3D?

By Ron Reece

Increase Performance, Inc., (IPI) is a company that specializes in revamps and expansions of fired heaters and furnaces. IPI uses 3D modeling to show clients the possible solutions for their aging fired heater equipment. Using Solidworks along with Excel, IPI creates a model that thoroughly illustrates how our customers can run efficiently and be cost productive.

To be able to better serve our clients, Increase Performance, Inc. uses a 3D modeling software process that reduces costly errors in the process of design, redesign, revamps, and expansions of fired heaters and furnaces. IPI has operated on 3D modeling for several years, ensuring our customers an impressive result. IPI recognizes that time is money and one of our top priorities is to demonstrate superb time management to our clients. The management of time is vital in turnkey projects; without 3D modeling, this aspect is virtually lost.
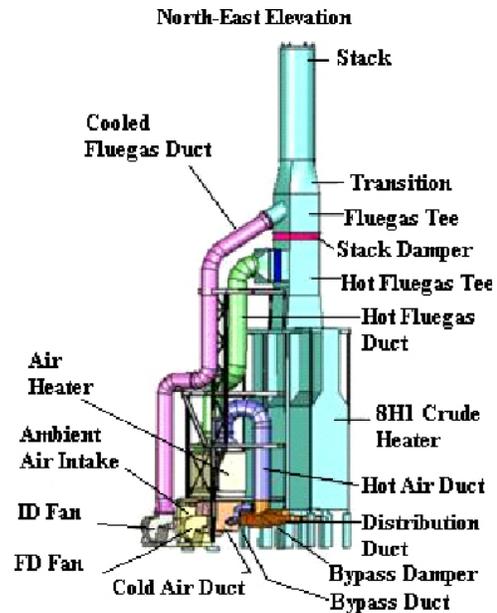
Recently a job, in Utah, was designed using this 3D effort. The customer's demands were precise and the effects of their revamp needed to be efficient. At the same time, the foot print for the equipment was modest. Employing 3D drawings, IPI was able to squeeze the appropriate equipment into the fixed space allotment. If IPI had not used 3D, the project would have been extended. Late in the design effort, it was discovered that a sewer line below the surface was causing a direct interference with the new concrete piers. Countless hours would have been spent re-working the design if it was drawn in a 2D type software package. The 3D package enabled IPI to make a few dimensional changes and all of the associated equipment was relocated. The engineers at IPI have many years of experience using 3D software and utilize 3D to an extensive degree. IPI has developed several specific programs that tie Solidworks with Excel. By using this method, our engineers at IPI can key in several major component dimensions and configurations into an Excel program. The IPI program then allows Excel to drive the Solidworks model, saving countless hours of design time. This method of design throughout the IPI component library helps to reduce cost which in turn, helps the customer maintain his or her budget.

IPI is instrumental in major revamps and we understand cost is always an important function of any deliverable project. Costly mistakes always affect the bottom line for IPI and its customer base, therefore IPI spares no expense on technology and its application.