

A PPI SPECIAL REPORT

Södra and the Port of Sunderland celebrate half a million tonnes of successful pulp shipments in 2011

THE SCIENCE OF SIMPLICITY



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Logistics is one of those areas that only gets noticed when it's not working. Companies expect their goods to arrive on time, every time, in pristine condition. They take it for granted this will happen and if it doesn't, that's when the logistics department comes under fire. Customers tend to like what they know, especially if it's working, and a major change in logistical operations is always risky.

When Södra Cell decided to begin shipping pulp to the UK via the Port of Sunderland (PoS), it was with some trepidation on the part of the UK managing director, Nigel Holland, and the then logistics manager Europe, Rolf Cato Olsen. Södra had been shipping to Chatham for a number of years in addition to Grangemouth in Scotland before that, when the company underwent a productivity drive which led to an overhaul of its logistics operations and a second switch of ports in five years. In a conservative business where customers don't welcome change for change's sake, the challenge was to demonstrate that Sunderland, a municipal port, had won the bid for the right reasons.

Some 6-7% of Södra's total pulp production is destined for the UK, which equates to around 140,000-150,000 tonnes/yr for a variety of applications. Approximately 20 customers receive Södra's pulp in the UK, and the majority, around 100,000 tonnes/yr, now goes through Sunderland. With service a major priority for customers, the bar had been set high when the port took over the contract.

Initially, the culture shock for both parties was huge; Sunderland, some 60 miles north of Leeds in the northeast of England, was well placed geographically to receive pulp from Södra's mills in southern Sweden, but it had limited previous experience of handling pulp in large volumes. As the first cargo units came ashore in 2007, both sides soon began to realize that a smooth transition was going to be tough; teething problems were significant and the port had insufficient hauliers to deliver the service it had promised.

A FRESH START

When it dawned on both sides that the original bid had counted on around 20-30 trucks a week as opposed to the 6-7 required to maintain Södra's service levels, Odin Shipping, the port's agents, stepped in to help. Within two months, it had introduced a unique inventory tracking system to report back to Södra in real time on every ship and unit in the port, which, and how many units were in the warehouse. "It sounds simple", says Odin's managing director Peter Dickson, "because it is, sometimes simplicity works best. We would have paper mills calling up saying their pulp didn't arrive until 4p.m., while the driver was insisting he'd left the mill an hour earlier. Now we have a regular delivery report where Södra Cell can access all its pulp deliveries in real time."



Odin supervises the cargo discharge very closely on Södra's behalf

Setting sail for the future

The UK port market is a fragmented one in ownership terms. Ports are privately owned, trusts and some, such as Sunderland, are still in municipal hands. When the port lost a major steel contract in 2004, its future looked uncertain and winning the Södra deal threw it a lifeline it resolved to hold on to. Today the Port of Sunderland is part of the City Council's wider initiative to develop a national hub for low-carbon industry, as detailed in the recently launched Sunderland Economic Masterplan. The port has a high profile in the local community (it's only a 10 minute walk from the port to the heart of the town).

Originally built to facilitate the export of coal and with a proud maritime heritage in shipbuilding (Sunderland was once the world's largest shipbuilding town), the port is situated on a 200-acre site in the northeast of England and focuses mainly on dry bulk cargo handling. It has a 3-km stretch of quay frontage and in 2009, it handled around 650,000 tonnes of products. With the City's initiative to be a major force in UK off-shore wind power, PoS is hoping to capitalize on the growing wind and renewable energy market and has ambitions to diversify from this bulk handling base.

To ensure the data are as accurate as possible, Odin supervises the cargo discharge very closely on Södra's behalf, providing a discharge analysis back to Södra, building a consistent, constant picture, calculating the percentage of any damage to shipments, broken wires, oil on the cargo units etc. This runs in parallel with Södra's drive at the pulp mill end to optimize its own damage elimination program, known as the 'Take Care' initiative. Odin implemented a live, on-line inventory system which records all vessels coming into the port and tracks each unit from the warehouse to the receiver's mill gate.

"It's a huge sales aid," says Holland, "enabling us to see instantly how much pulp we have in stock, whether we can hold particular parcels for a customer for a week or two, whether we can organize an extra delivery and so on. It's been a huge improvement.

"During the world shortage earlier in 2010," adds Holland, "the system enabled us to see immediately where we had the flexibility to be quick on our feet and keep delivering to our customers by managing orders on a daily basis. If one mill didn't need its pulp as urgently as another, we were able to divert tonnage to a customer requiring immediate stock because we could see exactly what was in and coming in, where and when."

Coupled with the real-time monitoring service was an education plan for the 36 haulage companies on a one-to-one basis. Holland explains: "We expect clean, presentable curtained vehicles with reliable drivers who meet the stringent safety standards demanded by Södra, the port and customers. We have one receiver, for example, in the middle of a village. It can only accept deliveries at specific times of day because the truck blocks all the roads and we have to minimise local disruption."

Steve Todd, finance director of Union Papertech, says he's pleased with Södra's service from Sunderland. "The fact that we can count on deliveries arriving when they say they will has made a real difference to our local inventory levels. We can keep less stock on site because we know we can count on pulp being delivered when we need it, and that's important for a mill such as ours."

One of the Port of Sunderland's key advantages has been its quick vessel turnaround times; the ships discharge directly onto Corporation Quay and the pulp is moved by clamp truck to a purpose-built

warehouse a few metres away. Turnaround time averages just five hours for the vessels entering the port, which has the added advantage of being non-tidal and turnaround time for the trucks to be fully loaded can be as little as 15-20 minutes.

KEEP IT SIMPLE

Whereas as paper reels can be barcoded for tracking the system, it's a layer of unnecessary technology when it comes to pulp, says Matthew Hunt, Port Director. "Adhesive labels don't work on pulp bales since they're not wrapped, and they can end up in the customer's paper stock if you're not careful, which is the last thing anyone wants. It's hardly practical when we're looking to get the pulp loaded as quickly as possible to be hunting around for a scanner in the dark."

Instead, the port relies on good old-fashioned manual labor. The tallymen in the warehouse physically direct the units to the covered storage and keep a tally of what's in stock, where and when, information which then feeds back into the Odin system. "Don't over-engineer it," says Hunt. "Pulp is not necessarily like a specific reel of paper made to order. If a client wants a bale of Södra blue, they can often have any bale of blue, it just has to be at the front of the warehouse ready to go. There is an occasional need to segregate particular parcels which are allocated to a customer for specific technical requirements, but generally there is a science to the simplicity of the system and ensuring it is completely reliable. We have a 98-99% success rate for on-time deliveries; that compares to a European average of 96-97%."

The challenge for many companies during productivity initiatives is to maintain the service and flexibility that customers value so highly at a competitive price. It's a balance both sides believe has been achieved, comments Holland: "Changing ports is a huge risk and the contract we have now is nothing like the one we signed back in 2006," he says. "Every day we had to win a small battle together. There was no spitting out the dummy and walking away. We had to make it work, and we have. We don't want to have a man on an eight-hour shift in the customer's warehouse because he's not sure when the pulp is arriving. Now, we can give the customer a much smaller window so they can ensure an operative is in the right



Pulp is moved by clamp truck to a purpose-built warehouse a few meters away



Ships discharge directly onto Corporation Quay

place at the right time. That means improved productivity for the customer, as well as Södra.

"We believe our service is now second to none. If we need to get pulp to a customer for a particularly urgent need we can simply call Odin and say, 'Can you fix it?' They've never said no. A lot of ports don't have the freedom to make those decisions but there are only 43 people on site here, all of them involved in the business all the time and able to deliver as good a service as the bigger ports, if not better." **PPI**



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