The most striking thing about Vulcan is his size: colossal!

The tradition of huge memorials dates back to the Egyptian Old Kingdom. The Greek historian of the 5th century B.C., Herodotus, first used the term colossus in speaking of the enormous statues of the Egyptian pharaohs Amenhotep III and Ramesses II.

The major colossus of the ancient world and one of the “Seven Wonders of the World,” the Colossus of Rhodes, was, like Vulcan, a monument raised by a city. This immense statue of the sun god Helios, erected in 290 B.C., was a figure 105 feet tall. While an earthquake felled it in 224 B.C., its fame and memory linger on.

The Roman emperors also erected colossi of themselves. The Emperor Constantine’s seated figure, 30 feet high, dominated his basilica in Rome. Only the marble head, 8.5 feet tall, about the height of Vulcan’s face, survives.

The 19th century admiration for classical antiquity and especially for the Roman world brought about the revival of colossi. The greatest of these is the Statue of Liberty by Frederic-Auguste Bartholdi. Bartholdi had gone to Egypt as a young man and had seen the colossi there. Every American must have been impressed by the Franco-American joint venture which set a colossus in New York harbor, taller than that at ancient Rhodes. Liberty already had her place there when Giuseppe Moretti first came to New York from Italy in 1888. Moretti’s earliest job in America was working on sculpture at the base of the monument.

Dimensions are heights of the figures only, without base or pedestal. Sources disagree about heights; the more conservative measure is given here. Dr. John Schnoorenberg
Weight of Figure: 100,000 lbs.
Weight of Cast: figure+anvil, block, hammer, spearpoint: 120,000 lbs.
Weight of Concrete Fill: 120,000 lbs.
Weight of an Alabama-made Mercedes M-Class Sports vehicle: 6,005 lbs.
Weight of a Honda Accord, to be made in Alabama: 3,990 lbs.
Vulcan + concrete fill = weight of 60 Honda Accords or 40 Mercedes M-Class sport vehicles

Fabrication and Assembly: The statue was cast and assembled in 21 pieces — feet and lower legs, upper legs and hips, waist, chest and back, etc. — bolted together internally.

Bolt Connections: The castings for the statue are held together by large bolt connections.

Sleeve Connections: Each casting has a tapered end which is inserted into a sleeve at the end of the adjoining piece. The bolts are attached to a flange at the end of this sleeve.

Pedestal Connection: According to the architect's 1939 structural drawings, the statue is connected to the pedestal by bolts into Vulcan's feet and by steel rods which extend 10' up the statue's legs into the concrete fill.

Pieces (listed in disassembly order)
Pounds (not including concrete fill)
1. Spearpoint ........................................... 350
2. Right Hand (hollow) ............................... 1,000
3. Right Arm (hollow) ............................... 1,500
4. Right Arm (hollow) ............................... 1,500
5. Right Shoulder (hollow) ......................... 2,000
6. Left Shoulder (hollow) ............................ 2,000
7. Left Arm (hollow) ................................. 2,000
8. Left Hand (hollow) ............................... 1,000
9. Head (hollow) ....................................... 15,000
10. Hammer ............................................. 300
11. Anvil (hollow) ..................................... 6,000
12. Anvil Block (hollow) ............................. 6,700
13. Anvil Block ........................................ 7,000
14. Chest (concrete filled) ......................... 10,000
15. Waist (concrete filled) ......................... 10,000
16. Hips (concrete filled) ......................... 10,000
17. Thighs (concrete filled) ....................... 10,000
18. Right Knee (concrete filled) ................. 5,000
19. Left Knee (concrete filled) .................... 5,000
20. Right Foot (concrete filled) ................. 12,000
21. Left Foot (concrete filled) ................. 12,000

Sources of Information:
Birmingham Historical Society's Vulcan and His Times; press accounts from the time of the statue's casting, 1903-1904 and in the 1930s; and historic documentation drawings by Richard A. Reden, Historic American Engineering Record-National Park Service.

Technical adviser: Mark Davis
During the early 1990s, a National Park Service survey of historical sites identified the potential of Vulcan and Vulcan Park as both a National Historic Landmark candidate and as a visitor center for the greater Birmingham area. As part of this multi-year study, the Historic American Engineering Record (HAER), a Washington-based division of the National Park Service, prepared measured drawings, documentary photographs and text on Vulcan and his setting in the 1930s.

This drawing of Vulcan Park is both documentary and interpretive. It captures in one image the statue of Vulcan and its symbolic placement in a prominent park setting over the iron ore vein that supplied Birmingham's early industry. Historic American Engineering Record-National Park Service; illustrator: Richard K. Anderson, Jr., 1993.

A series of photogrammetric aerial views were taken as part of the 1998 documentation. Historic American Engineering Record-National Park Service; photographer: Jet Lowe.