

## Value Engineering Fundamentals

### Overview:

All manufacturers have at least some products that fail to meet expectations through a combination of high costs and poor performance. Value Engineering is a highly effective tool for reducing costs and improving product performance. VE is ideal during new product development, but is also applicable to existing products where areas for improvement have been identified.

Specifically, this seminar will focus on identifying and driving down cost in mechanical assemblies while improving quality and performance.

### Course Topics:

1. Understanding product value – What are the sources of value, and which are more important?
2. Guiding principles of lean design – What overarching guidelines help the design to stay lean?
3. The five cost knobs – What ways can we trim cost, and what are the ramifications?
4. Trigger lists – What are the factors that are critical to hitting cost and quality targets?
5. Design efficiency – How can we estimate the theoretical minimum number of required parts?
6. The problem statement – What exactly needs to be done to the part or assembly?
7. The major VE steps – How does VE work, and what are the details?