



Data Center Air Conditioning Manufacturer Finds Gorbelt® Interlock System To Be Pretty Cool

Industry:

Heating and Cooling

Product:

Testing assembled pieces in dip tanks

The Problem:

units are large and heavy; forklifts did not work

The Solution:

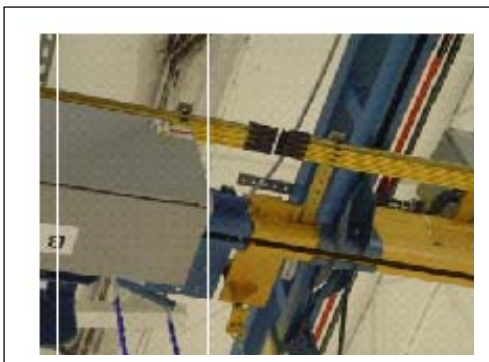
Gorbelt® Ceiling Mounted Work Station Crane with interlock to connect to a Monorail System



Faster, More Streamlined Work Process with no Floor Space Limitations

A manufacturer of network cooling systems in the Midwest was creating a new, larger air conditioning unit to be used in the cooling of data centers. The air conditioning units range in size from 2 to 8 feet in length, 2-3 feet in width, and can weigh several hundred pounds.

At the end of the new assembly process, the units needed to be placed into a large dip tank where they are briefly submerged in water to check for air leaks. They would then be removed from the tank, and either brought back to assembly to repair any leaks, or placed on a nearby conveyor to be finished and prepared for shipping.



When creating the new work space, finding a safe and efficient means to lift and lower the units into the dip tank and then moved again was a primary concern. A fork lift was considered, but maneuverability inside the area would be difficult, and the varying sizes of the components would require frequent adjustments of the truck's lifting blades.

The customer has Gorbelt work station bridge cranes throughout their facility, and wanted to use a similar solution for the new work cell. The problem was that the anticipated

work flow would require moving loads outside of where the system's runways would need to be installed due to nearby obstacles.

The solution was a ceiling mounted work station crane with two motorized 1000 pound bridges, each bridge featuring two hoists with motorized hoist trolleys and a spreader beam at the hook. Beside the system was a 1000 pound ceiling mounted monorail with an interlock system that either bridge could connect with to safely transfer the units outside of the work station crane system.

The end result is a very efficient handling method that never requires a load to be set down or relocated by a fork lift or other method, and allows a single operator complete control of bridge, trolley and hoist position to move the air conditioning units throughout the testing process.

By motorizing the hoist trolleys, the operator can control each one individually to space the hoists the appropriate distance apart to safely lift any size load while maintaining balance. With one set of controls, an operator now picks up the air conditioning unit from the assembly line, positions it over the dip tank, lowers and lifts it from the tank, and then moves the product through the interlock and onto the monorail.

The customer is very pleased with the new solution, citing a faster, streamlined work process with no floor space limitations or fork lift requirements as the highlights.