

Cascade Grain Pipe Racks

Clatskanie, OR

JH Kelly fabricated the complete pipe rack, for use at the Cascade Grain 100mg ethanol plant, in our 40,000 square foot module shop complete with all structural steel, process piping, insulation and labeling. The rack was then shipped to the job site in ten separate modules for field erection on top of the 20 foot structural supports.

The main pipe rack is approximately 400 feet long and 15 feet wide with three level rack sections 11 feet tall. This assembly is supported on 20 foot high structural supports. This pipeway connects the fermentation gallery with the two DD & E process buildings and the boiler pad.

The economic advantages of fabricating the racks in the module shop include the following:

- Enclosed work environment complete with lighting and overhead cranes.
- All work at grade level vs. high work at the job site.
- Reduced trade stacking compared to the job site.
- Approximately 50% improvement in labor efficiency
- Reduces manpower requirements in the field
- Improves schedule
- All precision fit-ups and potential problems resolved in the shop rather than expensive rework in the field.



Special points of interest:

- 400 feet long, 15 feet wide & 11 feet tall
- Shipped in ten separate modules
- Fabricated off-site in 40,000 square foot module shop