

PROJECT OBJECTIVES

Goal: Reducing solar field construction costs through improvement of the heliostat design, assembly methodology and assembly tools

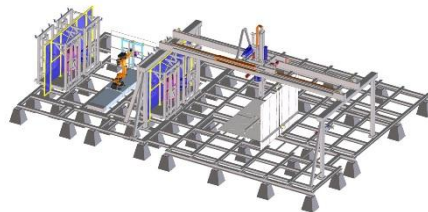
Innovation: The Heliostat assembly process is currently implemented indoors in a controlled environment. The new Heliostat design and the proposed assembly process will be quicker than before and will not require a controlled environment, thus eliminating the need for the construction of expensive, centralized assembly facilities and for permitting processes associated with such construction.

APPROACH

- The proposed assembly process is based on small, cost-effective assembly cells (to be designed and manufactured).
- The assembly cells can be rapidly deployed and relocated both within the solar field and between projects. This will reduce the costly time period between ground breaking and the start of actual construction, ensure production volume scalability, increase use rate, and ultimately contribute to reduction of construction costs.

KEY RESULTS AND OUTCOMES

- FAST preliminary design complete.
- Validation of assembly method concept concluded using FAST Alpha platform
- Heliostat Assembly Delivery rack preliminary design completed
- Required production rates confirmed by advanced computerized production simulation
- FMDS functional specification document completed



NEXT MILESTONES

- Detailed FAST design:
 - System engineering and main electrical components definition
 - Mechanical design
 - Electrical design
- Detailed HADR design
- Supplier selection for FMDS