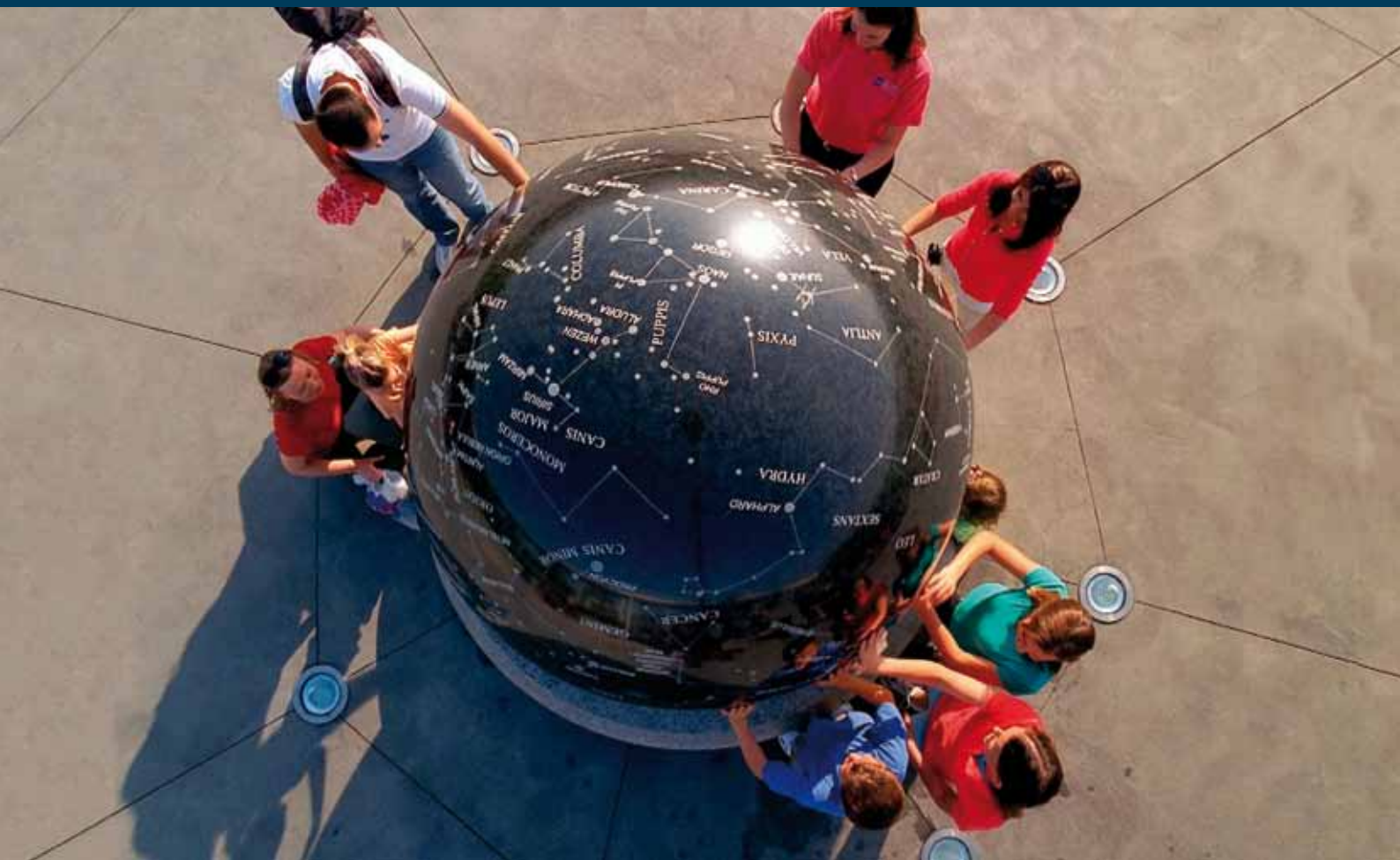




Floating

Spheres/ Objects



Adrian College

The Collaborative Inc., KL Companies, Adrian MI
2013



Incorporating sustainable design principles, the new circulation space of the Jones & Peelle Science & Business Center at Adrian College brings natural light into the building through skylights. The space is subtly infused with a spirit of the sciences:

The tools and methods of DNA sequencing, a patterning well-known within the scientific community, are cut into the curved stair railing made of 3/8" thick plate steel.

Weighing 2.4 tons a Floating sphere fountain occupies the center of the new entrance hall. With a touch of the hand, the 3' diameter sphere spins weightlessly on a thin film of water, evoking planetary notions.

Both sphere and base stone are made of the bluish Norwegian hard stone *Labrador*.

Hanseviertel Hamburg

gmp Architekten von Gerkan, Marg und Partner
2012

With a total rentable area of 484,376 ft², Hanseviertel opened in 1980 and was one of the first commercial centers in Germany. In the course of its redevelopment in 2012, Kusser installed a Floating sphere made of green Brazilian granite, which is 7' in diameter and weighs 14.33 tn. The golden inlays on the surface of the sphere (artist: Tilman Fulda) depict the trade lines of major shipping companies in Hamburg.





Rimini Congress Centre

gmp Architekten von Gerkan, Marg und Partner
2010

Measuring 6' 8", the Floating sphere rotates weightlessly in the center of a water basin.



Private Garden Munich

Olly Bauer Architekten, LUZ Landschaftsarchitektur
2010

Water streams rise from the stone base in the region of the floating disc's missing segment. As the disc rotates above the stone base at exceptionally low water pressure, a moving field of jets is created.

This solid granite basin measuring 14' 5" x 14' 5" was built in the factory, as was the 6' 2" floating disc. The entire fountain system was installed in the garden and ready for use within a few hours.



Children's specialized Hospital New Brunswick

Thomas Biro Associates, LLC
2008





A curved, about 13' long granite runnel connects the Ø 2' 6" Floating sphere to the Ø 7' granite fishpond. The Floating sphere fountain, runnel, and fishpond were prefabricated and tested in Kusser's plant in Germany before shipping.

Getting the ball rolling



Basic physical principles and very accurate fabrication of the stone by the world leader in the field allow granite objects weighing tons to float on air or water. In 1986, with machines designed by Josef Kusser senior, Kusser Granitwerke produced, for the first time in the world, a granite sphere that was so precise it could revolve with control and effortless rotation. Even children can easily set large floating objects in motion.

1 Floating ring,
Tittling Coarse Grain, $\varnothing$ 285/ 235 cm
(9' 4 1/4" / 7' 8 1/2"), b: 70 cm (2' 3 1/2")
Germany



2 Floating sphere,
New Belfast granite,
 $\varnothing$ 180 cm (5' 11"),
Norfolk Zoo, Norfolk, VA
USA, 2002



3 Floating ring, Meerfelsen granite,
 $\varnothing$ 180/ 130 cm (5' 11" / 4' 3"),
b: 60 cm (2'),
Kirchplatz Birkenfeld,
Germany, 2001



4 Floating ring on Floating disc,
Dark Labrador granite,
ø 150/ 120 cm (4' 11" / 4'),
b: 50 cm (1' 8")



5



6



7

5 Floating ring, ø 140 cm
(4' 7"), Fürth, Germany, 2001

6 Floating ring,
ø 90 cm (3'), St.-John's
Children's Hospital,
Springfield, IL, 2009

7 Floating ring,
ø 150 cm, (4' 11")
Dubai, 2004

8 Floating sphere with map
of the world, ø 150 cm
(4' 11"), New Belfast granite
4, 8 Private garden in
Vernal, UT, USA, 2005



8

Floating soccer balls



9 Floating sphere of white and black marble,
ø 120 cm (4'), new soccer complex Overland Park, KS, USA
Arch.: DLR Group, Omaha, NE, 2009

10 Floating sphere, Tittling
Fine Grain, ø 200 cm (6' 6³/₄"), Munich
International Trade Fairs, FIFA World Cup 2006



New world record:

2.70 m (8' 10") Floating sphere



The floating solid granite sphere, currently the largest in the world, was installed in front of the new Donbass Arena of FC Shaktar Donetsk in the Ukraine. Pressure of just 2.4 bar (35 PSI) is sufficient to allow the 31 ton sphere of solid granite to float on its base stone.

12 Floating sphere, Tittling Coarse Grain, $\varnothing$ 270 cm (8' 10"), weight: 30.85 tons Donbass Arena, Donetsk, Ukraine, 2009



11 Quarrying the 82 ton granite block from which the 270 cm (8' 10"), 30.85 ton sphere of Tittling Coarse Grain was produced in one piece.

11

Sculptures on Floating discs



13 Floating disc, $\varnothing$ 280 cm (9' 2"),
designed by Wilhelm Schneider,
Tittling Fine Grain with 5 m (16' 5")
high stainless steel sculpture in front of
the Rhein-Neckar Arena of TSG 1899
Hoffenheim, 2008

13

14 Floating disc, $\varnothing$ 180 cm (5' 11"),
designed by Wilhelm Schneider,
Tittling Fine Grain, with 4 m (13' 1 1/2")
high stainless steel sculpture St. Leon-
Rot Golf Club, 1996



14



15

Combination Floating objects: Floating ring on Floating disc

15, 16 Lagoon Park, Farmington, Utah, USA, 2005, VCBO Architecture, Salt Lake City, UT, USA 16 Floating Sphere, ø 100 cm (3' 3")

15 Floating ring, ø 150/ 120 cm, (4' 11" / 4'), b: 50 cm (1' 8") on Floating disc, base stone: 228 x 228 x 55 cm (7' 6" x 7' 6" x 1' 10")



16

17 Floating sphere, ø 150 cm (4' 11"), Multicolor Red, Celebration City Amusement Park, Branson, MO, 2003



17

Combination Floating objects



18 Floating wheel, $\varnothing$ 200 cm ($6' 6\frac{3}{4}''$), b: 60 cm (2'), Azul Macaubas quartzite on Floating disc, $\varnothing$ 250 cm ($8'3''$), h: 60 cm (2'), SAP Walldorf, 1998

19 Floating sphere, $\varnothing$ 111 cm ($3' 7\frac{3}{4}''$), Azul Macaubas quartzite on Floating disc, $\varnothing$ 151 cm ($4' 11\frac{1}{2}''$), h: 35 cm ($1' 1\frac{3}{4}''$), Japan, 1997

18



19



Objects weighing tons stacked one above the other can be set in horizontal or vertical rotation on wafer thin films of water. The individual parts of this water feature are so exactly coordinated with each other that minimal pressure is needed to lift the floating elements by some tenths of a millimeter and support them with only hydraulics. A movement which is free from wear is created. Together with the durability of the granite, this allows an unlimited life expectancy of the floating object. A unique feature of the Kusser sphere is the alternating direction of rotation which is hydraulically controlled by Kusser's patented turning equipment. It causes the surface to remain equally wet and shiny.

20 Counter-rotating Floating discs, $\varnothing$ 160/ 230/ 300 cm (5' 3" / 7' 6 1/2" / 9' 10") with up to 240 cm (7' 10 1/2") high granite sails, Sheikh Hazza Palace, Abu Dhabi, 2003

Floating Ring on Floating Disc

Gerlinger GmbH & Co. KG, Nördlingen • Ring $\varnothing$ 8' 2", Disc $\varnothing$ 6' 11"
2011



Town hall square Gersthofen

Floating gear wheel, $\varnothing 7' 6 \frac{1}{2}''$, artist: Reinhold Gröbl
1994



Ripley's Believe It Or Not! Baltimore

Ripley's Entertainment, Inc. • Floating sphere $\varnothing 4' 7''$
2012

Floating discs with changing jets



21, 23 Floating disc, ø 450 cm
(14' 9"), with changing jets, Coburg
Artist: Manfred Mayerle, Munich,
2007

21



22

22 Floating discs,
ø 158, 202, 226 cm
(5' 2 1/4", 6' 7 1/2", 7' 5"), with
field of moving jets, Munich,
1995 Artist: Paul Müller,
Munich

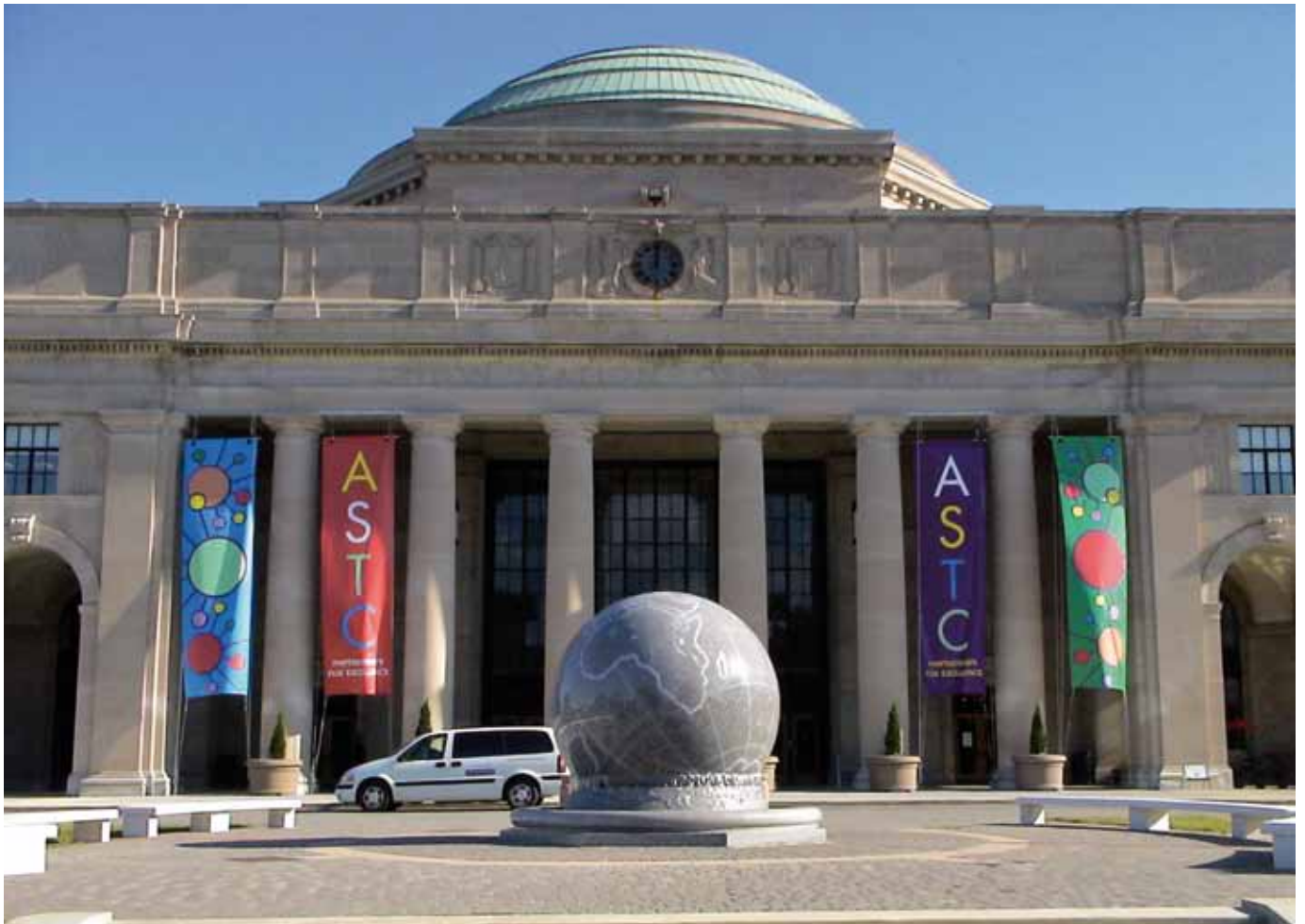
24 Floating disc,
ø 150 cm (4' 11"), with
field of moving jets,
Weserpark, Bremen, 2004



23



24



25-27 Floating spheres, $\varnothing$ 265 cm (8' 8"),
27.5 tons and $\varnothing$ 71 cm (2' 4"), Richmond, VA,
Arch.: Boynton Rothschild & Rowland,
Richmond, VA, USA, 2003

25



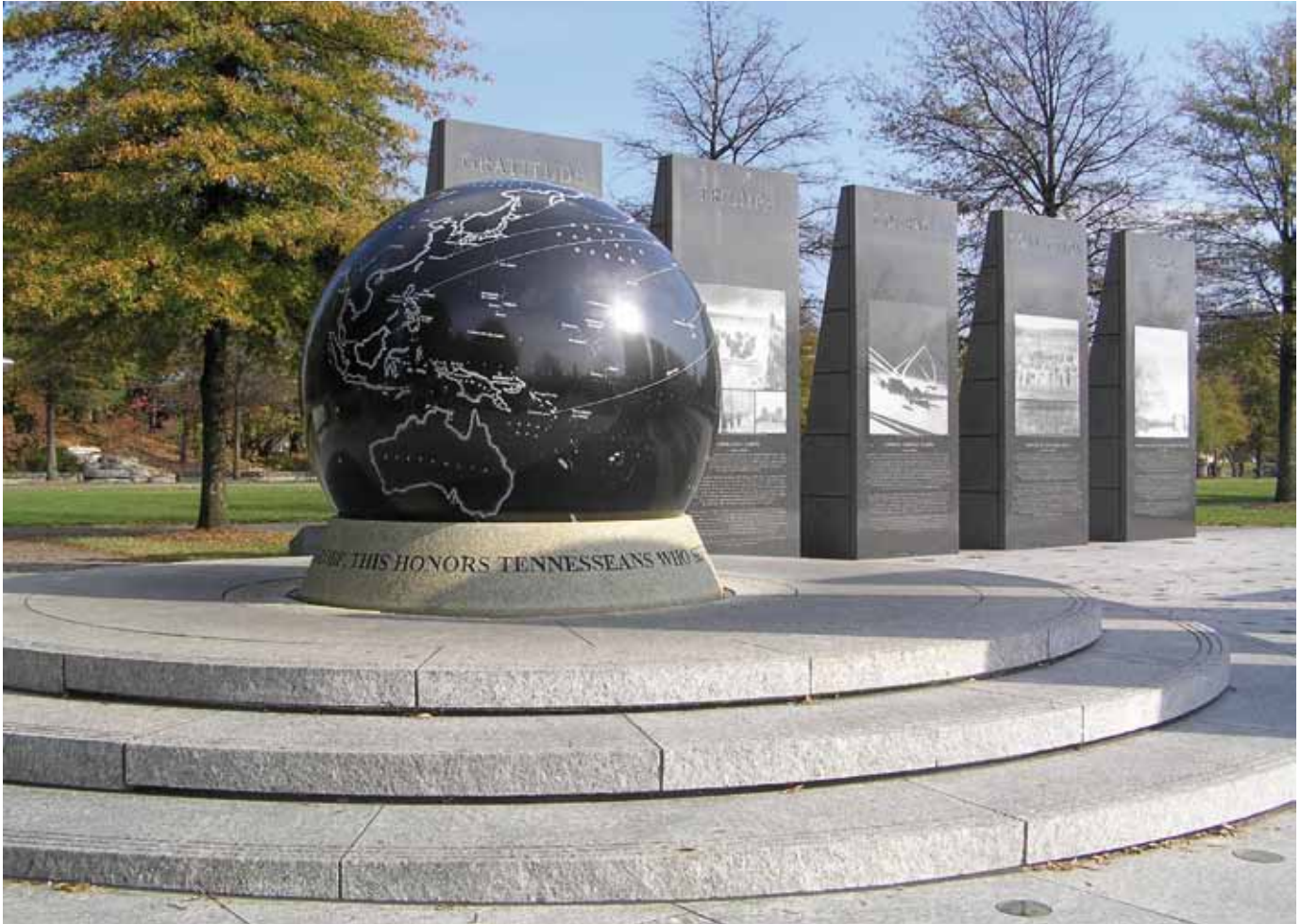
26



27

A 265 cm (8' 8") and a 71 cm (2' 4") Floating sphere portray the relationship of the earth and moon in regard to size and distance in a scale of 1: 5,280,000 at the Mary Morton Parsons Earth Moon sculpture in front of the Science Museum of Virginia.

Floating Sphere Memorials



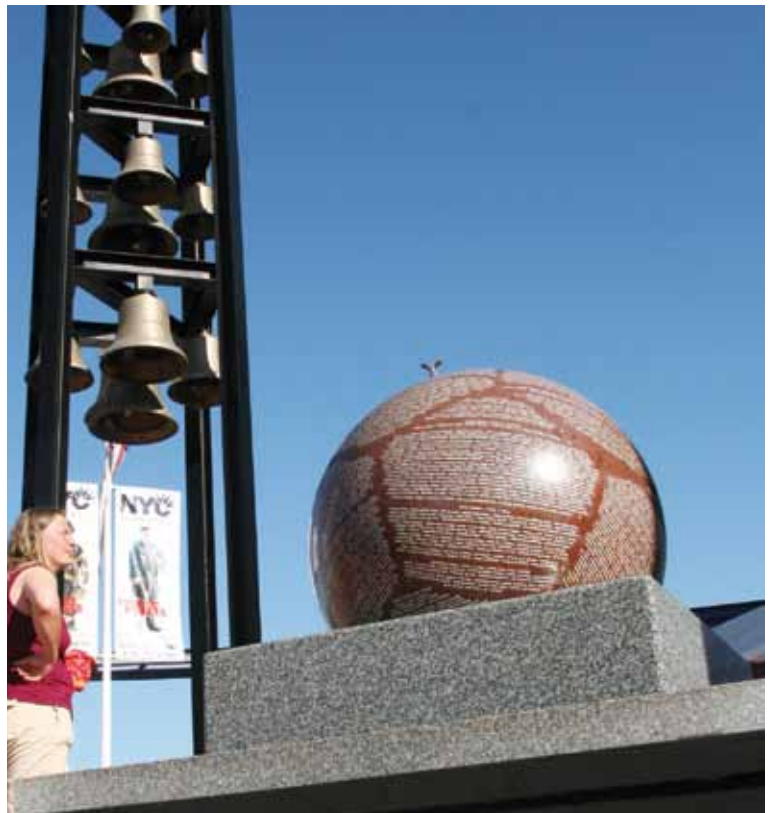
28 World War II Memorial,
Nashville, TN, USA, 2001
ø 180 cm (5' 11"), Tuck Hinton
Architects, Nashville, TN, USA

28

29, 30 Cal Expo 9/11 Memorial, Sacramento, CA, USA, 2003
In remembrance of the victims of the September 11th 2001 attacks, the names
of the 3,071 victims are engraved on the Floating granite sphere (ø 120 cm, 4').



29



30



31 Waukegan Veterans Memorial, Floating sphere, $\varnothing$ 90 cm (3'), Waukegan, IL, USA, 2005, photo: Mike Pavelich, Waukegan Park District

31



32 Glendale Veterans Memorial, Floating sphere, $\varnothing$ 120 cm (4'), including granite armed forces monuments and engraved granite sidewalk pavers, Glendale Heights, IL, USA, 2004

32

33 9/11 Heroes Memorial, City of Fenton, MO, USA
Floating sphere, $\varnothing$ 80 cm (2' 7 1/2"), Archdesign Collaborative LLC, St. Louis, MO, 2005



33

21

Visitor centers with Floating spheres



34 Floating sphere with 88 named constellations and over 1100 stars, ø 180 cm (5' 11"), Kennedy Space Center, FL, BRPH Architects-Engineers, Melbourne, FL, USA, 2007

34

35 Christ Fellowship Church, ø 152 cm (4' 11 3/4"), Palm Beach Gardens, Florida, USA, 2008

36 Floating sphere, ø 90 cm (3'), Kansas City Area Transportation Authority, Arch.: Rafael Architects, Inc., Kansas City, MO, USA, 2007



35



36



37 Floating sphere with engraved world map, $\varnothing$ 117 cm (3' 10"), Transocean Houston, 2006
Gensler Architects, Houston, TX, USA

37



38 In the Canyon Visitor Center of the Yellowstone National Park the known geological hotspots of the world are displayed on a Floating sphere. $\varnothing$ 90 cm (3'), USA, 2006

38

Focal points in public spaces



39 Greenville Hospital,
ø 90 cm (3'), Greenville,
SC, USA, 2008

40 Floating sphere,
ø 100 cm (3' 3"), in
Houssen, France, 2005

39



40



41 Floating sphere,
ø 150 cm (4' 11"), SAP
Walldorf, Germany, 1991

41



Expert precision and quality of workmanship are not only true for the natural stonework but also for the fountain technical equipment which distinguishes Kusser Fountainworks from its competition. Floating spheres and objects can be installed quickly and easily anywhere in the world as they are completely prefabricated in the factory, tested, and shipped together with complete and fitted technical equipment and installation drawings.

42 Floating sphere,
ø 95 cm (3' 1"), Mende,
Lozère, France, 2008

42

Themed designs



44 Floating wheel with engraved logo, ø 100 cm (3' 3"), Germany, 2003

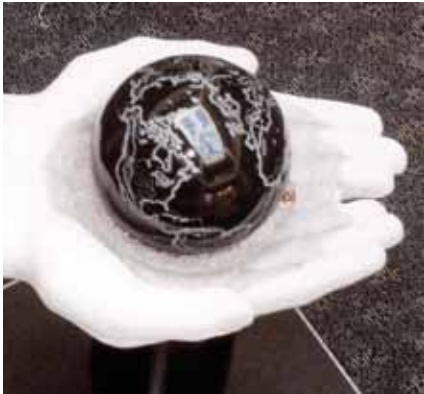
45 Floating sphere, ø 70 cm (2' 3 1/2"), Linz, Austria, 1995

46 Floating sphere with map of the world in sculpted hands, ø 50 cm (1' 8"), Germany, 2000

47 Indiana University-Perdue University Columbus, ø 90 cm (3'), with granite library books, Columbus, IN, USA, 2007



45



46



47



48 Floating sphere in the wading pool of Michaelibad Munich, Artist: Manfred Mayerle, 2001

49 ø 150 cm (4'11"), with engraved dragon, Rendezvous Hotel Singapore, 1998

50 Floating sphere, ø 120 cm (4'), on granite poker chips and roulette wheel, Casino Innsbruck, Austria, 2000

51 ø 100 cm (3'3") Ettelbrueck, Luxembourg, 1997

48



49



50



51

With decades of experience, patented machines, and control devices, extraordinary ideas can be turned into reality. Kusser's highly qualified technicians, architects, and engineers ensure that these ideas are realized to their optimum potential.



Kusser Graniteworks USA, with its division, Kusser Fountainworks, is a subsidiary company of Kusser Granitwerke – a family business with almost a hundred years of history in the quarrying and processing of natural stone. It currently employs some 100 people. A long-standing tradition of exceptional craftsmanship, state-of-the-art machinery maintained by the firm's own specialists, and internal planning teams of technicians, engineers, and architects have helped establish Kusser as one of the world's leading companies in the natural stone industry. In 1989 the first Kusser fountain was installed in the United States. Since 2004, the successful acquisition of the former US distributor has established Kusser Graniteworks USA as a permanent presence in the US market. The following brochures provide more detailed information about Kusser products and services:

- General company information, "Designing with natural stone"
- Natural stone for indoor spaces
- Natural stone for the outdoors
- Prestressed granite
- Kusser Fountain SYSTEM
- Fountain technology
- Floating spheres/ objects
- Implementing works of art

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