

JM Coull earns Pyramid Award in Excellence in Construction competition: For ASML Lithography's ultraviolet cleanroom

March 17, 2011 - Construction Design & Engineering

The Associated Builders and Contractors (ABC) honored JM Coull, Inc. with a Pyramid Award in its national Excellence in Construction competition on February 22 at the organization's annual conference in Orlando.

The competition is open exclusively to the recipients of awards in the ABC's regional Excellence in Construction program. Entries are reviewed by a distinguished panel of judges, representing a cross section of construction industry experts, including owners, architects, engineers and other industry leaders. JM Coull was the only Mass. firm to be recognized in the competition.

Capturing the judges' attention was JM Coull's construction of an extreme ultraviolet cleanroom for ASML Lithography, Inc., of Wilton, Conn. ASML produces equipment used by the major global semiconductor manufacturers. The project attracted notice by accommodating over 25 major design changes during the construction phase while meeting the owner's need to occupy the space much sooner than anticipated.

The scope of the project included building an ISO 6 manufacturing cleanroom beneath an occupied, 3-story building. The clear height required by the equipment to be housed in the space demanded the excavation of a pit within the building's existing footprint. The design changes that eventually redefined the project were largely driven by the fast-paced evolution of technology in the dynamic semiconductor industry. Even as the specifications for the building modifications were being developed, changes were being made overseas to the equipment that would eventually be housed in the new space.

The first change enlarged the small, 3-foot-deep pit until it was a huge 70-by-30-by-12 feet. As the project proceeded, changes continued to affect the design, forcing the construction team to adjust on the fly. Eventually, JM Coull would be asked to complete and certify half of the cleanroom so the owner could begin using it before the scheduled completion date. Meanwhile, the excavation of the pit and construction of the rest of the space continued in the adjacent area. At the end of the project, both halves of the cleanroom were seamlessly integrated while maintaining the ISO 6 standards.

The panel of judges for the ABC competition indicated that the logistical challenges overcome by the project team placed the project among the "best of the best" for meeting extraordinary demands while maintaining the highest standards for quality and safety. The national awards program solicits entries from ABC members who placed first within their chapter programs and evaluates them on the basis of quality, complexity, and effective utilization of resources.

This year's panel of judges included Craig Shaffer of SafetyWorks, Inc., Dillsburg, Pa.; Ralph Riley of S&B Engineers & Constructors, Ltd., Houston, Texas; Mike Moak of Keller, Inc., Kaukauna, Wis.; Paul Lamarre of Hall Contracting of Kentucky, Inc., Louisville, Ky.; Rich Baldwin of PCL Construction Enterprises, Denver, Colo.; Bill Holder of Starcon International, Inc., LaPorte, Texas; Kirk Mobley of

Mobley Industrial services, Inc., Deer Park, Texas; and Michael Caughey of Starcon International, Inc., LaPorte, Texas.

JM Coull is a design-build and construction management firm specializing in facilities for advanced technology, life sciences, education, healthcare and manufacturing. From its offices in Maynard, Mass., and Shelton, Conn., the firm services clients throughout New England.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540