



## SPAL Implements Microsoft Dynamics NAV and Achieves a Long List of Immediate Benefits



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SPAL designs and manufactures sealed DC brush and brushless motor electric cooling fans and blowers for OEM automotive, bus, truck, off-highway, construction, powersports, military, marine, and the stationary equipment (generator/APU) markets. The products are used for cooling radiators, oil and transmission coolers, condensers, evaporators, heaters, CACs, batteries (hybrid and EV applications), and for ventilation. Additionally, SPAL offers various automotive-related accessories to support the racing, motorsport, installer, speed shop, and the DIY markets, both amateur and professional.

### BACKGROUND

SPAL had become a Business Automation Specialists of Minnesota (BASM) client to support their Sage PRO software needs. When news that the platform their software was built on would no longer be supported by Microsoft, SPAL looked to BASM for a replacement. Microsoft Dynamics NAV was a natural fit, and along with BASM's help, SPAL decided to move to NAV's on premise solution.

### ISSUES

During the pre-implementation work, a kick off meeting with SPAL'S different departments uncovered the following issues that they wanted to address with the new software:

- The Purchasing/Inventory department needed a better way to communicate with the Sales department regarding product availability lead times. The goal was to provide better customer service by setting expectations, and to prevent sales from selling in stock inventory that had been previously committed to other customers. Effective customer forecasting would also be an important component of this, as the current spreadsheet methods weren't working. There was too much manual effort to compile data, and it took too long to consolidate. The PI department couldn't react quickly enough, and the forecast to purchase analysis needed to be automated.

- Warehouse and Shipping had an integration between their WMS and accounting solutions, but it wasn't effective due to two separate databases. They didn't have the control to make it responsive to their requirements, although they had created many workarounds to make it work. They also needed better visibility into inventory, and needed real-time reporting, which would require fixing their process of using quotes instead of sales orders without releasing inventory prematurely. Additionally, their production modifications required duplicate data entry between their systems which were prone to data entry errors. A third solution for shipping, with a poor integration, caused delays in updates. Finally, shipping containers received from their parent company in Italy, contained multiple purchase orders in the same container. They needed a container receiving and tracking module with the ability to send and receive data into their ERP system to update the PO automatically.
- The Accounting / AR / AP group needed a way to automate the allocation and billing of landed costs, which was delaying receiving while manual calculations were done, which caused delays throughout the organization. They also needed a streamlined process for meeting their parent company's requirements for reporting and financial statements.
- Management spent too much time compiling data, which didn't leave time to analyze it. It also required going to each department to get it. There was no centralized system or visibility into the data otherwise.

## SOLUTIONS

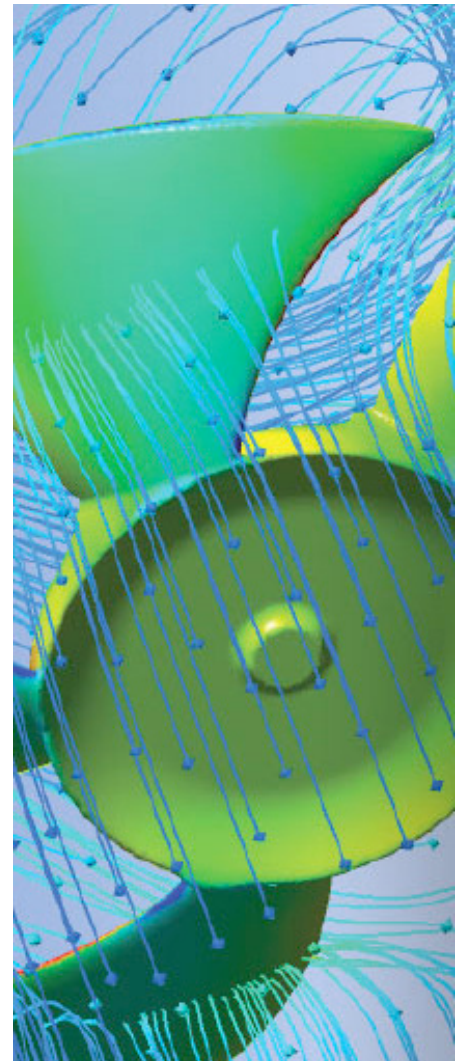
BASM prepped NAV to meet all of SPAL'S many needs, including several custom solutions designed by BASM. With the magnitude of this company wide system, BASM had several people on site for the implementation and training to ensure a smooth transition to NAV and their new streamlined process. One of the most impactful features to the entire organization, was a custom "Container Management" module designed by BASM.

The Container Management module cut receiving time to less than half. What had previously taken SPAL 45 minutes using spreadsheets is now received and automatically reconciled and allocated to the warehouse in 20 minutes. It also improves accuracy and time frames due to the landed cost and volume modification. CSR's can now see immediate availability of inventory and it has reduced administration time, so now purchasing agents can update statuses without having to go to each purchase order.

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# Case Study

The right mix of technology and practical business experience.

One of the most complex implementations involved the WMS, Webstore, and Labeling functions. With no way to do a phased implementation, it all had to go live at once, but that went without a hitch due to preplanning and project management.

The remaining issues were solved as follows:

ISSUE	SOLUTION
<b>Purchasing / Inventory (PI)</b>	
<b>Difficult to provide accurate date expectations to customers</b>	Container Management module allowed PI to rapidly update product expected dates which in turn provided Sales with real-time, accurate availability to set and more importantly, meet customer expectations
<b>Stock allocated for one customer got sold to another customer</b>	Reservations provide Sales the option to hard allocate product to customers as needed – customer expectations met again!
<b>Customer forecasts external to ERP required a lot of time to compile hampering PIs ability to react to rapidly changing demands</b>	Managing customer forecasts in NAV provides PI instant visibility to critical demand for accurate purchasing
<b>Return Materials Authorization (RMA)</b>	
<b>Time consuming process managed outside of ERP which required a lot of manual communication and lacked visibility from department to department</b>	<ul style="list-style-type: none"><li>• RMAs are created in NAV</li><li>• The warehouse registers receipt of the return product in NAV</li><li>• RMA department inspects return product and authorizes the appropriate credit and or restocking charge</li><li>• SPAL now has a complete audit trail and visibility at any step of the process</li></ul>
<b>Various customers have specific Analysis of Product Failure and resolution requirements</b>	<ul style="list-style-type: none"><li>• Use of Zetadocs drag and drop functionality allows RMA department to complete required documents, store pictures and any other documentation applicable to the return for future review</li><li>• Return Reason Codes provide data for analytics of SPAL defined problem types</li></ul>
<b>Customer Service / Order Entry (CSRs)</b>	
<b>Lack of visibility to product availability</b>	<ul style="list-style-type: none"><li>• Container Management module allowed PI to rapidly update product expected dates which in turn provided Sales with real-time, accurate availability to set and more importantly, meet customer expectations</li></ul>
<b>Quoting done outside of ERP lead to an average of \$5,000/month in credit memos</b>	<ul style="list-style-type: none"><li>• Sales Quotes are done in NAV with a small mod to implement pricing upon approval</li><li>• Since pricing is now maintained in NAV, pricing is always accurate – good bye credit memos and billing complaints</li></ul>
<b>Future orders maintained outside of ERP to avoid accidental early shipment and to allow CSRs to modify order prior to warehouse processing</b>	<ul style="list-style-type: none"><li>• NAV's release functionality allows CSRs to enter orders and determine when the order is ready for warehouse processing</li><li>• Dashboard cues provide quick, real-time visibility of orders due to be released today</li><li>• Visibility to picking and shipping status on the order allow CSRs to instantly determine the status of an order</li></ul>



# Case Study

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## ISSUE

## SOLUTION

### Warehouse / Shipping / Receiving (WMS)

**Separate WMS and ERP systems, while integrated, limited SPAL's ability to respond to rapid changes in customer orders**

- Now WMS is a part of the ERP database
- Warehouse staff are working off the same transaction as the sales staff, so there is not potential for discrepancies between 2 systems due to timing

**Production was not handled in the old WMS system and required dual entry between WMS and ERP**

- Since WMS is part of NAV, it inherently handles all inventory transactions
- Transactions from warehouse to production and back are seamless – no dual entry required

**Outside shipping software was integrated to ERP but caused delays**

- Shipping is built into NAV with an integration to the freight carriers
- The shipping is done in NAV, so no more delays

**Multiple Purchase Orders arrive in a single shipping container which took a lot of time to process**

- Container Management allows purchasing staff to define which PO lines will be arriving on the container
- Receiving time is significantly reduced for warehouse staff as they are only working from 1 document
- Discrepancies are immediately evident since only the product expected to be received is displayed on the container

### Financials / Inventory Costing

**Allocation of Landed costs was difficult as it had to be done before the product was sold and was not easily allocated by meaningful break-downs**

- Native NAV functionality allows for Landed Costs to be allocated to a product even after it is sold or used in production allowing for un-paralleled costing accuracy
- Container Management allows AP staff to quickly select the entire container receipt

**Challenging financial analysis requirements by parent company took a lot of time and data manipulation**

- NAV's dimensions provide robust yet simple financial analysis functionality so the Parent Company can analyze financials as it needs while SPAL USA can still analyze the data as it needs
- Since the data is already compiled, management has time to analyze the results to make better, more timely decisions to facilitate growth and increased profitability



## RESULTS

The SPAL team got what they were looking for and more. Each department enthusiastically embraced the changes and benefits they could see immediately. The CSR's loved all the information they could find and the visibility regarding status of orders once they were released to the warehouse. After seeing the first check run, AP was "giddy and looking for other things to do" according to the AP manager. The warehouse manager loved the new shipping station with scanner. The front office loves the visibility into all the other departments.

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Both the BASM and SPAL teams worked to pull it all together and get it done. After the first week they were feeling comfortable with where they were in the implementation, using the new system, and the long term time savings, streamlining, reporting, accuracy, reporting and ultimate customer satisfaction the solution would provide.

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