Challenge Accepted: Uneven Floors, Swinging Obstacles are no Problem for Work Station Crane

Industry:
Foundry Serving Pump Industry

The Problem:
Manual handling of parts causing injuries

The Solution:
Two Gorbel Work Station Cranes with combination of Free Standing supports and Ceiling supports

Gorbel® Systems Flexibility Can Support Many Custom Options

A foundry in the southern part of the U.S. specializes in manufacturing hard-to-find components for pumps, but was having a difficult time finding the right solution to handle the parts. The work area, where the parts are loaded onto grinding tables, was being served by forklifts when possible, but much of the lifting was done manually. With parts that range in weight from less than 100 to several hundred pounds, injuries were taking a toll on employee morale, as well as the company’s bottom line.

With injury reduction as the driving force behind a process change, the plant manager also sought a solution that would not only reduce injuries, but make the whole plant function at a higher level. With a 32’ wide by 80’ long area to cover, finding a single solution that would serve the full area was certainly a tough task. The facility’s floor was uneven, there is a fork lift ramp at one end, and there was a work cell at the opposite end of the shop that needed to remain accessible.

The customer purchased a 2 ton capacity Gorbel work station crane with custom supports to serve the entire work area. By using a combination of support structures, the crane provides complete coverage to the entire facility.

The crane has support at four points, each with a different configuration. On the low end of the sloping floor, the runways are supported with ceiling mounted hangers. The second support point is suspended from the ceiling on one side, which is a high traffic area for forklifts, and a cantilevered support at the other end, where ceiling obstructions are the problem. The third support could not mount to the ceiling due to overhead obstacles, so it features a standard freestanding header. Finally, and at the end of the
system that faces an adjacent work bay that needed to remain accessible, cantilevered supports hold both the runways, and allow a nearby jib crane to move products into the work area.

“We’re very happy with the final product,” said the plant manager. “It shows how flexible Gorbel systems can be by all the support options they offer on their work station cranes.”

The crane not only met the very demanding installation requirements, but the company is happy to report that there have been no worker injuries since it was installed in 2008. The added benefit of having the work area now fully covered by a single lifting solution is that the workflow has also become much more efficient and productivity has increased.