KINETICS

2010 National Mechanical Competition

Introduction

Kinetics welcomes competitors to the 23nd Annual Associated Schools of Construction (ASC) competition. Since 1973, Kinetics has earned a solid reputation as a leading provider of high-purity piping, process systems, and mechanical systems in the United States. Over the last few years, we have expanded our geographical reach, and have become a true global provider of specialty piping systems. In addition, we also provide customers a single-source of fabrication, field installation, and maintenance.

Once your school has signed up for the competition and you have determined your final team, please forward a copy of your individual resumes and a team photo that identifies each participant to Kinetics, 48400 Fremont Blvd, Fremont, CA 94538, Attn: Marie Patterson at marie.patterson@kinetics.net.

Problem Description

This year's project consists of a new 26 storey high-rise office building in downtown Phoenix, AZ. The first 11 floors of the building are parking garage, and the remaining floors are future office space. This project consists of the core and shell build out only. Tenant Improvements are slated to begin once space is leased. The RFP requests pricing for the installation of all Mechanical and Plumbing systems in the building. The purchase of some equipment may be included in the RFP as well. The owner has requested that Building Information Modeling be used on this project.

Each team will be given a set of plans and specifications, a general contractors schedule, productivity rates, labor rates, material unit costs, contract, general conditions and a bid form.

Judging Criteria

The proposed problem will require the compilation of quantity take-offs, cost estimating, subcontractor bid evaluation, labor productivity, RFI's, safety, scheduling and contract evaluation. Teams are to estimate footages using P&ID's (process and instrumentation diagrams) and architectural drawings. In addition, team participants' oral presentation skills will be utilized during the presentation and estimate proposal interview. Each team will be required to turn over all documentation and back-up material for requested items in an organized binder.

The successful team solution will be based on the overall project budget, realistic construction schedule, presentation and overall understanding of the scope of work.

Each team will be **scored** on the following items:

20%	Plan and specification lump sum estimate for the mechanical, and process piping systems including: accuracy of bid, subcontractor selection, value engineering items, and presentation of estimate.
20%	Team oral presentation and Proposal Review including: team participation, eye contact, public speaking ability, and information presented.
15%	Construction Schedule including: scheduled activities, logic of schedule, coordination between trades and general contractor, and presentation of schedule.
15%	Bid Form including: Correct bid form, organization chart logic, proposal letter, and contract clarifications and exclusion.
10%	Turnover Package including: back-up information for estimate and schedule, and organization of documentation.
10%	Construction Safety Practices
5%	Drawings & Specification Questionnaire
5%	Ethics

Mechanical Rules

Kinetics will be enforcing the following rules. If any team should be cited for breaking any of the rules, Kinetics reserves the right to deduct points based on the 5% ethics or disqualify the said team. Kinetics also follows the Competition Rules as stated on the ASC website: www.asc67.org.

1. Once the competition begins, the six students are not allowed the use of any outside information.
2. No person besides the stated six student participants shall be allowed beyond the threshold of the door of the designated work room at any time during the competition. The competition begins when the problem statement is handed out until the teams presentation is over.
3. Once a presentation has begun, no person shall be allowed to enter the presentation room.
4. Kinetics discourages the use of “canned” or fluff material in both proposals and presentations.