Determine Need

Determine Functional Requirements and Constraints

Specification

Identify essential problems
Propose function structures
Search for and propose solution principles
Combine and refine into concept variants
Evaluate against technical and economic criteria

Concept

Develop preliminary configurations
Introductory Analysis
Select best preliminary design(s)
Refine and evaluate against technical and economic criteria

Preliminary Design(s)

Refine and complete configuration(s)
Detailed analysis of refined design(s)
Review for errors, manufacturability, and cost
Prepare a preliminary parts list and fabrication drawings

Definitive Design

Finalize Details
Final analysis and verification
Complete detail drawings and production documents

Documentation

Prototype

Test and evaluate

Solution