

CFM Holdings Limited



Founded in 1979, CFM Holdings Pte Ltd. (CFM) is a well established leader in the precision metal stamping & tooling industry. CFM provides a full suite of stamp metal component tooling service to its customers – from design and fabrication of tools, as well as production stamped components. Since the company's inception, CFM has developed a base of customers world-wide, located throughout Singapore, Malaysia, Europe and the US. Many of CFM's customers include major MNC manufacturers in the electronics industry, such as the Matsushita, Sony, and Brother Industries Groups, in addition to other electronics leaders from Toshiba, Thomson Group and Sanyo Group companies. As part of the company's long term plans, CFM has more recently expanded its customer base to also include clients from the automotive and telecommunication industries.



With manufacturing facilities in Singapore, Malaysia, Indonesia, Dalian (China), and the Slovak Republic, CFM is dedicated to providing world-wide support to their existing customers through other marketing and sales-support offices in California and elsewhere around the globe.

The Challenge

With the rapid pace of innovation in audio

visual products, home appliances, multimedia, digital imaging, and telecommunication, these industries are expected to grow at a clip of 12 percent annually – retail growth in new markets could drive these figures as high as 16 percent. Hence shortening time to market is a common demand echoed by all CFM customers. Conventional stamping tool design based on 2D drafting/CAD environments has long ago reached its full potential, and cannot deliver further incremental gains in productivity now required by the marketplace.

While CFM's customers' product designers continue to stretch design concepts further, even towards product miniaturization and mobility, tool design has become the critical factor required to bring these new innovative products to market on time – requiring CFM to find increasingly better means by which to meet these increasingly demanding needs of its customers.



The stamping industry today is analogous to the plastic mold industry over 10 years earlier; a time when leaps to high productivity in plastic mold design required deployment of 3D product for tool design. Early on, CFM understood the benefit of applying 3D technology to metal tooling and how it would be an integral part of their future growth.

Benchmarking

CFM's management began the research for a better 3D tool design system as far back as 2003. After extensive research and testing, the company finalized on 3DQuickPress and SolidWorks, narrowing the field from other platforms offered

by Autodesk and PTC (Pro/ENGINEER®).

CFM's needs required a system which could handle jobs from low to high complexity, with efficiency gain in each range of designs. The finalist combination of 3DQuickPress and SolidWorks was chosen over the other offerings also due to the short learning curve the products required – rather than adding extra workload on the existing team, the tools they ultimately chose had to decrease the present workload.

Critical to their success, it was also clear that the vendor must provide superior local support to enable CFM to migrate their existing 2D CAD environment to 3D in the shortest possible time. During the decision and implementation phase of CFM's 3D migration, SeaCAD Technologies Pte Ltd was instrumental in enabling CFM's engineers to effectively use SolidWorks and develop the required 3DQuickPress skill sets.

Benefits

- Shortened implementation time through easy-to-use interface and common tool designer commands
- Eliminated design and development errors, and hence shortening development time
- Enabled direct export of punch and cutting profiles from the customized templates, direct export of 3D model data to CNC/CAM
- Provided instant BOM information – both materials and standard components automatically prepared and formatted.
- Eliminated human errors introduced in manufacturing with all detail drawings automatically created. Introduction of 3D isometric views provided clearer understanding further eliminating errors.
- Reduced time through re-use of existing designs and materials
- Enabled smooth transfer of electronic design data to the workshop
- Exceeded expectations by multiples in price/performance

