

Contractor Optimizes Pipe Stringing Operations

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CHALLENGE

Limited space on the right-of-way made traditional pipe stringing operations inefficient and unsafe.

SOLUTION

Use DECKHAND® to perform pipe handling for stringing operations on the right-of-way.

RESULTS

DECKHAND® helped Pipeline Contractors LLC to maximize efficiency and safety of pipe stringing operations in challenging right-of-way conditions.



Pipeline Contractors LLC sought a more efficient and safe pipe stringing operation

Pipe stringing is the process of delivering pipe segments from the pipe yard to the right-of-way and deploying them alongside the ditch. The stringing crew that normally consists of a hauling truck, operators, and laborers is responsible for the stringing operation. The crew relies on cranes, straps, and pipe handling devices to do the loading and off-loading. It is critical to have reliable pipe handling equipment. The first and most important task of the pipe handling equipment is to ensure personal safety of the stringing crew members. The second is to prevent pipe damage. A damage to pipe coating can occur as a result of the pipe being pulled with straps or chains. Also, severe damage to the pipe body can occur should the pipe be dropped. For reference, a typical repair of a dropped pipe may cost as much as \$20,000. The last task is to ensure operational efficiency. The equipment should provide versatility and user friendliness to allow uninterrupted operation with minimum number of people on the ground.

Pipeline Contractors LLC is a pipeline contractor working with U.S. pipeline owning companies. The company delivers safety and efficiency in the most challenging right-of-way conditions. In 2016, Pipeline Contractors was challenged with doing stringing for a pipeline construction project in Louisiana and Mississippi. The right-of-way location was amidst directional drilling rigs which posed extreme challenges to mobility and safety of pipeline stringing operations.

Pipeline Contractors LLC deployed DECKHAND® pipe handling arms

Pipeline Contractors deployed CRC-Evans' DECKHAND® pipe handling arms for loading pipes onto trucks at the pipe yard and for unloading and stringing them on the right-of-way.

DECKHAND® improved efficiency and safety on the right-of-way

The DECKHAND® design features allowed Pipeline Contractors to realize benefits in the following areas: (1) efficiency (2) safety, and (3) equipment maintenance.

The DECKHAND® leverages the hydraulics of excavators to perform operations. A positive grip design allows off-center pipe handling and tilting for up to 15 degrees. These features coupled with the operator's ability to monitor and adjust operating parameters through the in-cab display provided exceptional versatility and safety of the pipe handling operations on the right-of-way where the pipe-handling excavator had to constantly maneuver around many drilling rigs. The stringing crew observed that with other types of pipe handling equipment they would have to constantly remove and re-attach pipe arms or use a bulky crane and straps. This would significantly compromise efficiency and safety of the operation. The company also observed that more people would need to be engaged in the operation, posing a higher safety risk.

In addition to enhanced operational efficiency and safety, Pipeline Contractors LLC have recorded minimal maintenance requirements and operator-friendliness of the equipment. Each of the estimated 5,000 pipe joints were handled 3 times by DECKHAND® on this project.