

SAP® Certified

Integration with SAP NetWeaver®



ASSET MAINTENANCE

Overview

This company has been supplying customers with high quality fuels, oil, chemical and lubricant products for every application since 1985 and has become one of the largest petroleum marketers in the nation, with annual revenues exceeding \$1 billion. They also have a nationally recognized Emergency Fueling Response Division; a Fluids Purification & System Decontamination Unit; an Oil & Water Removal and Reclaiming Section; and a proprietary delivery fleet. They are also a supplier of Diesel Exhaust Fluids (DEF).



The Challenge

This customer is a petroleum marketer and makes use of all kinds of tanks for storage and transportation of petroleum products. Periodically, these tanks (and their associated accessories) need to be delivered to the original vendor for service. After servicing has been performed, the tank (plus accessories) is returned to the customer. When you're a billion dollar business and you're running your business on SAP this seemingly simple process can be slow, painful and error prone.

The customer wanted to automate the entire process through the use of bar codes and mobile computers in order to remove errors and to reduce time spent physically shipping and receiving these assets. Additionally, the customer wanted to streamline and simplify the steps required by the users in order to ship and receive these assets.

The Solution

The *NLINK® ADC to SAP Solution* was installed on a central server running Windows Server 2003 and a set of customized SAP data collection transactions were delivered. Concurrently, Junot's hardware partner installed a wireless network and provided all the required bar coding hardware along with the necessary user training.

Hand-Held Devices

10 Motorola Symbol MC9090s



Problem No 1:

Customer needed the ability to add "Unknown" accessories for Tank Delivery.

When a tank asset needs to be delivered to a vendor for service, a PM Work order is generated in SAP for the specific Tank package (Tank + Container; Equipment + Functional Location). Depending on the Tank configuration and the service required, the accessories that need to accompany the Tank package cannot be determined without looking at the tank itself (cannot use standard Bill of Material since not all parts for the Bill of Material are required; and sometimes, other parts beyond the BOM are needed). The current operating procedure requires users to:

- Evaluate the tank as it is loaded for delivery, and determine the accessories needed, then:
- Pull the required accessories. Each of the accessories pulled will be noted on paper for subsequent manual data entry into SAP, then:
- Update each of the additional accessories in SAP for the PM Work order, then:
- Post a goods issue for all items on PM Work order.

The paper trail for steps 2 through 4 consumes a lot of time; which becomes a problem as the tank, along with the truck driver, is waiting for delivery papers. Needless to say, the customer wanted to streamline this process.

Solution No 1:

The MB1A-261 (Tank Delivery) interface gives the users the ability to post a goods issue for any items that have been identified on the PM Work Order. The IW32 + MB1A-261 (Tank Components) Interface gives users the ability to update the PM Work Order for items that are not assigned to the order. These interfaces satisfy the customer requirement to reduce the time spent updating the order details in SAP, and simplify the operating procedure to include only the following:

1. Evaluate the tank as it is loaded for delivery, and determine the accessories needed
2. Scan the PM Order to issue items that are assigned to the order. Interface automatically posts a Goods Issue to the PM Order
3. Scan the items as they are being pulled from the warehouse. The interface automatically adds scanned items to the PM Order, then posts a Goods issue to the PM Order.

The interface also automatically applies scanned material items to the PM Work Order (if the items are not on the order) before posting the Goods Issue transaction to SAP, and displays current SAP system stock inventory as a visual indicator to alert users if the material scanned is blocked or unavailable for issue for any reason.

Problem No 2:

Customer needed real-time updates for goods issue.

Currently, movement of materials from inventory stock to an 'In transit' location is performed after the fact due to the use of paper documents. Customer wanted to post this transaction as it happens, as this transaction impacts the tank accessories that can be issued for a Tank Delivery transaction.

Solution No 2:

The MB1B-309 (Service Order) interface allows users to transfer any materials to a 'pick-able' location as users are picking items to satisfy a Tank Delivery order. This helps the user to quickly



satisfy the requirements for a particular Tank Delivery order should the user encounter a situation where the material needed is unavailable or blocked.

Problem No 3:

Wrong Assets Returned or Received.

Customer uses Serial numbers to track the assets shipped on PM Work Orders for services. Each Asset (Tank, Container, etc.) is serialized, and stored in SAP. When a Tank Asset is received back from a vendor, sometimes the wrong asset will be received against an order since serial numbers are not required entries in SAP for this posting. Moreover, SAP does not validate the serial numbers against the order in the Goods Receipt transaction; meaning that users can enter any old serial numbers they like for this posting (even if those numbers do not currently exist in SAP). Not only is fixing this problem in SAP time consuming, but more importantly, to satisfy the sales order for this tank, the wrong tank could have been shipped.

Solution No 3:

The MB11-262 (Tank Pickup) interface includes built-in serial number validation business logic to ensure that the tank received matches with the tank shipped for the PM Order. Users are now prompted to scan / enter the serial number for the order. If the serial numbers do not match the number stored in SAP, a validation error message is displayed on the hand held device, and users will not be able to post this transaction. Additionally, if additional components also need to be received (e.g. Container for the Tank, etc.), users are prompted with a message to look for and enter those items if necessary.

Benefits

Although this customer is physically located just a few miles from Junot's corporate offices in Houston, Texas, all work was performed remotely, and Junot Systems' personnel did not ever need to visit the customer site, keeping their costs down and boosting efficiency.

The delivered solution was able to replace an inefficient, error-prone and time consuming manual process that had grown increasingly unwieldy and frustrating to the warehouse personnel. Automation and streamlining of the business process has yielded significant real world cost savings that have yet to be fully quantified.

About Junot Systems

Junot Systems, Inc. is a specialist provider of SAP integration solutions for the manufacturing and process industries. Headquartered in Houston, Texas, Junot Systems, Inc. has deployed and supported its NLINK product suite for over 12 years in a variety of vertical markets, both in the US and overseas.

About Junot Systems' Solutions

NLINK® is a configuration-based product suite that installs in minutes and requires absolutely no custom coding to be deployed. NLINK's patented and SAP Certified Interfaces work with any version of SAP and require no additional SAP components to be purchased or installed into the SAP landscape.

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