



Consulting for the Plastics Industry

[www.consultekusa.com](http://www.consultekusa.com)

[www.theplasticfailureanalysis.com](http://www.theplasticfailureanalysis.com)

### Consulting Projects:

- Project for fortune 500 company to determine the root cause for the inconsistencies in the quality of the specially formulated Urethane compound, recommend necessary changes, assist with implementation, and follow up until satisfactory closure.
- Comprehensive tooling design review for a high volume project, recommend changes and assist with implementation.
- Technical consulting for analyzing and quantifying Residual stresses in machined enclosure from machining a Polycarbonate block. Conduct chemical compatibility test for specified Epoxy and Polycarbonate.
- Consulting projects involving Moldflow analysis, FEA, product design and development, failure analysis, tooling, etc. to a major Dental device company.
- Consulting service to a rotary drive and motion control products in the area of product design, product enhancement, FEA, and silicone key pads.
- New product design, material selection, Moldflow analysis, Finite element analysis and tooling procurement projects for a major dental device company.
- Consulting project for a leading bionic and pain management technology firm to develop specialized Injection molding process for proprietary over-molded urethane parts.
- Consulting project for a medical company involving research and development of a micro molded part. Assist in procuring tooling and prototype parts and also evaluate processing techniques.
- Consulting service to a Fortune 500 office products company to assist with tooling procurement specifications, product improvement, and evaluation of molding shops in Mexico.
- Consulting service (continuing) to a medium size Injection Molder to evaluate, recommend, procure and implement ERP/MRP system suitable for manufacturing operation. Provided training as needed.



- Consulting service to a major irrigation company concerning PVC molding problems. The project entailed studying, analyzing, and recommending tooling and process changes to reduce nonconformance. Recommend And Qualify alternate material. Assist with development of PVC hot runner tooling. Assist with DOE and correlation study to establish settings for optimum process and establish process control “P” dimension.
- Consulting service to a medical company specializing in blood filtration. The projects required determining possible cause for premature failure of a critical component using established failure analysis techniques, evaluate tooling and process related problems, recommend and implement changes.
- Consulting service (continuing) to a medical company to design and develop Drugs of abuse test cup and other allied products. Provided technical assistance in all phases of design, material selection, prototyping, tooling, vendor selection, assembly, qualifying, and manufacturing.
- Provided consulting to a conveyor component manufacturer in the area of molding and extrusion, recruit, hire and train production manager, set up tooling, material and process standards, established standard operating procedures, procure new tooling, debug and qualify new molds, assist engineering with product design etc.
- Provided consulting to a medical product marketing company to assist in development of a drug testing Cup and electronic Reader. Provided technical assistance in all phases of design, material selection, prototyping, tooling, vendor selection, assembly, qualifying, and manufacturing. The scope of service extended beyond plastics parts procurement. Developed production mold standards, material specifications and assembly procedures and standards.
- Consulting service to a food processing equipment manufacturer. The services included studying and analyzing premature failure of the turret parts made out of UHMWPE. Researched and recommended new material and helped with conversion and qualification.
- Consulting service to a non-profitable molder in El Paso, Texas specializing in automotive lens molding and large parts. The service entailed observing, studying, and analyzing the financial statements, overall plant operation, competence level of management team, prepare report and recommend changes.
- Consulting service to a Speaker manufacturer. The project involved identifying unknown plastics material used by a competitor with the help of an outside analytical laboratory. Also helped in procuring overseas tooling.
- Consulting and expert witness services to several attorneys in the cases involving product failures, product liability, personal injury etc.
- Technical and training seminars on variety of subjects ranging from Material selection, Processing, Testing and Evaluation, Product design, Plant operation and management, Failure analysis, Automation etc...