



# ANDUSTRY *news*

NO. 1 | FEBRUARY 2018

ANDUS GROUP SERVING THE INDUSTRY

ANDUS *group* companies:

## Manufacturing

FIB Industries

Gouda Refractories

Van Voorden Foundry

## Services & Maintenance

Gouda Vuurvast Belgium

Gouda Vuurvast Services

Gouda Feuerfest Deutschland

ISS Projects Slovakia

Lengkeek Staalbouw

Rijndijk Engineering

## Contracting

Armada Janse

Armada Mobility

HSM Offshore

HSM Steel Structures

RijnDijk Staalconstructies

## CONTINUOUS DEVELOPMENT IS NECESSARY

Ms Gerdi Verbeet became chairwoman of the Supervisory Board of Andus Group in 2016. What is her take on the group after nearly a year as chairwoman?

Gerdi Verbeet: “After I resigned as chairman of the House of Representatives, I wanted to stay active within society. When I was asked to take the position at Andus Group, I accepted practically immediately because I’ve always felt very strongly about the manufacturing industry. Andus Group is a leader in this industry, with wonderful companies. During my time at The Hague, we assumed that we had to profile ourselves as a knowledge economy. That we had to specialise in services and logistics, but I’ve always felt that it is important to perform well in the manufacturing industry, too. The Netherlands needs a varied labour market with different options. Not everyone is suited to an office job; you also need people with practical skills. And as a social democrat, I highly believe that everyone is equally important and valuable. That you must give everyone good opportunities to be able to take care of themselves. We need everyone equally and we must try to make this country a good place to live together.”

### Continuous investments

“I also really enjoy the craftsmanship when I go on a

working visit to the various Andus companies. It is a pleasure to see the pride that people take in the product they’re making. I think it’s really great to see how they make such a beautiful – and sometimes immensely large – product with such concentration and passion. How they collaborate intensively using cutting-edge technology and major technical ingenuity to create something that is accurate right down to the millimetre. Impressive. That’s also an important field for attention in my opinion: the technological developments are moving at lightning speed and we must ensure that our employees remain ‘fit for work’. As a company, you have to continuously invest in your employees’ education and training. The time for moving through the rest of your life with the skills you originally learned is over; people must continue to evolve. That’s not just a challenge for the company, but also for the employees themselves: they have to know where their ‘learning button’ is and how to make learning fun. The demand for high-quality labour is only increasing and you will need to be able to constantly master new techniques.”

### Great initiatives

“Naturally, another continuous challenge is corporate social responsibility and caring for our environment. As the chairperson, I not only represent the shareholders or the employees; I must consider the interests of all stakeholders, including those of our society. Of course, the company respects the law. But if we want to give our society a beautiful future, then we must work on sustainability with great awareness and put enough energy into this. As a company, you must not be afraid to be held accountable in this regard. I have been seeing a lot of great initiatives in this area being taken by the Andus companies, and I strongly believe in this. It’s necessary for our children’s futures.”



Photo: Margriet Tielmans

# GREEN ENERGY FOR 1 MILLION HOUSEHOLDS

HSM Offshore is on the front lines when it comes to developments on the energy market. For years, major projects have been achieved in the oil and gas markets, but this market has strongly declined due to sustained low oil prices. However, the market for wind energy offers a great alternative: HSM Offshore has already been involved in building five platforms. A recent highlight was the contract award to build and install two transformer modules for TenneT. Wind energy? HSM Offshore is contributing to this as well.



An immense wind farm of 138 km<sup>2</sup> is being constructed approximately 22 kilometres from the Dutch Walcheren coast and must supply 1 million households with green energy, i.e. the Borssele wind farm. To convert the generated low-voltage electricity (66 kV) into high-voltage (220 kV), TenneT has contracted HSM Offshore with the construction of two transformer platforms in the sea, called Alpha and Beta. The platforms will then be connected to the TenneT high-voltage station on land in Borssele using AC cables. This station will convert the electricity into 380 kV.

### Economically profitable

HSM Offshore was already working on a first wind energy project for the Horns-rev A wind farm off the coast of Denmark in 2002. This country is leading the pack in terms of sustainable energy generation. So much that in 2015, 42 percent of the

energy needs in Denmark were being generated by wind energy, which was a world record at that time. However, since that first project, it has taken a long time for major energy suppliers to make the switch; it just wasn't profitable enough. But various innovations in the wind energy market and the continuous increase of the size of wind turbines made wind energy much cheaper. This fact and the increased public and political pressure has turned wind energy into a booming business now. A new industry has been created and HSM Offshore is moving full speed ahead with it.

### Out to sea

In the coming three years, HSM Offshore will focus on the construction of two large platforms, whereby HSM Offshore will be taking care of everything but the high voltage installations. The scope of work is enormous: from

engineering to the purchase of all materials and equipment; from the construction of the platform to testing the installation at sea and commissioning it. It is a complex and comprehensive project in which risk and interface management will be given priority. The first 'topside' of approximately 3,800 tonnes will be installed on the six-leg jacket, weighing approximately 3,000 tonnes, in April 2019. Total height: 86 metres. In the 20 weeks that follow, approximately 40 HSM Offshore employees will commission the platform. What is the commute to work like? Walking across the temporary bridge connecting the jack-up barge Seafox 7 and the platform. So they're out to sea for a while. The housing and working platform will be installed next to the transformer platform. This same process will be carried out for the Beta platform the following year. As we mentioned, it's massive.

## WONDERFUL PROJECTS BY RIJNDIJK STAALCONSTRUCTIES

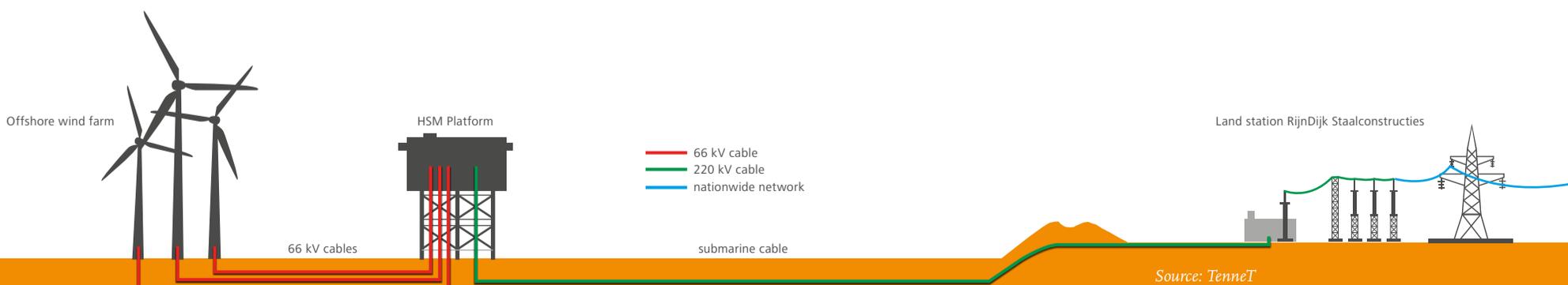
In addition to HSM Offshore, RijnDijk Staalconstructies is also involved in the Borssele wind farm project. Specifically, TenneT has awarded the construction of the Borssele land station to Joulz Energy Solutions, which in turn called in RijnDijk for the construction of the station. At the same time, RijnDijk Staalconstructies has landed a great project for the engineering and supply of the structural steel, as well as the wall and roof cladding, for the brand-new shea nut oil factory in Ghana for IOI Loders Croklaan Industries. These fantastic new projects were a nice entry for the new managing director, Eric Steijns.

Eric: "Of course it was nice to join the company in this stage. I've been working at RijnDijk Staalconstructies since the beginning of this year

and these two projects are a perfect reflection of the company's strength. Well-established clients and varied projects with tonnages ranging

between 500 and 1,000 tonnes. Of course, it's fantastic to have Joulz as a new client in this regard, and to have been able to continue the

good relationship with IOI Loders Croklaan via this third project we are doing for them."



Source: TenneT

## Variety

“The Borssele project for Joulz entails the delivery of 650 tonnes of steelwork, the installation of the primary components on the steelwork, the construction and delivery of the secondary and tertiary installation including commissioning. We supply

approximately 600 galvanised steel tubular columns with a three-layer coating in approximately 20 different models, varying in length up to 24 metres and in diameter up to 460 millimetres. Because of the high-voltage environment, the standards for quality and safety are particularly high. The project for IOI Loders

Croklaan is completely different. There are approximately 600 tonnes of steel needed here too, but it is, in fact, a complete factory, with process units, utility buildings and pipe racks. After the different structural parts are prefabricated, they will be transported to Ghana in containers, where IOI Loders Croklaan will

install them together with local partners. In brief, there’s an incredible variety in the work, which is also great for our production employees.”



Eric Steijns

# GOUDA REFRACTORIES: AN UNFORGETTABLE EXPERIENCE IN RUSSIA

The construction of an anode plant means that the necessary refractory materials can quickly turn into an investment of millions. Which is why it would be only logical that the tender process for the delivery of these materials takes months to complete. Michel Grootenboer (Director Sales & Marketing) and Darius Grofik (Sales Manager) from Gouda Refractories had all of this in mind when they travelled to Moscow in July 2017 for a ‘Clarification Meeting’ with RUSAL, the world’s largest manufacturer of aluminium. It became an unforgettable day...

Michel: “We got an unexpected call from RUSAL in June, asking if we were interested to tender for the delivery of refractory materials for a new anode plant in Taishet.” He walks over to the world map in his office and points at a small, black dot. “So right here, in the Irkutsk region, about 7,000 kilometres from the Netherlands, as the crow flies. We then got an email with the initial specifications and the invitation to come to RUSAL headquarters in Moscow on July 11th.” Darius: “RUSAL had split up the project into five packages: the supply of the mortar, the insulating castables, the anchoring bricks, the top blocks, and the flue wall and head wall bricks. We were neck-deep in calculations. I focused on the materials, while Michel focused on the transport possibilities and costs. Because this

was something like 17,500 tonnes of refractory bricks, which would require around 650(!) containers alone. Just try getting all that to Taishet.”

## Wait and wait some more

Michel: “Indeed, it was to become a major operation. We would transport the containers by road to Rotterdam, after which we would ship them by boat to St. Petersburg, to then transport them by rail to Taishet. Plus, we of course had to concentrate on satisfying the necessary terms and conditions, and the guarantees. Ultimately, we submitted our initial budget via email and then we travelled to Moscow to present our proposal in more detail and to get more information about the next phase of the project, the objectives, etc.”

Darius: “We were welcomed at 9:30 a.m. And the first surprise was that it was a joint welcome for all the tenderers. So there we were, sitting together with competitors from Germany, Russia, and India. The rest of the day was just as surreal. We were asked to put our ‘best offer’ in an envelope twice, after which we waited in a meeting room for hours while RUSAL considered our offer.”

## A great project

Michel: “Oh yes, it was one surprise after another. There wasn’t any corporate presentation or anything like that required; just offering a new price right there on the spot. So I was constantly in contact with Marcus Schuchmann, our Managing Director. Finally, at 5:30 p.m., we were all called back

together and we were told that we had been awarded 500 tonnes of insulating castables and 17,500 tonnes of refractory bricks. And then we could leave...” Darius: “Michel and I just looked at each other, stunned, like, did this really happen? Just wham bam, in one day? Such a huge project? Because ultimately, it meant that 680 containers with materials will be supplied, the first of which are already on their way, and the last of which will be delivered at the end of July. Like I mentioned, super surreal, but a really great project.”

# REUSING RAW MATERIALS REDUCES THE ENVIRONMENTAL IMPACT

Anyone walking around Van Voorden Foundry will see a forest of flames and white-hot ladles. Unfortunately, the manufacturing of high-quality, complex castings requires a lot of energy. Anyone who thinks saving energy in those circumstances is just a waste of time and effort would be mistaken. There are numerous ways in which Van Voorden Foundry works to minimise its ecological footprint, specifically by making efforts to reuse materials.

Very simply stated, Van Voorden Foundry’s production process is the melting and casting into specific

forms of numerous metals in various compositions and alloys. Iron, nickel, aluminium, copper, etc.

are Mother Earth’s raw materials. But the extraction of these materials means that the earth is slowly but

surely being exhausted. Plus, the mining facilities and transport of these metals consume their fair >>

>> share of energy. Van Voorden Foundry is very aware of these facts, which is why they have developed a programme to buy back their products from clients after the lifespans of these products have expired.

### No landfilling

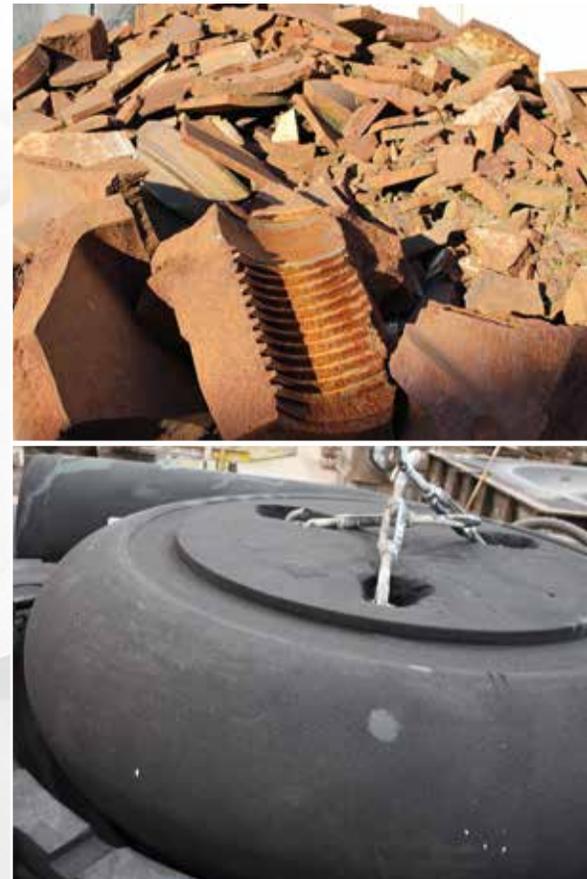
It's actually based on the cradle-to-cradle concept. Van Voorden Foundry knows the exact chemical composition of each product, of course. So, by taking back a casting, the foundry can add these products back into the melting process piece by piece, which means that the materials are ultimately reused. This is also done with the sand that forms an essential component of the production process. After

all, a sand mould is required for every casting. After casting, the sand mould is broken down in large, unusable clumps. But by breaking up these clumps of sand in a special installation, these are turned back into grains of sand again. And then, after 'dusting' this sand, it can be reused in the production process. This allows Van Voorden Foundry to reuse 90% of the sand they use. And that's worth quite a few semi-trailer truckloads!

### Critical eye

Lastly, the company has purchased a 'chip centrifuge' for the aluminium-bronze products. After a product is cast, it is further processed, during which 'chips' or burrs of

material are removed and left behind. During this process, a coolant often has to be used and this coolant attaches to the waste material. This means that the chips cannot be reused in a new casting process because too many hazardous fumes would be released. The chip centrifuge 'washes' the chips and breaks these down into even smaller pieces. This process makes the materials suitable for reuse. It's obvious that a major industrial process like this will take a toll on the environment. But by looking at the process carefully, you can implement important improvements that significantly reduce the environmental impact.



## WE CONTINUE TO EXPAND

Invasto BV, an Andus Group real estate affiliate, is right in the middle of developing two new facilities for FIB in Leeuwarden and an expansion of the existing offshore facility at HSM in Schiedam.

Pickling is an essential process at FIB for cleaning all the stainless-steel parts that are manufactured in Leeuwarden. In order to continue to comply with the strictest environmental requirements, now and in the future, and to be able to achieve the desired capacity expansions, the company decided to build a new pickling facility with twice the surface area of the old facility. The floor will be sturdier so that even the heaviest components can be pickled in-house. This will, of course, require some significant doors (8 metres wide

and 6 metres high) so the largest constructions can be driven inside. In addition, the new pickling bath will be significant larger so that larger objects can be submerged in it. Furthermore, a storage facility will be built next to the pickling facility. All of this will not only boost FIB's opportunities but also the appearance of the location.

Invasto is also right in the middle of projects for HSM in Schiedam. The existing offshore facility will be expanded with two axes creating a total

extension of approximately 22 metres. This expansion will allow for the simultaneous construction of two complete platforms of approximately 2,000 tonnes each in the HSM facility. In the meantime, 46 piles with an individual length of 23 metres have already been delivered, the foundations have been poured, and RijnDijk Staalconstructies has been hard at work manufacturing the steel structures.

## ANDUS GROUP SERVING THE INDUSTRY

**Industry news is an Andus Group publication**  
 Industry news appears several times a year. The publication aims at keeping employees, clients and suppliers informed of developments within Andus Group.

**Editorial committee**  
 Kris Rooijackers  
 Jennifer van Rijn  
 Niels Wibier

**Lay-out and Production**  
 HOW communicate | create

**Editorial address**  
 Voorstraat 56  
 4132 AS Vianen

Andus Group BV  
 Vianen / Tel. +31 (0)30 - 211 58 00

FIB Industries BV  
 Leeuwarden / Tel. +31 (0)58 - 294 59 45

Gouda Refractories BV  
 Gouda / Geldermalsen  
 TEL. +31 (0)182 - 59 14 00

Van Voorden Foundry  
 Zaltbommel / Tel. +31 (0)418 - 57 12 00

Gouda Vuurvast Belgium NV  
 Wijnegem / Tel. +32 (0)3 - 326 57 00

Gouda Vuurvast Services BV  
 Gouda / Tel. +31 (0)182 - 59 14 00

Gouda Feuerfest Deutschland GmbH  
 Bochum / Tel. +49 (0)2154 - 888 700

ISS Projects sro  
 Košice / Tel. +42 155 729 92 27

Lengkeek Staalbouw BV  
 Hoogvliet RT / Tel. +31 (0)10 - 416 16 44

Armada Janse BV  
 Budel / Tel. +31 (0)40 - 256 19 11

Armada Mobility BV  
 Nieuwegein / Tel. +31 (0)30 - 246 95 00

HSM Offshore BV  
 Schiedam / Tel. +31 (0)10 - 427 92 00

HSM Steel Structures BV  
 Schiedam / Tel. +31 (0)10 - 427 92 00

RijnDijk Staalconstructies BV  
 Budel / Tel. +31 (0)40 - 246 72 28

RijnDijk Engineering BV  
 Breda / Tel. +31 (0)88 - 066 41 11