

## Solarsoft for Manufacturing

Orchid International - "Orchid International eliminates shipping errors and significantly strengthens inventory accuracy, enterprise-wide control and supplier management with iVP."

### CUSTOMER SPOTLIGHT

#### AT-A-GLANCE

- Industry: Automotive, Appliance, Lighting
- Location: 5 Locations
- Website: [www.orchidmfg.com](http://www.orchidmfg.com)

#### Key Challenges

With an IT staff of three people, run 5 manufacturing facilities operating varying manufacturing processes - flow, repetitive and work-order based - as a tier one and tier two supplier to demanding customers in a variety of industries.

#### Solution

Solarsoft Business Systems' iVP ERP solution, running on the IBM System i.

#### Key Benefits

Increased inventory accuracy, flawless shipping accuracy, rock-solid reliability and enhanced enterprise-wide control requiring minimal IT staff.

*"Users in our facilities are telling me that Solarsoft iVP has more functionality – functionality they are using – than SAP."*

*Tim Bryan, VP Engineering/Operations  
Orchid Manufacturing*

For Orchid International's VP of Engineering/Operations, Tim Bryan, functionality, cost, and hardware platform were the primary criteria upon which he would select an ERP solution – and he evaluated hundreds.

At the time – the early 2000s – Mr. Bryan oversaw the operations in 5 plants, each of which was operating on a different ERP solution, and none of which were integrated. The five plants also operated in a variety of manufacturing environments – repetitive, flow and work order. He knew Orchid needed a single ERP solution that could adapt to any of these environments, be implemented across all five enterprises and managed on a day-to-day basis by his company's lean IT staff, consisting of him and two others.

Equally critical are the demands placed on Orchid by its diverse customer base, which operates in a wide cross-section of industries including automotive, consumer products, appliances, HVAC, lawn & garden, heavy industrial, electric motor, lighting and electronic. As a tier-one or tier-two supplier in these industries, Orchid must meet exceedingly stringent on-time delivery and order accuracy requirements. Included in Orchid's customer portfolio are such high profile customers as General Electric, John Deere, and Toshiba, as well as nearly twenty companies in the automotive supply chain, including Johnson Controls.

In Solarsoft iVP, Mr. Bryan found an affordable, fully integrated ERP solution that could meet all his requirements out-of-the-box. The biggest hurdle derailing any predilection Mr. Bryan might have had toward selecting Solarsoft iVP, which runs exclusively on the IBM System i, was hardware. Orchid had never before seen a System i, and selecting Solarsoft iVP was going to require a complete architectural



**Tim Bryan, VP Engineering/Operations**

change for the company. That concern was overcome when Mr. Bryan and his colleagues saw the System i's operating system, which looked strikingly similar to a Windows NT environment. "Once we got past that box scenario, Solarsoft came to the top of the list in terms of functionality for the price. And that's key for us," says Mr. Bryan. In 2002, Orchid selected iVP over competing ERP solutions from SAP, QAD and Macola.

Within the past year, the company marked a milestone – the last of its five plants went "live" with iVP. That facility, in Mt. Juliet, TN, opened in 1994 and is Orchid's original plant - a supplier of metal-stamped parts to dozens of major OEMs, from GE to John Deere. "We (Mt. Juliet) had been on Macola for 12 years, and on the same version for over 8 years. They ceased supporting that version after 2000 and because we chose not to go with the latest version we had been forced to support it ourselves for the past 6 years," says Mr. Bryan. "We'd been ready to get rid of Macola for quite awhile." Orchid's other plants took priority, however.

For instance, in 2004, the company purchased a facility in Monroe, WI, which produces lamination stampings and die-cast products to a growing host of motor and lighting manufacturers. The plant was using SAP, and Orchid was going to have to pay a hefty monthly fee to stay on that SAP license, so the company decided they needed to migrate from SAP as quickly as possible. Likewise, the McAllen, TX facility, which supplies laminations and die-casting products to GE's Mexico operations, had a pressing need for a true enterprise-wide ERP solution, as its operations were dependent upon nothing more sophisticated than a Microsoft Access database.

Mr. Bryan, a strong advocate of phased-in ERP implementation, started his Mt. Juliet plant's implementation with iVP's accounting, order entry, EDI and shipping and progressed through

inventory, PO, receiving and MRP, saving production and scheduling for last. "Now, if you have 14 people, like you would in an SAP cut-over, where you spend millions on having resources full time at your facility for the next 6 months, then you might be able to actually bring it all on line at one time, but none of us can afford that. I have 3 people in my department for 6 locations, so we have to be very modular on how we cut-in things."

In fact, though certainly not typical of Solarsoft customers, Mr. Bryant – who has experience implementing SAP - and one of his IT colleagues have been known to implement iVP modules themselves. "That tells me that iVP is not so overly complex that you need a module expert for every module in order to even begin to think you can implement," he says. "We implemented iVP in our Monroe plant, and users are telling me that Solarsoft iVP has more functionality – that they are using – than SAP. SAP is more than capable, but the complexity of SAP and the amount of resources it takes to implement anything within SAP kept them from implementing it to the same level we did iVP in a very short time."

Now, utilizing Solarsoft iVP with very few modifications and minimal third party software, all of Orchid's facilities, with approximately 500 employees, 700 suppliers and 250 customers, manage their enterprises' front-office and varying shop-floor processes. Says Bryan, "We stay within 98% of iVP, but we'll create a few little (customized) hooks."

With so many trading partners, many of them small and not functionally EDI capable, Orchid utilizes Solarsoft's Easy e-Business Suite. This tool allows real-time collaboration with suppliers and customers, who access a secure website to report shipment details or check order status, for example. "We call it the 'Poor Man's ASN'," says Bryan. "They (customers) might not be able to accept an ASN, but they still want an e-mail of their packing list. Without the Easy e-Business Suite we'd have to go to a machine, scan the packing list, attach that file to an e-mail, pull up our customer list and e-mail it off. Now we just go to the customer contact list in Solarsoft, populate those e-mails directly from information within Solarsoft and send it off."

Noting iVP's integrated EDI, Radio Frequency (RF) Scanning and Serialized Bar Code Scanning capabilities Bryan reinforces the importance of integration for

him. “Third-party software is not going to fly for me. I’m not going to fight those battles between the RF software provider and the ERP provider.” But beyond that, “I’ll go to any facility and walk through their flow from EDI through shipping, and if they’re not doing integrated bar-code scanning verification at the serialization level, their inventory accuracy can only be a fraction as good as what we’ve got.”

## **INVENTORY ACCURACY - Serialized Labels Mean Fewer Scans**

Inventory accuracy at the Mt. Juliet facility has always been good, despite the labor-intensive environment necessitated by their previous ERP solution. The difference now, according to Mr. Bryan, is that with iVP’s integrated RF, Bar-Code Scanning and Serialization functionality, inventory accuracy has never been better and inventory management never so automated. “We did the best we could with what I call Macola’s ‘offline keying process’,” he says. “You turned in your bar code, it was scanned and then keyed in, but it was all offline. There’s opportunity for people to forget to turn in the ticket, or someone to scan the wrong bin location. Everything is tracked by 3 elements - PART, BIN, QUANTITY - so there were three data elements someone could mess up on.”

With iVP’s integrated RF and bar-code serialization, “I do one scan - at point of use - I don’t wait until after I turn it (the bar code label) in. Our supervisor said our inventory has never been better.” He provides an anecdote to reinforce his point. “We picked our cut-over to Solarsoft during the middle of a full physical inventory. Think about that; what’s the risk profile of being wrong when the auditor comes out for the audit and you’ve just cut-over to a brand new ERP system three days before?” He continues, “Well, the auditor pulled 45 finished bins, and with the RF gun and a piece of paper scanned and counted every one of them. Every single bin matched - 3 days after cut-over – and we move 200-300 bins per day, so we’d done quite a few transactions. The system was easy enough to use, and the people followed the procedures, such that we had absolutely no inventory problems.”

## **SHIPPING ACCURACY - “We do not have shipping errors.”**

“Prior to having Solarsoft, we had to key and scan any given BIN, QUANTITY and PART at two different locations, so there was an opportunity for error at any of those six input transactions,” Mr. Bryan explains. “With Solarsoft iVP’s serialization we’re scanning one number. It has to match. I don’t have any chance of inputting the wrong quantity or bin or part. When I scan the serial number, the serialization knows where that bin is physically located. There is no inventory accuracy lag. That’s why I’m very big on serialization and the RF. I’ve been through it all, trust me.”

Mr. Bryan is getting the information he needs in real time with Solarsoft’s open architecture approach, with the master data, the control of the data, the storage of the data all residing in a Solarsoft iVP DB2 database.

One major gap in Orchid’s previous ERP software was that it did not require anyone working on the shipping dock to scan containers as they were loaded on trucks in order to verify that the bin he was loading matched the packing list, which had been produced by a different individual. Solarsoft iVP requires the shipping people loading the truck to scan the containers that go into the trailers. “At the dock we scan the shipping label to the internal move label, so we no longer have the potential to put the wrong shipping label on it. They must match the packing list or they don’t get their paperwork,” says Mr. Bryan. “So now I have two independent sources verifying the accuracy of that shipment, and I don’t have customers calling up saying ‘this isn’t even my part’.”

According to Mr. Bryan, Orchid now has zero shipping errors.

So, what is flawless shipping accuracy worth? “One call from a customer who has been sent the wrong part number is damaging beyond measure. Because, now, what is their confidence in your ability to manufacture a good product if you can’t even ship them the right part? Before getting on Solarsoft, we had sent a significant quantity of the wrong part to a customer. They were going to bang our quality rating with them to 10,000 defective parts per million (PPM).”

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*“I can’t tell you how many vapor-ware salesmen I’ve had in the past, who told me a certain function or feature was in their software only to find out it was in development or, worse, on a piece of paper. If Solarsoft tells you their software can do something, then you’re able to do it. That’s a major part of being able to trust Solarsoft. They’ll be honest with you.”*

*- Tim Bryan, VP Engineering/Operations*

“Historically, we average 3 PPM in this (Mt. Juliet) facility. That 10,000 PPM would have pushed us over 30 PPM for the year.” What is a 30 PPM defective rating worth vs. a 3 PPM when you do a presentation to a potential customer? Says Mr. Bryan, “It’s immeasurable. One mislabelled container could have cost me an infinite number of customers.”

### **The IBM System I (formerly, iSeries)**

Previous to Solarsoft iVP, Orchid’s enterprise was running on a five year old PC. Now, Mr. Bryan’s IT group maintains a much more robust support structure for Orchid’s manufacturing environment, with dual System i boxes kept in separate rooms; one maintained as a back-up.

“The architecture is extremely robust. I have not been down due to the box or a Solarsoft software glitch one time in 5 years,” he points out. “Reliability is critical to a manufacturing environment. I can’t be fighting a box going up and down, or software going into a glitch mode that takes down a facility or the whole company. We never touch the box. I can’t tell you - in the Microsoft world, under NT operating systems - how many times we had a box go down.”

### **ACCESSIBILITY**

For any organization managing their ERP solution with a lean IT staff, remote access is key. That access is one of Solarsoft’s biggest advantages, according to Mr. Bryan. “We do everything remotely on Solarsoft,” he says. “I can go to any PC and I can get on iVP, given that I know the IP address and security codes. I don’t have to load software. I go to an internet site that I have set up. We have people working from home all the time. It’s so convenient. At my level, I want to keep it as simple as possible, and the whole Solarsoft approach, from its accessibility to its integrated architecture and reliability makes it a very easy system to manage.”

