



## LTS Quoting Tool - revised 9/28/2015

Activity	Complexity	Description	Setup Cost	Additional Cost	Per
Concept Product Design		Produce illustrative design options for iteration until feature sets are established	\$750-\$1,500		
3D CAD Model	1	Basic geometry, a few features (ie. washers/brackets)	\$30		
	2	Intermediate geometry, several features & operations	\$200		
	3	Complex geometry, numerous features, contours & operations	\$600		
Assembly Model			\$30	\$15	component
Engineering Drawing	1	Basic print, few dimensions, reference drawings	\$35		
	2	Intermediate print, 3-4 views, several dimensions, datums & feature callouts. Exploded assembly drawings.	\$125		
	3	Complex print, 4+ views and detail sections, multiple GD&T references, datums, feature callouts.	\$350		sheet
Gear Design		Planetary Set, full compliment Design, stress, tolerance, non standard profile definition	\$750		
		Spur Gear, full compliment Design, stress, tolerance, non standard profile definition	\$250		gear
Cylindrical Fit Study			\$75	\$15	fit pair
Tolerance Stackup	1	Section Map not Required	\$75	\$25	stackup
	2	Section Map Required (complex assembly, many parts, ie. >5)	\$200	\$25	stackup
BOM	1	< 50 parts	\$125		
	2	> 50 parts	\$200		
Analytical Model (Excel)	1	Basic calculator, a few variables, simple optimization routine	\$300		
	2	Multiple variables, graphical output, complex optimization algorithm, animation	\$1,000		
Finite Element Analysis	1	Basic static structural study, 1 part, simple constraints and loads	\$400	\$125	study
	2	Static structural study, contact regions, mesh refinement, unusual load and constraints	\$750	\$200	study
	3	Advanced static structural study, multiple parts/complex geometry, advanced load and constraint requirements	\$1,000	\$250	study
Photo Renderings	1	Single Part/Material, 800x600 max resolution	\$40		
	2	Up to 5 parts, Various Materials, Surface Finishes, 1024x768 max resolution	\$75		
	3	Large assemblies, Lighted parts, multiple surfaces, high resolution (up to and greater than 1920x1080)	\$175		
Engineering - Day Rate (Full day of dedicated work)	1	Time secured at LTS office	\$1,200		
	2	On-Site, within 60mi of Philadelphia, PA	\$1,500	+ Meals	
	3	Overnight, air or car travel	\$2,000	+ Meals & Travel	
Custom Excel/VBA Software		Every job is unique, billed on a per-project basis	\$750+		
Hourly Rate		General Engineering	\$150/hr		
Training		Excel / VBA / Solidworks / Design Practices: Training session customized per customer requirements	\$150/hr	+ Travel	