

The Anvil Experience

Anvil International Provides Support for the World's Tallest Launch Pad Water Tower

Unique aerospace application requires ingenuity in design and installation.

Project Overview

When rockets and spacecraft launch from NASA's flight facility at the Mid-Atlantic Regional Spaceport (MARS) on Wallops Island, Va., the engine exhaust generates an enormous amount of heat and vibration. A special deluge system pumps water from a 307-foot water tower — the tallest in the world — under and around the launch pad to keep it cool, stable and safe. And what keeps the deluge system safe during these tumultuous takeoffs? Anvil International's pipe supports and pipe rollers.

The Anvil Solution

Sauer Group Inc., the project's mechanical contractor and a long-time proponent of Anvil products, wanted to use Anvil pipe supports and rollers due to their durability and history of quality manufactured products. Anvil was happy to help, though the project had previously only used pipe rollers to accommodate lateral movement in horizontal pipe applications. The 48" vertical header on the launch pad water tower would require 360-degree support after the header turned 90 degrees to horizontal and was threaded through a welded steel channel structural support system. Four custom pipe rollers were at each of the support points inside the channel frames. The other pipes in the deluge system ranged in size down to 8" in diameter and also required custom slide assemblies — Anvil Fig. 439. Anvil worked with engineering to design the supports and provided assistance during installation — demonstrating the team's flexibility and willingness to go above and beyond to meet these unique customer needs.

Anvil piping products used on the project:

- Specially fabricated pipe rollers, Anvil Fig. 76SD
- Structural H slide assemblies, Anvil Fig. 439

Building Connections That Last

Now, when missions launch from MARS to resupply the International Space Station, everyone involved can rest assured that the launch pad will remain cool and safe. In this way, Anvil has helped enable the advancement of the aerospace industry for years to come.



The 307-foot water tower for the Wallops Island deluge system.



Customized specifically for the unique application, the Anvil Fig. 76SD Fabricated Roller.



The custom Anvil Fig. 439 Structural "H" Slide Assembly is in place to support the deluge system pipe.



For more information go to www.anvilintl.com

B U I L D I N G C O N N E C T I O N S T H A T L A S T

