

## Sapa streamlines its warehousing activities

*An interview with Peter Bergs, Hub manager SAPA*

**In order to remain competitive in a stagnating construction market, Sapa Building Systems, manufacturer of aluminium windows, doors and conservatory systems, decided to take its efficiency to the next level. The first phase of Sapa's continuous improvement programme involved a detailed assessment of the warehousing operations at its hub in the Belgian town of Landen. With the help of logistics consultancy firm Groenewout, the company evaluated the existing situation and defined – and implemented – a host of improvements. The result: a significant improvement in efficiency and an increase in delivery reliability at order line level.**



*Peter Bergs*

Sapa's 25,000m<sup>2</sup> logistics hub in Landen serves not only the Belgian market but also most other countries in Central and Western Europe, including Scandinavia, plus it ships export orders to the Middle East and Far East. In addition to handling the distribution of aluminium systems, the hub also takes care materials sourcing (system profiles and accessories), inventory management and demand planning. The warehouse, which holds approximately 12,000 SKUs (stock keeping units), comprises an automated warehouse with cantilever racking for profiles, a conventional warehouse with cantilever racking, an 8m-high accessory warehouse and an automated warehouse with cassette shelving. In addition, there is a zone for value-adding activities and where a powder coating line and a number of thermal break lines are located. These thermally insulate the profiles.

Sapa's board of directors came up with the ambitious plan of increasing the efficiency of the hub in Landen and positioning the company even more firmly as a reliable partner for its construction-industry clients. High on the list of priorities were significant cost reductions along with a better service level, a reduction in obsolete stock and a higher output from the powder coating line, which has been operational since late 2012. That plan led to several sub-plans, with top priority being given to a thorough analysis of the warehousing activities.

Peter Bergs, hub manager at Sapa: "We suspected that we were working very hard in the warehouse, yet inefficiently. We wanted to change that by taking a smarter approach to utilising our people and planning the workload."

### In search of potential improvements

Sapa enlisted the help of consultancy firm Groenewout to analyse potential improvements within the various warehousing processes. Initial analysis resulted in six key processes being defined, and a plan of attack was then suggested for each one. Bergs recalls: "The following processes were defined: packing, picking, replenishment, picking and packing of accessories, lay-out & slotting, and goods in & despatch. Data analysis and value stream mapping helped us to gain an overview of these six processes and evaluate them. We looked at the various activities in each of

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the steps: the individual process steps were timed, the number of employees involved in each activity was noted, and so on."

Groenewout also performed a benchmark study to discover how Sapa scored compared to other companies in the same sector for a whole range of activities. The study revealed that there was considerable room for improvement on almost all fronts, from inbound goods through inventory levels and inventory mix right up to picking and packing. Bergs explains: "Thanks to their extensive database, Groenewout can perform a benchmark study pretty quickly using their own data. For each of the aspects that they benchmarked, we didn't just receive an indication of the potential for improvement but also a firm commitment. For picking, for example, Groenewout estimated the potential for improvement at between 20 and 40%, but also committed themselves to a 36% improvement excluding slotting. That proved to be a very useful exercise." The analysis, observations and time-test data subsequently formed the basis for a number of very concrete recommendations. One of them was to switch from having two employees permanently stationed on each packing line to a system based on one employee per line supplemented by a 'mobile' employee who helps out on whichever line is busiest.

The findings from Groenewout's evaluation activities were also discussed in workshops with the supervisors and team leaders. "Groenewout compared the theoretical staffing level that they had calculated for the various processes against the actual staffing level, and those gaps were a topic of the workshops. The workshops have been a very important step in the overall process. Giving our employees the opportunity to have their say, and using their input as the basis for making a number of changes, has created the internal support necessary to enable the improvements to be implemented smoothly in the second phase of the project," explains Bergs.

### **Clear scope**

The main focus of the recommendations lay on better balancing the workload, utilising employees more efficiently and making improvements to a number of process steps. Bergs recounts: "We had agreed on two clear limitations beforehand: we would not tamper with the core processes of the ERP system (Ed.: Sapa preferred not to say which system it works with) that guides our activities, and we would not make any fundamental changes to the warehouse set-up. Products could of course be moved to a different location, but we would not move any racking systems or make any other radical adjustments."

Within that context, Groenewout formulated numerous possible areas for improvement, divided into quick wins, short-term improvements and long-term ones. One of the actions suggested related to the inbound flows of goods.

"Up until then, delivery trucks could turn up at Sapa unannounced at any time, and various employees would immediately set about unloading them – which meant that other warehousing activities were being interrupted, whether appropriately or not, and sometimes delayed. From now on, deliveries are only accepted between 8.00h and 15.30h and drivers first have to contact the shipping department before being allowed to come to the loading dock. Instead of the goods-in administration being done in five different zones, we've now centralised all those administrative activities in one place," says Bergs.

Another efficiency gain is based on tightening up a number of processes, with better planning and stricter cut-off times potentially eliminating the need for the nightshift. Bergs explains: "The intention is to separate out activities such as picking, packing and loading – which currently all overlap too much – and to organise them better by working with stricter cut-off times. In other words, making clear agreements about releasing orders to the warehouse and setting a strict deadline for completing picking activities so that work can start on loading the trucks on time. That tighter planning should enable us to scrap the nightshift, or at least reduce it. After all, some activities are more difficult to do during the day, such as replenishing the automated warehouse. Doing that at night enables us to make optimal use of the robots in the daytime in order to achieve maximum output." The picking process has become better organised in the accessory warehouse too. Instead of letting one employee handle a complete pick order, from collecting the labels to preparing the order in the despatch zone, there are now two employees who spend the whole day picking orders and depositing them in a central holding area. An employee from the despatch department subsequently collects the orders at regular intervals and takes them to the despatch zone.

### **Efforts bearing fruit**

Groenewout's recommendations resulted in a fully fledged action plan, including various sub-projects, which is already over three quarters of the way towards completion. Sapa did not have to wait long to see the first results. Bergs: "We've been able to boost our efficiency by over 16%, partly by reducing the number of temporary workers. The service level, based on the delivery reliability at order line level, has increased from just below 90% to 93% currently." All in all, the project has run very smoothly. "Groenewout's methodology has proven its worth. We've received extremely hands-on advice which we're now rolling out one step at a time. My biggest concern was the change management. We paid a lot of attention to that right from the start – including through the workshops – and that approach has paid off. Many of our employees have been with Sapa for a very long time and in such a case it's not unusual for people to resist change, or perceive it as a threat. By immediately creating the necessary support among those employees too, we were able to pre-empt a lot of problems. Incidentally, we're noticing that nowadays a growing number of employees are suggesting improvements of their own. We have installed five

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information boards in the warehouse so that everyone can follow the situation, and we hold follow-up meetings twice a week to discuss the progress of the various projects. Now that the first round of efficiency gains in the warehouse has become reality, we are exploring a number of new, potential projects in line with our commitment to continuous improvement," concludes Bergs.

#### About Sapa

**sapa:** Sapa AS, specialised in extrusion, aluminium construction systems and precision tubing, is the new name for the joint venture between Sapa, part of the Orkla Group, and the Norwegian company Hydro, part of Norsk Hydro. Since the merger, Sapa AS can call itself global market leader in the extrusion of aluminium profiles. Headquartered in Oslo, the company is active in 40 countries and employs around 23,000 people.

The construction departments of both Sapa and Hydro have now been combined in the Sapa Building Systems business unit, which develops and markets aluminium windows, doors and conservatory systems under brands such as Sapa Building System, Wicono, Technal and Domal. In Belgium, the company has a development centre (in Lichtervelde) and a logistics centre (in Landen). Sapa Building Systems supplies to manufacturers who purchase the profiles in standard lengths. Since Sapa has its own powder coating line in Landen, customers in the Benelux region can also order profiles in a choice of colours.

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#### More information

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