There comes a time when you realize that using a modified off the shelf system will require you to compromise your process. To satisfy this need for unique deposition systems, T-M Vacuum established the Special Systems Group. This talented group of designers and engineers make it their mission to think outside the box and design and fabricate unique thin film deposition systems that address unusual and specific thin film deposition challenges. Cost effectiveness and efficiency is a given.

Typically these systems have unique requirements stemming from the shape of the substrate or the required process sequence that can not be even remotely satisfied by a standard deposition platform.

Examples of some of these requirements are:

- The need to keep a planetary evaporation chamber under full vacuum during substrate load and unloading
- Manipulation of a 3-dimensional substrate to achieve a conformal PVD coating
- Full batch loading of a drum-side sputtering system where preheat and etch need to be done in a separate chamber
- Dual-side sputtering with full XYZ control of cathode positioning for uniformity
- Dynamic evaporator source-to-substrate distance control for special process considerations

Door Mounted Cathode with position Adjustability in X, Y and Z axis