



## Marine Corps University Campus Gets a Massive High-Tech Upgrade with Help from D-Tools System Integrator.

When it comes to national security, education for the armed forces is critical.

With that in mind, Karcher Group, Inc. (KGI) responded to a bid request for the complete audio/visual design and installation for two new building at the Marine Corps University (MCU) campus in Quantico, Virginia. Using the D-Tools System Integrator (SI) platform, Karcher submitted a proposal, conceptual drawings and a comprehensive technical game plan for the work at MCU...and won the bid.



VP of Technical Operations, Hong Cheng, uses D-Tools SI regularly, so he was quite familiar with the significant benefits offered by the software including how it replaces the need for multiple individual programs (*spreadsheets, calendars, etc.*). "The need to streamline the proposal process prompted me to begin using D-Tools back in 2008," he says. "Without software that allows us to completely manage our business process, we would have had to

employ multiple skill sets during the proposal process including drawing, database, and life-cycle management in order to simply submit a bid."

The scope of the MCU project was massive, incorporating 38 classrooms, a 300-student lecture hall, 500-person auditorium, centralized help desk for management/support for every room, over 200,000 feet of cabling, and 55 equipment racks. D-Tools' data-driven software makes it easy to quickly and simply create accurate and professional proposals based on a comprehensive list of manufacturer product specifications made available by D-Tools' massive cloud-based product library. Using D-Tools, KGI created a proposal that included AMX Control modules, Enova DGX Matrix Switchers, Biamp DSPs, JBL speakers, Crown amplifiers for the audio arrays, Planar professional displays for a 6X6 video wall and individual configurations, Cisco VTC, Christie Digital CP2230 projector with over 32,000 brilliant lumens for the auditorium, and Final Cut Pro-integrated custom Apple workstations for the AV processing area.



D-Tools' drawing capabilities allow system integrators to create fully detailed engineering drawings in both Visio and AutoCAD. Because everything in SI is data-driven, users can quickly and easily generate detailed Line, Plan, Elevation, and Schematic drawings by simply dragging and dropping products from their product catalog or project file to the drawing surface. Cheng utilized the SI drawing features to generate conceptual line drawings as well as professional functional schematics to show the client that KGI is capable of delivering this sort of technical and detailed AV design.

After winning the bid, KGI hired additional technicians dedicated to the MCU project to ensure its timely completion. D-Tools SI helped KGI manage their technicians by maximizing workflow efficiencies. "D-Tools software allows our AV Design Engineers to work on several projects at one time," says Cheng. "We are able to juggle competing projects and client requests without having to hire additional or re-assign personnel." In addition, the software also helped KGI reduce errors thanks to its ability to recognize when a cable or device had been previously installed or connected.

“ This project is unique because it displays the technological capabilities and innovation our USMC Professional Military Education (PME) offers today’s military student who becomes tomorrow’s leader,” says Cheng. “The USMC has benefited from the installation tremendously. Numerous classes and training sessions have been facilitated at the new buildings, and ceremonies have been hosted in the new auditorium, all thanks to the new AV systems installed by KGI with help from D-Tools System Integrator software. We are proud to have been part of this state-of-the-art campus.”



\* Photos by Kip Dawkins Photography

