

## Operations Improvements At Specialty Printing Company: Operational Basics, Waste Reduction, And Productivity Improvements To Turn Around Declining Performance

**The Challenge:** SpecialPrint, a manufacturer of customized paper stationary products, was experiencing declining revenues due to end-user industry (medical, legal) shifts to electronic documentation and international competition. SpecialPrint's 4-facility manufacturing network was experiencing low utilization and rising costs. Given the extra capacity, SpecialPrint management had launched an initiative to close one facility and relocate the equipment to one of its 3 remaining plants. Despite this planned closure, the PE investors engaged Gotham to help identify additional cost savings opportunities across the SpecialPrint network in order to help turn around performance which was approaching debt covenant thresholds.

### The Partnership:

**Analysis:** The Gotham team conducted a rapid (2-week) cost and operations diagnostic at the 3 remaining plants to identify operational cost opportunities and put together a capture plan. The team began by assessing asset utilization by operational area: sheetfed and web printing, fastener machines, labeling, hand assembly/fabrication, etc., as well as adherence to lean manufacturing principles, including housekeeping, layout, and material flow. As no accurate historical measures existed for waste and productivity, Gotham established current performance levels and variability across lines and shifts. The team then identified and quantified sources of waste and labor efficiency. Finally, the team quantified the magnitude of the opportunities associated with our findings.

Despite some recent accomplishments, SpecialPrint operations were caught in a cycle of declining volumes and low capacity utilization that limited labor efficiency and fixed cost absorption. Contributing to this vicious cycle were:

#### • Structural Issues:

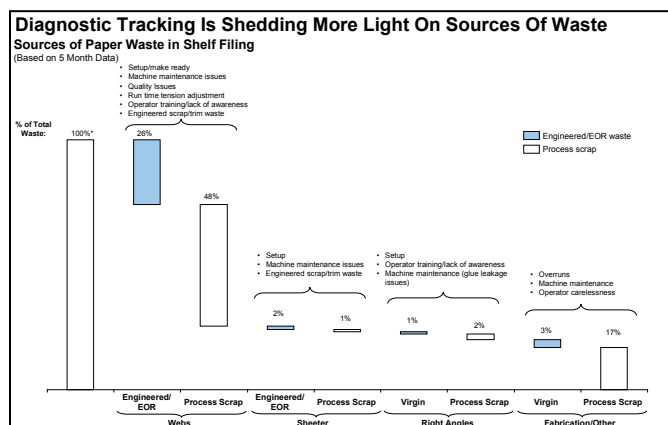
- Asset underutilization beyond volume problems – e.g., best-in-company assets not being well leveraged, local optimization mindset (vs. full network optimization and integration)
- Best practices for housekeeping, layout, and material flow not incorporated across the full network

#### • Process/Control Issues:

- Lack of focus on/understanding of waste
- Excess direct labor costs due to low volumes and customized nature of the business, exacerbated by turnover issues and lack of company-wide SOPs
- Reactive planning/scheduling processes hindered by low volumes
- Insufficient and out-of-date finished good inventory controls

#### • Information/Tracking Issues:

- Labor costs not properly tracked; out-of-date or absent standards
- Shop-floor performance data collected but not synthesized into timely, actionable reports
- Systems use for accounting, WO creation, and order entry purposes only – not for planning or inventory control.



While current performance varied by site, the bulk of these operations issues were evident to one degree or another at all sites, presenting significant additional cost reduction opportunity beyond the planned closure of 1 plant. Our diagnostic estimated \$1.0-2.2MM in standalone cost opportunities from reducing material waste and improving direct labor efficiency.

**Strategy:** After reviewing our diagnostic findings with management and the PE team, it was agreed to begin putting in place waste and labor productivity tracking at the largest facility in the network. To this end, we launched a set of joint teams focused on: the capture of quick wins (e.g., waste caused by end of paper rolls, productivity losses driven by labor discipline issues); and implementation of tracking to determine losses and contribution. In addition, sub-teams were created to address make-ready practices and scheduling optimization/redesign. The teams' secondary focus was on: identifying high waste products and conducting value analysis exercises; redesigning high non-value added loss areas (e.g., hand assembly); and correcting and filling gaps in standards, routings, and bills-of-material.

**Execution:** As the joint teams got underway, closure of the medical products plant/move of equipment to the largest of the 3 remaining facilities was completed. However, plant performance then further deteriorated at the host facility due to the limited training provided and failure to transfer relevant standards. Consequently, waste reached new highs (up to 45%) and facility output decreased resulting in customer service issues. In light of this situation, Gotham re-directed and led the joint teams to focus first on putting in place operational basics. Such basics included organizational change (the right managers, reporting structure, and disciplines), building measurement and reporting systems (especially waste and labor productivity), establishing basic startup and changeover procedures on the line, training operators, and targeting priority improvements (e.g., reduction of changeover waste). Ultimately, a new plant manager was hired, and Gotham provided training so the manager would be positioned to lead continuing improvement efforts.

**The Outcome:** 6 months after our engagement, SpecialPrint waste and labor productivity performance continued to improve – waste dropped to 20% from the 40%+ levels (\$0.6MM savings), and labor productivity improved by ~15% (\$0.5MM savings).