

Pipe Supports for Houweling's Heat Recovery System

Mona, Utah

Houweling's Tomatoes, a world class model for sustainable agriculture, opened its third greenhouse farm located in Mona, Utah. The 28.3 acre farm was built adjacent to an existing Rocky Mountain Power plant with an agreement allowing them to capture flue gas from the power plant stack and utilize the heat and CO₂ contained to grow tomatoes year round.

This environmentally-friendly tomato farm is believed to be the first commercial-scale operation in the world that pulls both heat and carbon dioxide directly from a power provider. This Ultra Climate Greenhouse System built by Kubo is incredibly 'green' with the only water leaving this site contained in the tomatoes. The Houweling's Tomatoes heat recovery system inside its energy building connects to a 10-foot-diameter, 475-foot-long duct from the Currant Creek Power Plant to the greenhouse. The 10-foot-diameter duct stands 25 to 30 feet above the ground suspended by hot-dip galvanized pipe supports.

The pipeline was a major component to facilitate delivery of heat to warm the greenhouse and CO₂ to fertilize the tomatoes. A key factor in selecting a corrosion protection system for the supports was choosing one which would stand the test of time. Because of Houweling's positive experience with hot-dip galvanizing's decades of maintenance-free corrosion performance at their tomato farms located in Delta, British Columbia and Camarillo, California, it was an easy choice to pick hot-dip galvanizing again.

Pacificorp Energy is the owner/operator of the Currant Creek Power Plant, and Rocky Mountain Power supplies the electricity for Houweling's operations. This natural gas fired, electrical generation facility enables Houweling's to operate with a very low carbon footprint by utilizing the exhaust to heat their greenhouse and reduce CO₂ emissions into the environment.

This innovative and sustainable approach to food production allows Houweling's to proudly grow and harvest fresh, tasty, Utah Grown tomatoes in excess of 500,000 pounds weekly, year-round without any negative impact to efficiency or cost of power production at the Currant Creek plant. Utilizing hot-dip galvanizing for corrosion resistance provides maintenance-free performance, allowing Houweling's to focus on growing tomatoes for years to come. ■



Galvanizer

Valmont Coatings - Intermountain Galvanizing

Architect

Burns & McDonnell

Fabricator

Clary Fabrication

Engineer

LEI Consultig Engineers

Owner

Houweling's Tomatoes

Other

Sunroc Corporation; LPS Construction
Pacific Corp/Rocky Mountain Power

Food & Agriculture