

# VOLKER WESSELS CONSTRUCTION PLANT

CUSTOMER STORY



*" We want to make a difference  
in the construction industry and  
are starting at home"*

**VOLKER WESSELS CONSTRUCTION PLANT**  
is everything but a traditional plant service

## “We want to make a difference in the construction industry and are starting at home”

Data, digitization, automation and BIM may not be the first things that come to mind when thinking of a plant service. A look behind the scenes of VolkerWessels Construction Plant will soon prove otherwise. The eagerness to discover what smart use of data can achieve for this company is overwhelmingly obvious. This is not without reason, as data has already proven its strength in the company's day-to-day activities. Managing director, Ron Frazer and Business Analyst, Jan van Putten, recount why VolkerWessels Construction Plant decided to seriously invest in data and digitization 8 years ago, what it has brought their company this far and what the future holds.

In 1984 it all started relatively basic for VolkerWessel Construction Plant. The six Wessels Group (as it was then called) companies all had a small amount of plant, which was not very efficient. Maintaining, inspecting and often building and operating plant (e.g. tower cranes, scaffolds and builders' hoists) is a specialism in its own right. Moreover, storing all this plant requires a considerable amount of space. The group decided to start a professional plant service and bring everything together under one roof. Whatever plant items the companies required, could simply be rented "back".



### Carefree construction

Ron Frazer: “We first realized that construction companies’ plant needs were changing approximately 10 years ago. We were renting out fewer and fewer scaffolds and did not really understand why. Conversations with our customers showed they needed a wider range of support from us. Our customers were looking for a partner who could not only provide plant, but also the calculations and plans and take care of fitting plant items. All of this preferably at a fixed price. This got the ball rolling.”

“In 2010, this resulted in our new vision “Carefree construction”. We wanted to offer more added value. Not only by providing our customers with good plant, but also by sharing knowledge of plant and by offering comprehensive solutions. Service provision was introduced in the VolkerWessels Construction Plant organization. Needless to say, this implied an ERP package that supported our vision.”

### Preventing waste as much as possible

“In 2011, we made the transition to 4PS Construct and made our first steps in the field of data and digitization. We realized the “paper process” could be organized in

a smarter and more efficient way, both for our customers and our own internal process. The starting point is that the activities are carried out correctly from the start and that standardization and transparency in the process are strived for. Also across chain partners, in order to prevent waste as much as possible.

“The first step was making a transition from our physical plant book to a web shop. Site managers could place a digital order for plant items via this web shop. They were able to see which plant was located on their site, when it was due for inspection and could create a collection order for returning plant items themselves. When we would add a new plant type to our fleet, this information was visible for our customers in the web shop immediately.

### Digitization of main tasks

“The next step was digitizing our primary process. Rather than paper receipts trailing through the organization, data is entered directly in 4PS Construct by the employees responsible for the activities in question. In this way, we share plant requests from the web shop with our carrier digitally. In his system, our carrier links a

*“ In the past, we used a paper plant book which would be outdated the moment it came back from the printer's. We now have a 3D model of all our plant items, including a description of all their features ”*

driver and truck to this plant request in order to see exactly when and where he is expected to load and carry which plant item. This plant request is also shared with our forklift drivers via a tablet. To them, it serves as a picking list showing them which plant items they must prepare from stock."

"When the driver carries the plant item to the construction site, all activities such as driving, loading, unloading and waiting are recorded in his transport management system (TMS). This information is shared with our system and returned to our customers as knowledge. When the plant item is delivered, the original plant request serves as a digital consignment note which can be signed off by the site manager on the site."

"The work carried out by employees in the warehouse has been digitized to a large extent as well. Based on the customer's request they set to work on a particular plant item, a power cabinet, for example. They make sure it is ready to be rented out, by performing the required inspections, for example. Potential damages are photographed, and these images are communicated with the site manager via the web shop. The employees carrying out the work are responsible for digitally processing

the work order."

#### **Providing a comprehensive solution**

Jan van Putten recounts: "We believe our current web shop (since 2011) is outdated. We are currently working on a portal where customers can make all kinds of arrangements for their projects with respect to plant. Soon, we will offer a comprehensive solution." "Besides our own plant, we will show plant of our strategic partners such as Boels, Hilti and Riwal in our purchase portal as well."

Ron adds: "Boels is a company we used to consider a competitor. Until we realized our companies actually complemented each other quite well. Boels focuses on short-term rental and is located all over the country, which means there is always a branch nearby the construction site. In contrast, our strength lies in long term rental and supporting service such as calculations and plans and our specialist knowledge in the field of builders' hoists, scaffolding, tower cranes et cetera. Together, we can better serve our customers. Beside greater volume, we thus also create a wider range of items. We are taking this cooperation even further by striving for single data entry, across chain partners. Once one of the parties has entered data, the other imports it. We also share data."

*"We want to create a portal for all plant items and materials builders require for their building or infrastructure projects, and compete in terms of the smart process rather than on price"*



#### **Delivering knowledge and insight as well as plant**

As far as Ron is concerned, data will play an even greater part in the future. "The realization that, with over 800 current projects and the data from our strategic suppliers we have a substantial amount of knowledge at our disposal, is ever increasing. We would like to share this knowledge with our customers, the construction companies".

Jan continues: "We will do so by means of clear dashboards which will be displayed in our purchase portal. These dashboards will provide insight into performances in terms of plant, logistics and finances. Site managers will be able to see exactly how long they have rented a particular plant item and what was the average waiting time for the trucks. In addition, projects can be compared. In this way, we deliver knowledge and insight as well as plant items and contribute to a culture based on continual improvement.

*"Our cooperation with customers is now focused on how to work smarter rather than merely on price."*

#### **BIM Bridge**

Construction projects are increasingly being drafted in 3D, Ron says. "In order to follow this trend, we started modeling our entire plant package in 3D, a number of years ago. Our project engineers were in charge of this project. Over the course of the last few years they have become true BIM modelers. They have the ability to enhance our customers' virtual building with our plant models.

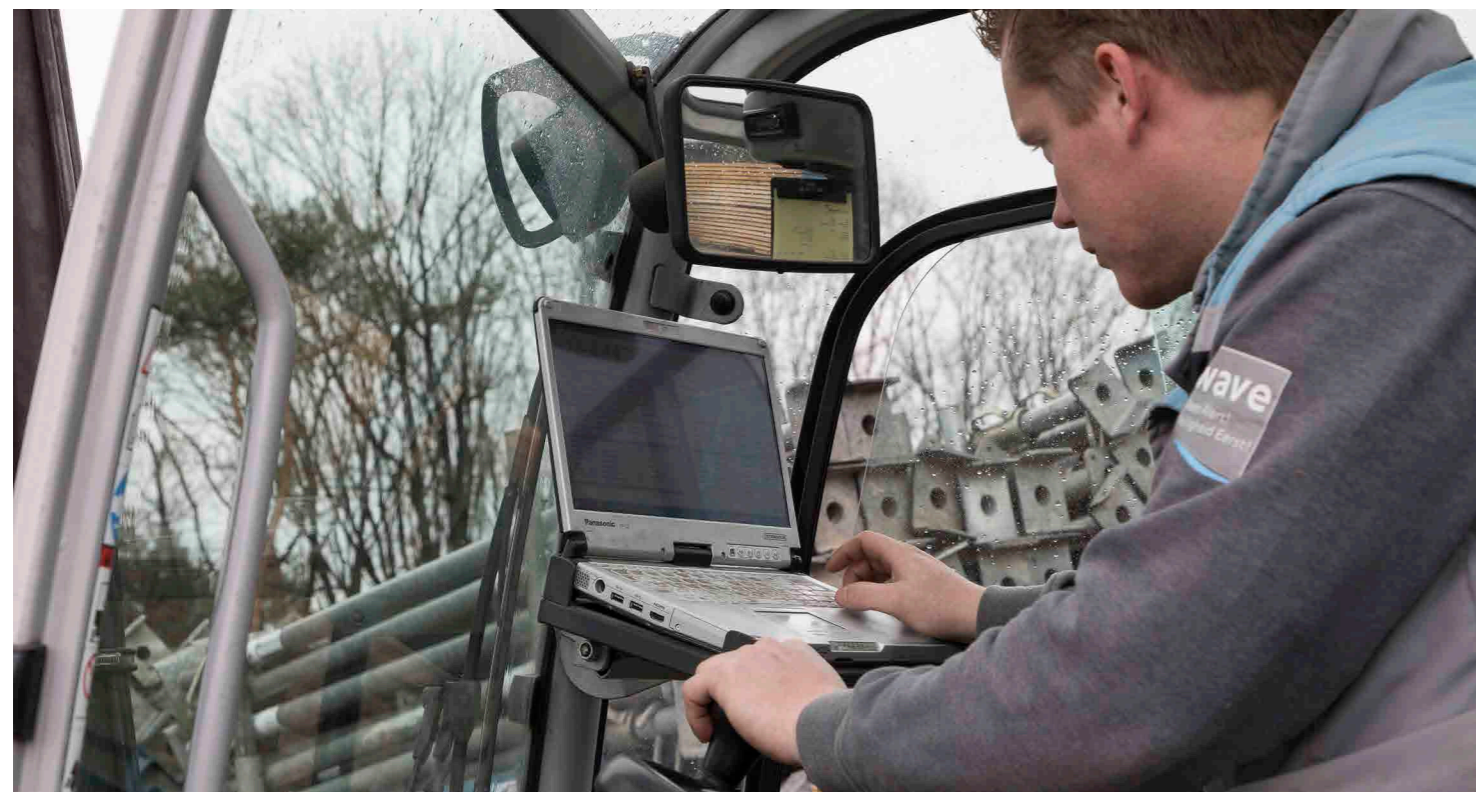
"These plant models are also available for our customers via an objects library. This library has various detail levels that are in line with the different construction phases. Together with our customers, we build a digital version before starting the actual building process "outside". This helps us determine in advance the most efficient plant deployment for a project and reduces costs of failure. In addition, our project engineers have enhanced the objects with data such as height, width and weight. In time, this information will provide even more benefits such as quicker and better calculations and ordering, plant stock management, analysis etc."

"All this is achieved together with 4PS", Jan adds. "The great thing about working with 4PS is that they understand where we are headed. In this way, we help each other reach a higher level. The application of the so-called BIM Bridge is a great example of this. Together we are researching the possibility of importing BIM models into our ERP software and

using the data in our follow-up process straight from the model. This means that we will be able to create a plant request directly from the BIM model. Yet another great efficiency improvement."

*"Our processes are now fully organized around 4PS Construct. This makes 4PS a very important partner."*

"Another example of us joining forces with 4PS lies in the field of Machine Learning. Recently, a student at the Eindhoven University of Technology wrote his master's thesis on this subject at our company. His research focused on the question whether on the basis of the information in 4PS Construct, we could predict which plant items will be returned when. This method uses the power of algorithms. Our plant management department will soon start work on this."



### **In the end, it is all about people**

It is obvious what VolkerWessels Construction Plant hopes to achieve with all this. Ron: "Together with our strategic partners, we aim to achieve the best possible plant solution for our customers. That is our passion. Digitization is an important tool for realizing our goals. Whereas the technology is often already available, in the end it comes down to

the people involved to make the necessary change. This is something we are very proud of. We could never have made these great steps without the commitment and drive of our people. We can do more work with the same number of people, and, as it turns out, it is great fun!

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