



U S E R R E P O R T

Introduction of noax Touchscreen Industrial PCs at the Konecranes factory Würzburg

QUALITY MADE IN GERMANY: RELIABLE, USER FRIENDLY, SUSTAINABLE

At the Würzburg factory of the Finnish crane specialist Konecranes, nearly two dozen rugged noax industrial PCs have been proving themselves in tough continuous operation since the hardware and software conversion in 2020.

Rough industrial environment with high vertical range of manufacture

Konecranes, a world leader in lifting solutions headquartered in Finland, provides innovative lifting solutions to shipyards and ports in addition to the manufacturing and process industries. The Würzburg plant, founded in 1824 and part of the Konecranes Group since the beginning of 2017, specializes in manufacturing the versatile straddle carriers and has become a true global player in this field. The state-of-the-art maneuverable special material handling vehicles are used in terminals worldwide in more than a hundred countries to transport and stack containers. The basis of the Franconian success is the permanent technical development and the commitment of about 400 highly qualified and motivated employees. Modern production technology with specialized production lines ensures the high quality and reliability and, last but not least, the delivery reliability for the diverse and demanding production.

THE USER / COMPANY

- Würzburg location of the global player for leverage solutions
- Specialization in straddle carriers
- High vertical range of manufacture with specialized production lines

»I would choose again for noax«

PASCAL HEIDRICH

Sustainable investment in future security

In order to be able to secure this success in the long term, it was decided in 2020 to completely change the hardware and software in production. "Our initial situation in production was a pure data capture solution with a deployment age of over 25 years," explains Material Planner Sven Steinfeld. "Using a chip and a barcode scanner, employees could record themselves and their order on a single-line LCD display; completely without user interface or visual representation." Accordingly, the users received no feedback whatsoever; there was no question of networking. Operating the terminals was cumbersome, barcodes often didn't work, and recurring failures reduced production efficiency. In addition, there was the security aspect regarding the outdated server – so it was urgent to replace this environment on the software and hardware side. "This was a real challenge," recalls Carina Riedmann, IT Coordinator Computing. This is because the high level of vertical integration at the site, with machining and configuration of all components and materials on site, makes the environment for hardware and application extremely harsh.

THE INITIAL SITUATION

- Outdated data collection solution without feedback to the user
- No visual user interface and therefore cumbersome operation
- Challenging, harsh industrial environment

»The launch definitely went as presented, actually even beyond that.«

SVEN STEINFELD

Wanted – found: Resistant & user-friendly industrial PCs

During the planned changeover of data acquisition and implementation of MES software, the search for new hardware also began. Due to the diverse conditions and requirements in the plant with steel construction, cutting, welding and painting hall, a robust solution was required first and foremost.

There was no experience within the group to fall back on: “Of course we asked within the group for recommendations, but as a production site with very special requirements, our situation here in Würzburg is simply very different from other sites, we had to start from scratch, so to speak – with an Internet search,” explains Carina Riedmann. Initial attempts to use desktop PCs in production failed in view of the challenging industrial environment and the special conditions at the plant.

With the switch to special industrial PCs with touch displays, the Ebersberg-based manufacturer noax, with more than 25 years of experience in the field of robust, user-friendly PCs for industry, quickly came into play. In addition to the criterion of robustness, noax also fulfilled a decisive IT requirement: “It was a prerequisite that the IPCs run with a normal Windows operating system and must be able to be seamlessly integrated and supported, also on the network side,” says Sven Steinfeld.

In addition, there is the ease of use and reliability: A decisive advantage of noax industrial computers is their uncompromising industrial design. With high-quality components and complete in-house development and production in Germany, noax sets standards in terms of safety and quality for long-term operation in extreme environments.

THE REQUIREMENTS

- Robust hardware solutions for industrial environments
- Windows OS
- Seamless integration and support through enterprise IT

»An important point for us was that the industrial PCs run with normal Windows OS and can be integrated seamlessly.«

CARINA RIEDMANN

RELIABLE AND DURABLE EVEN UNDER HARSH CONDITIONS IN ALL INDUSTRIAL AREAS

With one, everything works. Test winner: noax

After an extensive review of the offerings from various manufacturers, a handful of devices, including four IPCs and a desktop PC with touch, were finally put through their paces thoroughly on site over several weeks. The required software was installed and all applications in the industrial environment were tested with a wide variety of gloves. With a clear test winner: noax industrial computers. “In some cases, the computers got stuck and froze, no longer reacted – with noax, everything simply worked,” summarizes Sven Steinfeld.

“The decisive factor for noax was and is the workmanship – when you hold the device in your hand, you simply notice the quality,” adds Director Supply Operations Pascal Heidrich: “It quickly became clear to us that we would get the most out of noax and that it would pay off in the end. We are advocates of ‘Made in Germany’. Quality is very important to us. We expect the same from our equipment!” noax met all expectations with its completely enclosed design. Another plus is the precise operability of the touch screens with any type of glove.

EXTENSIVE FIELD TESTS

- Comparison tests on several PCs in the industrial environment on site
- Application with various gloves
- Clear test winner: noax IPCs

»When you hold the device in your hand you simply notice the quality.«

PASCAL HEIDRICH



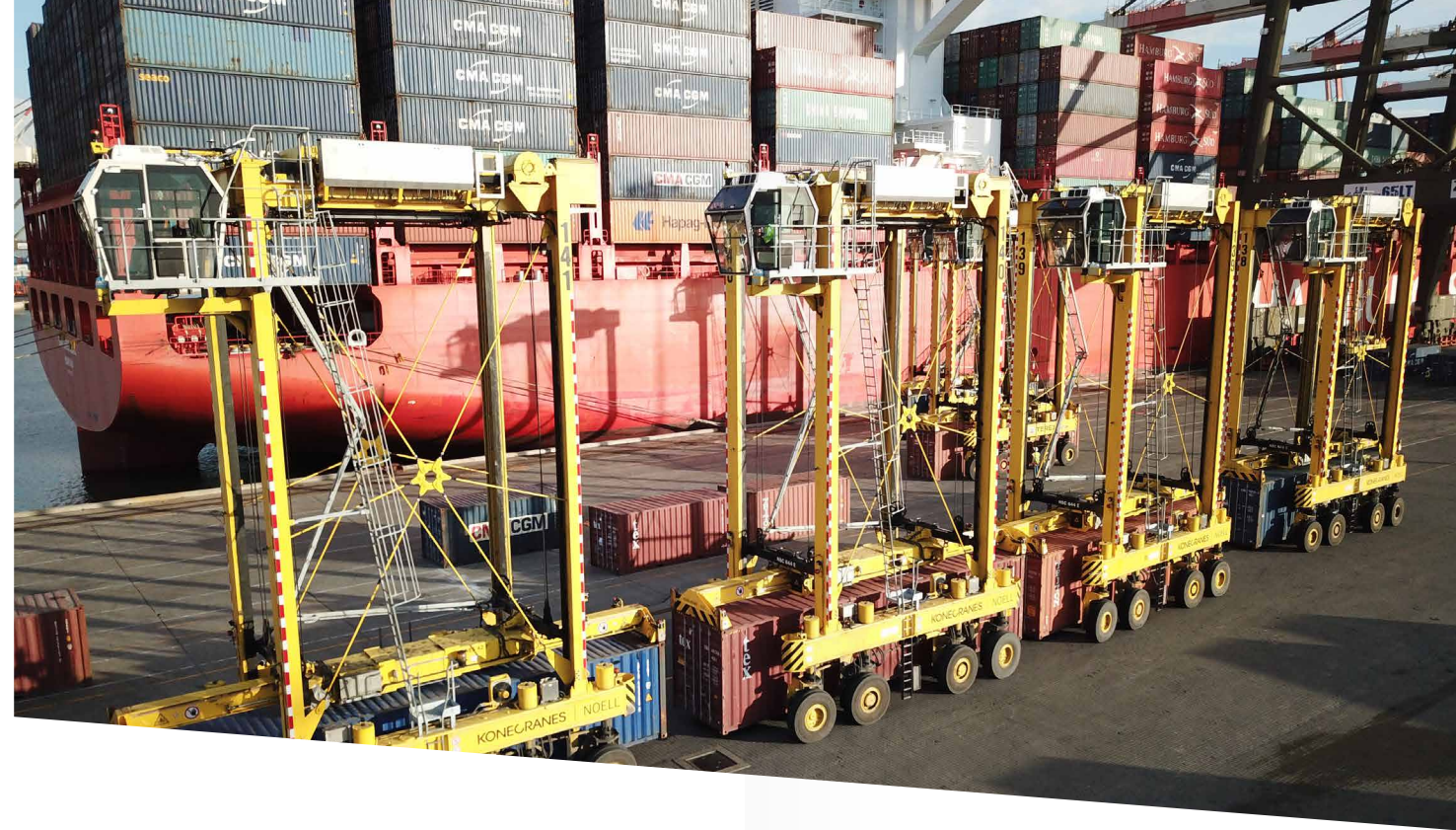
A major plus: partners with know-how & experience

After the initial examination and consideration, always with the regulations and specifications of the group in mind, the exchange soon intensified. noax was able to contribute its diverse experience from cooperation with global groups to the project – so that all group specifications and contingencies could be accommodated and taken into account in the product selection. “It’s great to have a partner with experience and know-how in advising and supporting companies in corporate structures and with appropriate tips on how to handle things,” Carina Riedmann emphasizes. She and her colleague Sven Steinfeld agree: “The process definitely went as we had imagined, in fact it went even further”. As for the employees, the changeover was received positively throughout as well. After initial reservations, as with every changeover, everyone in the plant saw the great advantages of the new hardware. The cooperative partnership ensured a smooth implementation. noax provided solution-oriented support with fast, competent assistance for all questions concerning the commissioning. The satisfaction in the team is correspondingly high.

IN THE PRESENCE OF HEAT, OIL, DIRT AND DUST, STURDY NOAX INDUSTRIAL PCS ENSURE PRECISION-FIT PRODUCTION

COOPERATION

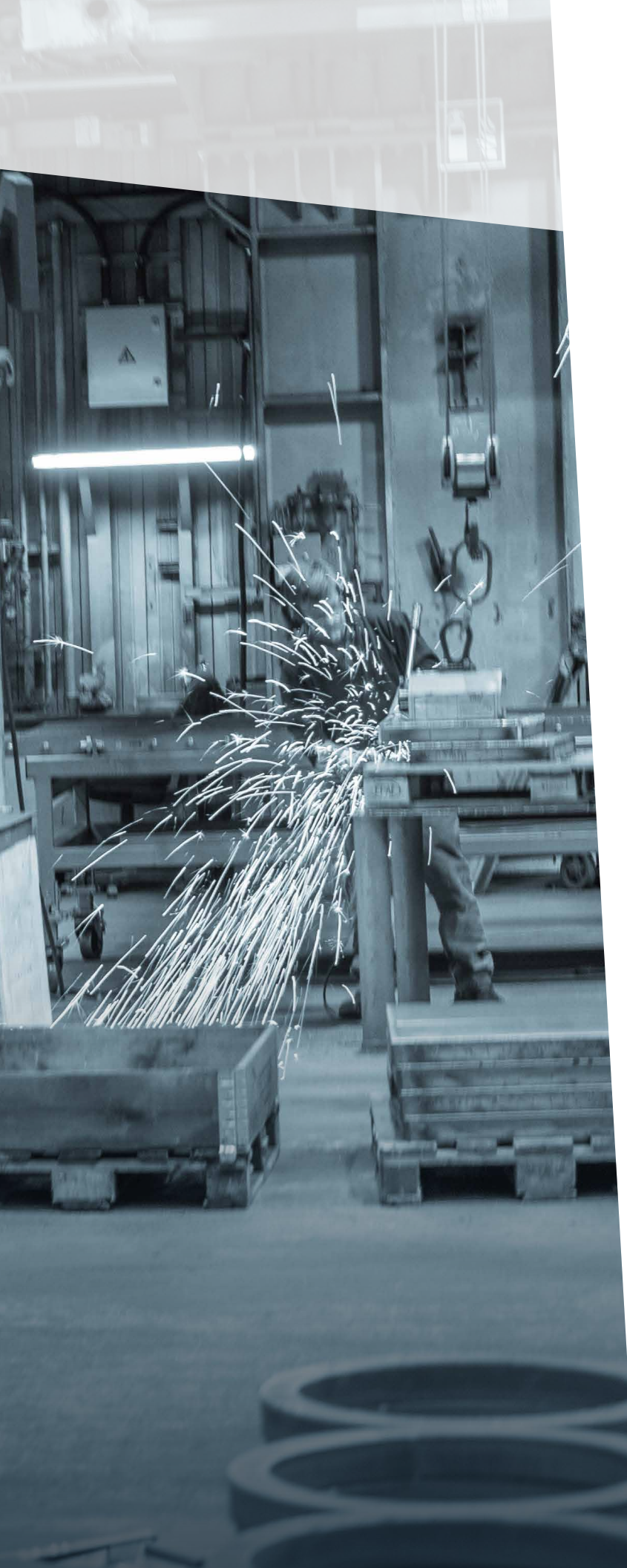
- Close coordination and consideration of all wishes and group specifications
- Added value through many years of experience and competent support
- Smooth process and high acceptance with the user



KONECRANES®

The Würzburg factory of the
global player for cranes
specializes in the production of
versatile straddle carriers.





Pascal Heidrich
DIRECTOR SUPPLY OPERATIONS

»We are advocates of Made in Germany. Quality is held in high regard at our company. Of course, we expect the same from our equipment!«



»I am very satisfied with the decision in favor of noax.«

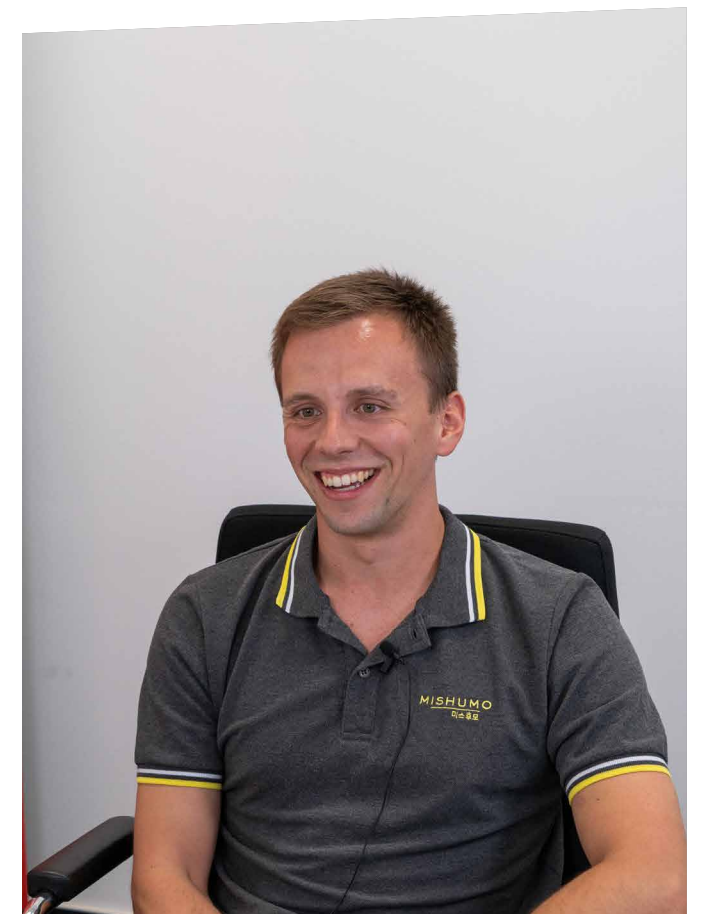
PASCAL HEIDRICH

Carina Riedmann
IT COORDINATOR

»We were always able to move according to the group's specifications, also because noax brought so much input with it.«

Sven Steinfeld
PRODUCTION PLANNER

»The data is transmitted exactly as needed, maximum comfortable.«



»The robustness of the Automation Series has convinced us. An absolute match!«

CARINA RIEDMANN

Tough IPCs All-round protection, reliable & intuitive operation

Twenty noax IPCs are currently in use at the Würzburg plant – with MES data acquisition on board. Another 23 noax industrial computers are used at other Konecranes locations. They are used throughout the entire production process: in steel construction, cutting, welding, mechanical processing, at assembly workstations and in the paint shop. Here, noax scored highly with its all-round protected IPCs. With the decision in favor of the Automation Series, the optimal hardware solution was finally found in a close exchange of ideas.

The noax Automation Series is ideally suited for industrial use at Konecranes with its many challenges, such as dust, oil and heat. Even under harsh environmental conditions, the completely enclosed industrial computers reliably and durably perform a wide variety of tasks in all industrial areas. The TFT display with automatic screen brightness and the projective capacitive touchscreen are standard features of these compact, high-performance terminals. They also impress with their robust industrial design, can be operated comfortably even with different types of work gloves, are waterproof and dustproof according to protection class IP66, and are resistant to shocks and vibrations. Thus, the networking of man and machine by means of

the latest information and communication technology is possible even under difficult environmental conditions – and all information is reliably available at the right time, at the right place, to all users.

The configuration for the RFID reader was also implemented individually; the data was transferred exactly as required. "Maximum convenience. We had very good experiences with the support, it worked out great," says Sven Steinfeld. Sophisticated, precisely fitting solutions for the demanding local conditions were also found in the area of mounts.

SOLUTION AND INTRODUCTION

- noax Automation IPCs with Multi-Touch, operable with work gloves
- Water- and dust-tight according to protection class IP66, externally certified
- Robust industrial construction, certified according to 5M3
- Customized configuration

High reliability & sustainable design: noax convinces

And what does the summary look like after around 1.5 years of use? Pascal Heidrich first had to find out for himself how things were going, because he hadn't heard anything yet – "Usually there is only feedback about negative incidents – I haven't heard anything about the hardware, which is a good sign!" This assumption was confirmed: Apart from the replacement of a screen protector, there have been no problems since the launch. The colleagues are correspondingly satisfied: The IPCs run reliably, whether in steel construction, where there is a lot of dust and work is also done with oily gloves, or even in the paint shop; once it even rained on a noax IPC, as Sven Steinfeld reports with a laugh – without any nasty consequences, thanks to the tightness of the noax IPCs. "Expectations

were definitely met," agree Carina Riedmann and Sven Steinfeld, "we would choose noax again." And Pascal Heidrich adds, "You simply shouldn't save money in the wrong place, I am very satisfied with the decision for noax – maybe the devices are a bit more expensive at first, but the price-performance ratio is right and the quality is convincing." All noax IPCs are designed for continuous operation. Spare parts availability for the durable hardware is guaranteed – without a maintenance contract: an investment that pays off! Certainly at Konecranes.

PROJECT SCOPE

- Start with over 40 Touch IPCs
- At 4 Konecranes locations in Germany
- Integrated RFID reader for Employee Authentication
- Installed software: mpdv Hydra MES

Why noax?

Consequent use of standards

▷ Seamless integration into the IT landscape

Precise, modern industrial Multi-Touch

▷ Intuitive and precise operation right to the edges

Made in Germany, complete in-house development

▷ Long-term spare parts availability and competent support

External certifications

and many years of experience

▷ High running and quality reliability

Completely enclosed design according to IP66

▷ Sturdy and resistant in harsh environments

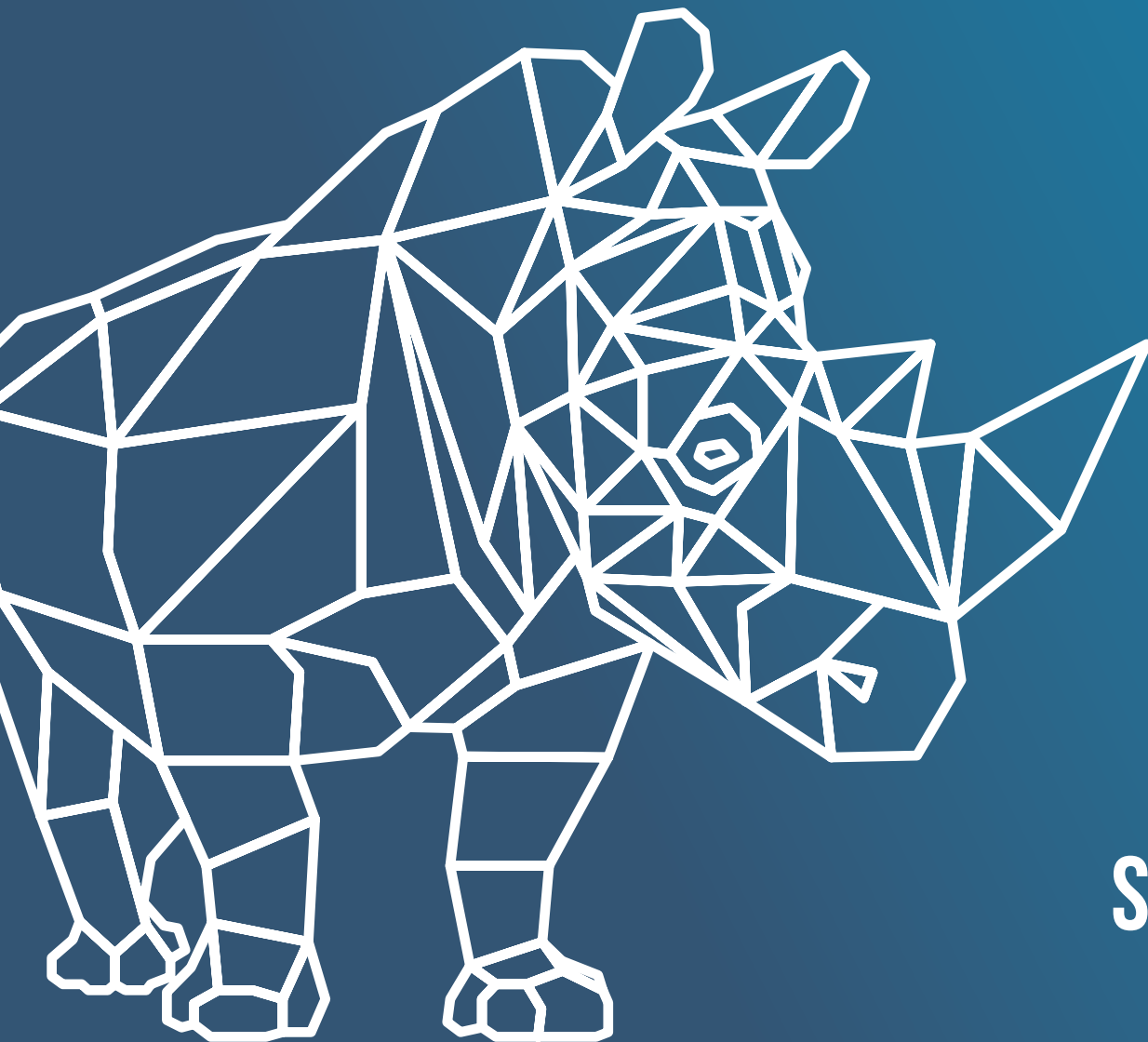
Individual configuration

according to the environmental conditions

▷ High user acceptance and smooth project handling

*»Expectations were definitely met,
we would choose noax again«*

CARINA RIEDMANN & SVEN STEINFELD



**TOUGH
IS OUR
STANDARD**

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