Revolutionizing Inventory Management:
Dynamic Parts Planning Safely Reduces Stock by Up to 10 Percent

Maintaining the right level of spare parts is critical, and complex. Carrying excessive inventory can be prohibitively expensive. But if you have too little, you slow repairs and end up spending more money purchasing new parts for replenishment, while negatively impacting the customer experience.

The problem is, the traditional best practices for managing spare parts – using time-series algorithms combined with sales forecasting, seasonality, gut instincts and simple rules of thumb to determine how many parts to stock – don't deliver the returns businesses need. They can even drive incremental costs into your business. Here's why:

- They're static, 'review-and-stock' endeavors based largely on historical demand data
- The algorithms don't account for variables resulting from failed parts in the field
- The output is inaccurate so most companies hedge their bets by purposefully overstocking or, more often than not, they unknowingly overstock
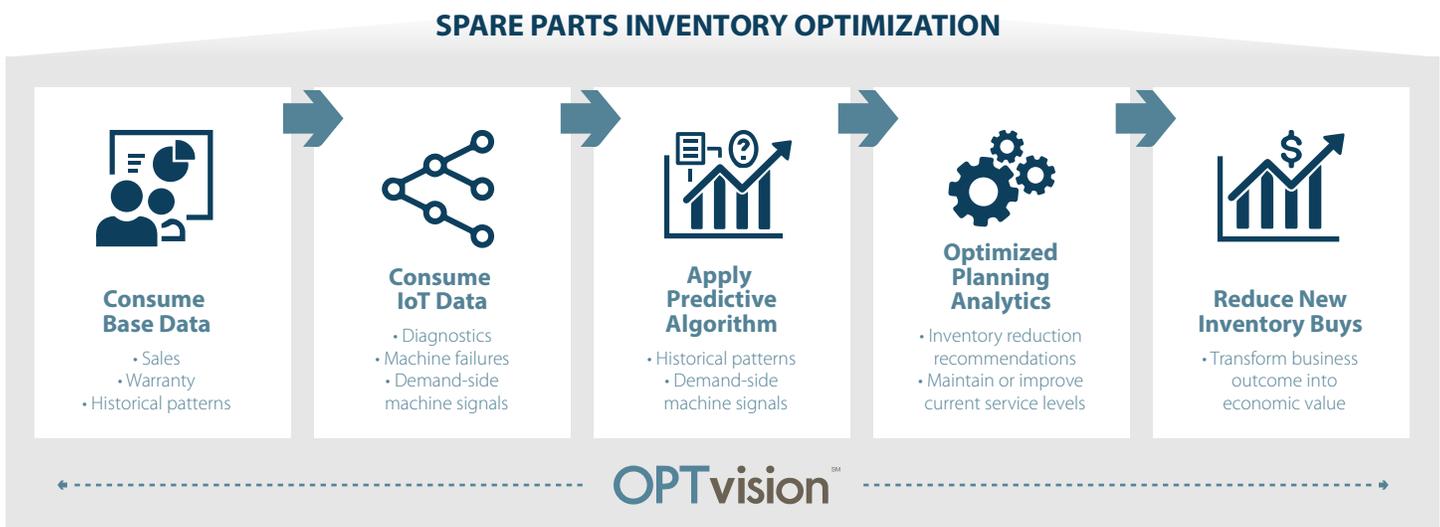
OnProcess Changes the Planning Equation
OnProcess Technology has revolutionized hub-level spare parts planning by adding machine failure predictability to the equation. We leveraged two decades of post-sale supply chain and advanced analytics expertise to create a proprietary dynamic spare parts planning algorithm, in partnership with the renowned Massachusetts Institute of Technology Center for Transportation & Logistics.

The result is spare parts planning that's as dynamic as your business, with the only model that includes consistent IoT data to predict demand based on historical failure patterns and raw machine signals. This game-changing model is the centerpiece of OnProcess' Dynamic Parts Planning Service.

OnProcess Dynamic Parts Planning Components

SPARE PARTS INVENTORY OPTIMIZATION

Consume Base Data
- Sales
- Warranty
- Historical patterns

Consume IoT Data
- Diagnostics
- Machine failures
- Demand-side machine signals

Apply Predictive Algorithm
- Historical patterns
- Demand-side machine signals

Optimized Planning Analytics
- Inventory reduction recommendations
- Maintain or improve current service levels

Reduce New Inventory Buys
- Transform business outcome into economic value

OPTvision℠

OnProcess Dynamic Parts Planning complements and strengthens your existing planning methods. It's a light-touch service that requires zero integration with your systems and no changing of tools or solutions.

We consume your base data and demand-side machine signals, and concurrently run our highly predictive algorithm alongside traditional algorithms that include your data inputs. We then compare the outputs using OPTvision, OnProcess' microanalytics platform and real-time control tower. Here, we provide recommendations on how to reduce your inventory and new buys. And we make sure to align those recommendations to your process and review period, whether weekly, bi-weekly or monthly, so that they're easy for you to act upon.

Advantages
- Achieve unparalleled predictability
- Reduce inventory up to 10 percent
- Save substantial money
- Maintain or improve service levels and fill rates

Dynamic Parts Planning Advantages

Achieve unparalleled predictability

Most of today's machine monitoring programs are designed to respond to signal failures. They also emphasize the few pieces of equipment that are starting to fail, rather than the whole. This makes it impossible to generate a sound baseline for analyzing machine performance and predicting failures. In stark contrast to this is OnProcess' approach. By analyzing historical failure data on the entire installed base, we're able to predict the exact spare parts you're likely to need, when, and in what quantity.

Reduce inventory up to 10 percent

Our proprietary modeling enables OnProcess clients to tighten spare parts forecasting and, as a result, reduce inventory levels by six to 10 percent. In addition, better monitoring and forecasting helps you be more proactive and prescriptive when taking actions to avoid and quickly fix machine failures. This, too, contributes to equipment uptime and reduces the need for spare parts.

Save substantial money

Carrying costs average about 25% of inventory value.[1] When you consider that you no longer have to spend so much on physical space, parts handling, and deterioration and obsolescence, it's easy to see how reducing inventory by even just six percent can save you hundreds of thousands to millions of dollars.

Maintain or improve service levels and fill rates

By aligning service operations with detailed maps of parts demand patterns, you can increase the responsiveness of your service supply chain. So not only are you holding less stock, you're better able to fulfill parts requests and deliver a timely, improved customer experience.

Boost Your Return with Dynamic Asset Recovery

Companies that want to further reduce new inventory buys take advantage of OnProcess Dynamic Asset Recovery, a managed service that complements Dynamic Parts Planning for a strong, closed-loop approach.

Dynamic Asset Recovery explicitly targets recovery outreach based on the parts you deem critical right now. It's an intelligent reverse logistics strategy for bringing your most valuable and in-demand parts back into inventory in an expedited timeframe. We apply advanced segmentation to your data, identifying tiers of equipment to focus on driving returns. Using OPTvision, we can instantly categorize, and re-categorize, segments based on part, rate and velocity. By bringing those high-value/ high-demand parts into inventory first, you re-gain control of that inventory, accelerate your supply chain life cycle and reduce new buys.

To learn how our Dynamic Parts Planning can safely reduce your inventory, contact OnProcess at **sales@onprocess.com**, **508-520-2711** or visit **www.onprocess.com**.

[1] *"Production Spare Parts: Optimizing the MRO Inventory Asset," Industrial Press, Inc.*