

➤ CASE STUDY: Repair or Replace your Bridge Crane?

The Problem:

An East Coast motor service shop was experiencing chronic problems with a production bridge crane. The 10-Ton, double girder crane was critical to daily production, yet each week a new problem would surface, including festooning malfunctions, the VFD cutting out, and an ominous noise coming from the wheel bearings. The repairs required only temporary shut-downs, but costs were adding up. Also, the persistent problems were a bad sign that the equipment was reaching the end of its lifecycle. A new production crane would be the ideal solution, but the Operations Manager knew this wasn't in the budget.

Shupper-Brickle Equipment was called in to assess the situation and offer potential solutions. At first overview, the basic structure of the crane looked sound, and the wire rope trolley hoist, a 10-Ton Detroit model, was in good working condition. However, the crane's controls and end trucks clearly needed replacing, and the previous repairs seemed to indicate an issue with the original installation. If the girders were not evenly squared, this might have disrupted many daily processes.

Resolution:

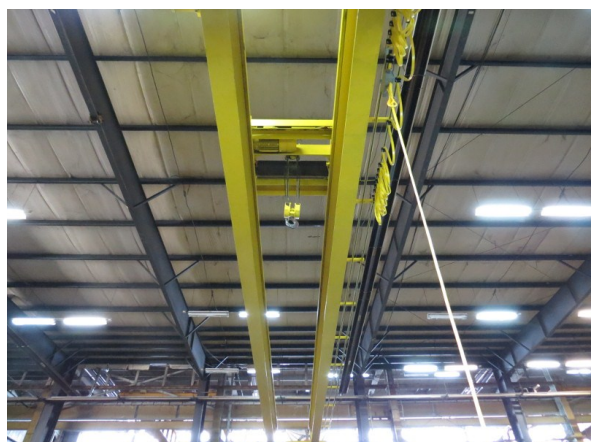
To the Operation Manager's satisfaction, a full replacement was not required, and instead, Shupper-Brickle's engineering department recommended an overhaul of the existing equipment. The crane was removed and transported to our shop for refurbishment by our highly-skilled crane builders and certified welders. First, a custom-designed adapter piece was welded into place to join the old girders with the new end trucks. Then, a laser level determined vertical position, and precision cross-corner measurements ensured that the crane was perfectly aligned.

In a year when steel is a highly-priced commodity, it was a critical cost savings to reuse the bridge girders and ASCE rails. In fact, the option to refurbish saved half the cost of a new crane. The project was completed on schedule, under budget, and returned the crane to its original full-strength production use.

The answer to the classic "repair or replace" question is largely dependent on the components of the original crane. Well made, heavy duty equipment can often be refreshed with new components. However, bridge cranes purchased for cost efficiency only or short-term use, will likely need replacement.



In the shop for refurbishment



Back in service