It was an exciting day when ALSTOM Power, Europe's most prominent energy production equipment company, acquired ABB's U.S. industrial turbine operation. In the words of ALSTOM Power's U.S. Industrial Turbine Segment President, “The merging of the ALSTOM and ABB industrial turbine businesses has brought a singular market focus to complementary gas turbine technologies and power ranges to meet industry needs up to 50 MW. Maintaining customer operations in the field is our ultimate and highest priority. This means ensuring availability of over 70,000 parts, ranging from individual components to small assemblies, for immediate dispatch to any destination in North America. Our spare parts business is supported by 365 days-a-year coverage, through established communication channels, via our customer support help desk. We are committed to supporting one of the largest installed fleets of industrial gas turbines in the world.”

The planning and repair chain management engine driving ALSTOM Power's aftermarket support is the GAINS, an Inventory Planning and Profit Optimization solution from GAINSystems. The GAINS uses expert systems, stochastic algorithms and advanced management science to dynamically manage error and variability, across the flow of materials in the enterprise, to ensure that all targeted customer service levels are met with no expediting and with the greatest contribution to profit. The GAINS has been specifically fine-tuned to support repair parts distribution as well as to profit optimization field service repair and repair center operations.

As a result of the ALSTOM Power implementing the GAINS, their first year of operations with GAINS resulted in:

▶ Reduce combined inventory investment by 25%
▶ Reduce annual carrying, expediting and other operating expenses by 23%
▶ Maintain a 97% customer service level (100% of lines/complete order) on all orders.
▶ This includes both spare parts orders as well as factory and field service based repair orders.
▶ Reduce expediting in their service and support business to near zero.
The unique optimization and supply chain planning capabilities contained in GAINS that enabled ALSTOM Power management to achieve such results:

1. **Dynamic Forecast Model Selection** that tests for plausibility and accuracy to provide an objective demand plan baseline and eliminate as much human bias as possible.

2. **Dynamic Analysis of Supply and Demand for every SKUL** (SKU by Location) across the enterprise that considers all error sources including the variability in supply and user variance from plan. Only through this comprehensive approach can precise Service Level attainment be achieved (most alternative approaches overshoot for most items and undershoot for some leading to excess costs). The goal is to attain exactly the cost-minimizing or profit-maximizing Service Level, not more or less.

3. **Profit-Optimized Inventory Policies** (e.g., Replenishment Order Sizing and Safety/Service Stock) calculated at the SKUL level, considering total annual cost, comprehensive error, targeted customer service levels, and all relevant dependencies and constraints.

4. **Leading Indicator, Extrinsic Variable, and Viability Analysis** to ensure forecasts and plans are not just a “look in the rear view mirror.”

5. **Real-time simulation** to support both GAINS internal scenario analysis, for both distribution and reverse logistics, as well as to give executives the ability to simulate scenarios for both tactical and strategic initiatives including Stocking Policy (what to stock where) and Network Flow Optimization (how best to provision it).

6. **Automated and optimized replenishment planning and core/rotables induction** that determines the profit and service level optimum source for each replenishment/induction (parent location, primary vendor, surplus location, new vs repaired, etc.). Constraints and opportunities (e.g., bulk buy discounts or rebates) are also dynamically analyzed in the generation of specific orders to meet or fulfill these parameters at least total annual cost given targeted customer service levels.

To learn more how GAINS can Profit Optimize your supply chain -
Visit our website: www.GAINSystems.com, or
Email us: ProfitOptimize@GAINSystems.com

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