



Client is the largest distributor of industrial, medical, and specialty gases and related equipment and the third largest distributor of safety supplies in the United States.

#### Client's Objectives

Client needed a way to enhance its e-Commerce initiatives via the Client corporate web site. One way to do this was to enable customers to check if certain gas mixtures were feasible in order to expedite the online ordering process for its wide array of customers across North America. Previously, gas mixtures were manually calculated by only Client associates who would then notify customers if the desired gas mixtures were feasible. This not only expended more time in the ordering process, but also left room for human error in miscalculating customer requests. CTI was chosen to develop a way for client' customers to order mix gases directly on their web site. A previous gas mixture feasibility project successfully implemented by CTI for client' client/server environment led to the assignment of this project for CTI's consultants.

#### CTI's Role

Since this project served Client' business-to-business needs, CTI needed to produce an application that would provide a streamlined interface that could calculate the feasibility of mixing a myriad of gases and offer help and ordering options for Client' customer base. A page for inputting mixtures contained a three-step process with Help Pages linked to each step in aiding customers with their queries. The first step involved choosing the cylinder grade and style for holding the gas mixture. A Help Page describing the cylinder styles and amounts was linked next to these cylinder options. Step two enabled customers to choose the gas mixture components and their concentration levels. When each gas mixture was selected, the gas' symbol, weight in moles and vapor pressure were all displayed in separate boxes next to the scroll down menu of gases. Finally, step three displayed the name of the final gas mixture, its symbol, weight in moles and vapor pressure. Additionally, CTI designed a Results Page summarizing the outcome of the gas mixtures calculated. The gas mixtures, cylinder valve and size previously selected, final pressure and pressure release device for the selected cylinder can be displayed in windows along with the part number for the selected cylinder. Finally, options to order items, print a summary of the results, refine the search or exit the mixture feasibility calculations tool were provided at the end of the Results page.

#### Real Results

Client has improved its customer service and sales initiatives by offering business customers an e-Commerce vehicle for purchasing their wide array of products, namely gases. CTI was able to quickly and successfully create a web-based interface for online users to purchase gas mixtures based on a feasibility test providing details on gases and the cylinders used to contain these mixtures.