



Innovators in Motion

CASE STUDY

A Heavenly Idea Saves Time and
Money While Enhancing Safety

EngineeredRigging.com
844.474.4448



A Heavenly Idea Saves Time and Money While Enhancing Safety



When an Engineered Rigging team set out to perform a motor changeout for an industrial plant in Arkansas, it could have used conventional scaffolding for the job. But one team member had a better idea: Deploy portable, lightweight construction platforms called Angel Wings to support workers performing inspection, repair and “hot work” tasks such as welding and cutting.

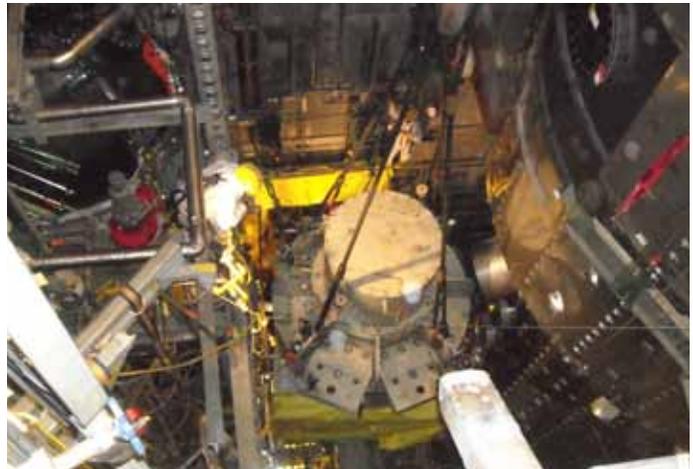
The job entailed the removal of a whip restraint girder to allow access to the motor. The traditional approach would have called for erecting scaffolding on both ends of the girder so workers could extract the bolts holding it in

place, then dismantling the structures so the girder could be removed. Then the process would have to be repeated to reinstall the girder.

On the other hand, the 40-pound, OSHA-approved Angel Wings platforms attach to I-beams using a hook and wing nut assembly. The workers simply lowered the Angel Wings to the girder, where they were able to secure the platforms and get to work removing the bolts.

Engineered Rigging’s use of Angel Wings delivered significant benefits to the plant:

- They eliminated 40 scaffolding tasks, saving time and money associated with erecting, inspecting and dismantling the structures,
- They eliminated 1,400 man-hours from the project and
- The plant calculated a one-time financial savings of \$52,000 based on an \$8,000 capital cost for the Angel Wings and \$60,000 in avoided labor costs. During the life of the plant, total savings are projected to be nearly half a million dollars.



Engineered Rigging’s forward-thinking approach did more than save the client money: its innovative approach garnered the plant a coveted Top Industry Practice Award.

FOR THIS PROJECT, ENGINEERED RIGGING PROVIDED:

Engineering Expertise: ER identified an innovative solution that eliminated 40 scaffolding tasks and greatly reduced labor costs.

Construction: ER skilled craftsmen removed the whip restraint girder and reversed the process upon completion of the motor change out.

Skilled Craft: ER craftsmen also installed the Angel Wings and performed inspection, repair, welding and cutting.

