

Raise Your

A.Q.
(Assembly Quotient)**Pick the Right
Contract Assembly
Partner****Raise Your AQ and Pick the Right Contract Assembly Partner**

Today's product markets are competitive and fast paced as profitable product life cycles continue to shrink. Product innovators increasingly recognize the need to stay focused on core areas of expertise, which rarely include manufacturing. Typically, only larger, vertically integrated companies maintain the staff and facilities enabling them to manufacture devices successfully in-house. So outsourced manufacturing has been accepted, embraced and is growing. In many companies, the question is not "Should we outsource the assembly operation?" It is "Where should we have it assembled?"

But wait. There are several manufacturing functions that must be performed in addition to the assembly operations. The better questions are "Precisely which manufacturing-related functions are we going to do internally and which should we outsource?" and "Where does the assembler's role begin and where does it end?" These questions demand thoughtful introspection, honest self-evaluation, thorough consideration of prospective manufacturing partners, and quite a lot of homework. The result can be viewed as a kind of acquired intelligence — your AQ (Assembly Quotient) — that will help you identify and compare prospective assembly partners.

The first step on your path to finding an assembly partner is to identify the design, manufacturing and distribution functions required to get your product to market. Your listing of required functions – whether sourced internally or externally – is likely to include product design and development, sourcing, manufacturing, assembly, marketing, distribution and servicing, and product improvements.

Conduct this examination to strengthen your AQ to ultimately help you choose the best assembly partner.

1. Product Design and Development

- Can my organization provide complete product and part design capabilities internally or must we outsource specialty areas such as ergonomics, packaging, electrical circuitry, software programming, or component design?



- Can my organization support internal design functions after the product is launched, or is it advantageous to outsource the continuing design requirements needed to provide cost reductions, product improvements, product variations for new markets, or caused by obsolete materials or components?
- Should the outsourced design requirements be contracted to a partner capable of providing a range of related manufacturing services or to several specialized contractors?

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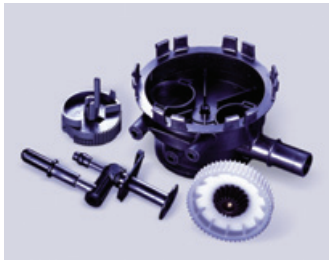
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2. Sourcing and Design of Components and Materials

- Can my organization find the best component and materials designers to refine component part designs, specify the optimum materials, construct tooling, develop production costing, develop build and ship schedules and define quality requirements? If not, should we find a specialized firm for purchasing and component design, or should we expect to outsource these requirements to the assembler?
- If we intend to perform specific tasks internally, can the supplier effectively integrate the tasks we perform into their services?



3. Component Manufacturing



- Should we plan to manufacture the components internally — such as sheet metal stamping, injection molding, circuit board assembly, metal casting — or should we outsource to companies that offer core competency in manufacturing these components?
- For components that are critical to the product's success, can we/should we keep component production internal for cost control, proprietary knowledge control, or quality control?
- Should we give preference to assembly partners offering a core competency with key component materials manufacturing that complements their contract assembly services?
- For the components we outsource, should we work directly with the contract manufacturer(s) or should the contract assembly house work directly with the component manufacturers?
- Can the assembler provide well-developed systems to control scheduling and costs? (e.g. MRP, Kanban, Lean Manufacturing)

4. Non-Manufacturing Services

- Distribution: Can the finished product inventory be warehoused at the final assembly location? How will we distribute the product from the final assembly area to the end user, and can the contract manufacturer perform some or all of this function? Will the product ship across borders, and if so, who will handle this function best?
- Invoicing: How will invoicing be handled?
- Returns: Who will handle product returns? How will we handle returns for repairs? Who will do the repairs?
- Parts and service: Will the product require that we sell spare parts, product upgrades or field servicing? Who will perform these functions?
- Marketing and sales: Who will market the product and handle the sales function? Is the contract manufacturer equipped to perform these functions?



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5. Product Improvements and Accountability

- If we outsource, who will be responsible if the product has problems? Is there a clear definition of how to correct product problems and will the supplier be capable?
- Who will be financially responsible? If we outsource many functions or to many provider partners, will we create an environment of “finger pointing” or can accountability be efficiently managed?
- Who will the FDA consider responsible for each function and who can best provide an effective reply to any FDA concerns that may arise?
- If there is a lawsuit, who will be legally responsible for each function?



6. Stability, Scalability, Accessibility, and Culture

- What resources can the supplier draw upon for timely resolution of problems? Is the supplier dependable, predictable and financially solvent?



- As our volume grows, can the assembler provide scalable production capacity to satisfy a range of volume requirements?
- As our total cost pressures grow, can the assembler offer the option of transferring all production to reduced total cost environments while maintaining product quality?
- Can my organization manage the outsourced functions if they are geographically distant, or must we have close proximity for better relationship management?
- How “easy” is the supplier to work with? Are they open and flexible to our unique and changing needs? Will we receive their attention when we need it?
- Does the supplier and its people take pride in their track record of accomplishment?

Your needs are as unique as each prospective assembly partner. When you've identified your organization's strengths, knowledge, resources and desire to handle these functions internally you will be ready to find the best outsource partners, or partner, for you and your organization. Chances are you will be looking for a manufacturing partner who offers you assembly capabilities, and more.



About UFE

UFE provides engineered manufacturing solutions to subassembly and finished goods manufacturers around the world. UFE is a manufacturing resource with strong, well-developed capabilities throughout the development and production continuum – from product engineering through contract assembly, including the core competencies of precision thermoplastic injection molding and mold building from which the company has grown. These services are provided independently or combined to cost-effectively meet customers' requirements for highest quality parts, products and molds.