





## "Signals" Rutgers Running Man

New Brunswick, New Jersey

Welcoming visitors to the Rutgers University campus in New Jersey, "Running Man" stands mid-stride at the entrance of the Biomedical Engineering building. Captured in a sprint, the amalgamation of various sized tubes generates a sense of suspended motion as the viewer's eye flows across the ringed body.

With the tubular nature of the basic elements of the structure, Running Man needed a corrosion protection system that would protect the sculpture inside and out. As pieces are dipped into molten zinc during the galvanizing process, zinc flows in and around the tubes, providing equal coverage for both the interior and exterior in one fell swoop. With the durable, protective metallurgical bond created by the galvanizing process, rust will not find any weak spots to begin corrosion.

This is especially important given the sculpture will have to withstand the harsh winters and wet springs of the East Coast year in and year out. This structure actually utilizes a duplex system for corrosion protection, which combines the superior protection of galvanized steel with the additional benefits of another corrosion protection system such as powder coating or paint to extend the life of the piece even further. Because of the additional durability created when using these two systems in tandem, the repetitive, scheduled maintenance for paint on bare steel will be significantly reduced.

Originally, the specifiers were concerned the unusual piece would never survive the galvanizing process, or at least be distorted beyond recognition. With good communication and design help, the galvanizer was able to show almost anything can be successfully hot-dip galvanized. This effective communication led the whole structure to be hotdip galvanized, including fasteners and all steel components. The cost of galvanizing was donated to the artist, who then passed the sculpture on to Rutgers University.

The sculpture posed many challenges, including an unusual type of pipe product and coordinating to ensure the correct weld material was used. The pieces were also carefully vented to prevent distortion and prevent any skimmings from being trapped on the surface during the dipping process. With good ventilation, the zinc was able to flow freely through and around the piece, creating a perfectly smooth finish.

An exceptional finish was one of several strictly monitored design criteria set up to achieve the artist's vision. As all who visit Rutgers will pass by this sculpture, it is particularly important for the piece to stay attractive and corrosion free – and the durable protection of hot-dip galvanized steel promises protection for years to come.

> Galvanizer V&S Lebanon Galvanizing LLC

> > Artist Ralph Helmick

**Steel Fabricator** 

Bob's Welding and Fabrication Jamaica Plain, MA

## civic contribution

