

## Manufacturing Strategy At Specialty Industrial Equipment Manufacturer: Outsourcing Non-Core Operations To Improve EBITDA, Avoid CapEx, And Reduce Operational Complexity

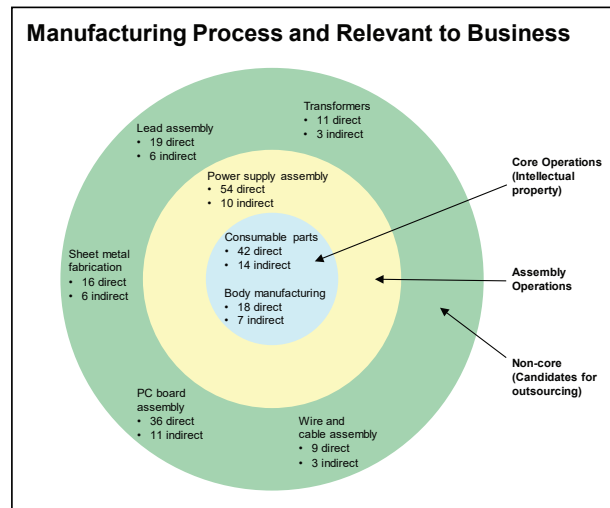
**The Challenge:** Our client is a leading manufacturer of specialty industrial equipment. Although once the market leader, declining sales volume and increasing cost pressure forced the client to re-evaluate its manufacturing strategy. The client asked us to assist them in this effort.

### The Partnership:

**Analysis:** Our preliminary review of the client's manufacturing operations indicated significant vertical integration. Some of the component operations (e.g., PC board assembly, wire harness, sheet metal) lacked sufficient scale to be cost competitive and were commonly outsourced by other manufacturers. These operations required significant management attention, as well as near-term capital infusion in order to sustain operation.

Working with production and executive management, we classified all manufacturing operations in three categories: core operations, assembly operations, and non-core operations, as shown in the figure.

Next, we conducted an economic feasibility analysis for each of the non-core operations to understand material, labor, overhead, and capital implications of outsourcing. We also looked at qualitative factors, such as supplier availability, component/process complexity, and risk to business.



**Strategy:** Based on the feasibility analysis and within the context of the client's business strategy, we recommended a 3-phase outsourcing plan:

- Phase 1: *EBITDA Improvement:* Operations where outsourcing reduced cost, including PC board assembly
- Phase 2: *Capital Avoidance:* Operations where outsourcing provided little or no cost savings, but resulted in capital avoidance, e.g., sheet metal fabrication, transformer winding
- Phase 3: *Strategic Complexity Reduction:* Operations that provided a significant reduction in management and purchasing complexity without a cost penalty, e.g., wire harnesses

**Execution:** We helped the client personnel carry out the first outsourcing initiative (PC board assembly) to capture bottom-line savings quickly and while building their skills for managing subsequent phases. In addition, we created detailed documentation that was used by ThermaGoods personnel to help guide their subsequent outsourcing efforts.

**The Results:** Annual conversion and material cost savings achieved through outsourcing ranged from 6% (transformers) to 20% (stuffed PCBs). Short-term capital avoidance from the outsourcing efforts reached \$4.5MM.