



Case Study

Erdrich USA

Industrial PCs
designed for mobile
forklift applications



Erdrich's barcode scanners are easily integrated with noax C12 IPCs

Expertly utilizing industrial computers in the automotive industry

Two men dressed in blue jump suits exchange words while reaching for the wall-mounted bin that holds ear plugs. As they methodically unwrap the plastic pouches and begin placing the plugs carefully in their ears, the conversation ends abruptly. With a quick nod, the lead man turns, then leans firmly into the heavy steel door leading to the plant floor. Instantly,

"In our initial examination of the unit, we could tell that it was very well built and could easily withstand the conditions of our facility."

the room is flooded with a sweet metallic smell and a deafening roar of the giant metal presses that are working tirelessly in Erdrich's new Dublin, GA facility, producing some of the highest quality stamped metal parts in the world. Erdrich, a German-based automotive supplier with more than 50 years of experience, is a mid-sized family-owned company that manufactures complex metal parts and subassemblies for the automotive industry. Through their experience and commitment to innovation, Erdrich has become a leading global player in the metal stamping industry with a customer base that extends throughout Europe, the US, and China with companies like BMW, Mercedes, and Volkswagen.

From concept to completion

Erdrich's search for their first US-based facility began back in 2010, as an answer to increased demand they were seeing from European customers with US-based manufacturing facilities. Erdrich was in need of a location that would provide a solid logistics infrastructure, including access to a major port facility, a skilled workforce, and a suitable business environment

necessary to compete on a global level. Following a widespread search, a quiet cotton field just outside of Dublin, GA off Highway 16, eventually became the top choice. Following two years of construction, \$40 million, and a special late-night delivery of a 150-ton press which closed down multiple lanes of traffic on Highway 16 on its journey from the Port of Savannah, Erdrich is now operational in a new 130,000 square-foot, state-of-the-art facility. The key attributes of the facility are a fully-equipped hardening shop for metal components, and a large press hall featuring a brake-piston processing line and assembly area. With the new facility completed, Erdrich expects the location to eventually mirror the size, capacity, and reputation of their German headquarters once fully operational.

Discovering noax IPCs

As with any new facility, many details are taken into account in order to get processes running

smoothly. After Erdrich received their warehouse shelving, parts bins, forklifts, and began populating the bins with inventory, they quickly began to realize that using pen and paper to track these movements to more than 180 bins (which will increase fourfold within the next year) would not be feasible. Any time a forklift operator needed to move products from the line, relocate inventory, or prepare loads for shipment, they had to do it by hand. With the quantity of movements made each day, and the fact the product and bin location numbers were more than 10 digits long, it became easy to see that inefficiencies and the potential for errors were significant. After brainstorming potential solutions, Erdrich decided that a fixed-mount touchscreen industrial PC (IPC), that could direct operators to the proper locations and allow movements to be entered directly on the touchscreen, would be the ideal solution. Furthermore, Erdrich agreed that the IPC should be ruggedized with at least an IP65-rating which would allow for protection from metal dust and oil which is often present



Erdrich's new manufacturing facility located in Dublin, GA

Erdrich is a company which thrives on innovation. With the help of noax industrial PCs, Erdrich can continue to develop new products and services which deliver the ultimate in performances, productivity and conveniences their customers have come to expect.

noax IPCs allow forklift operators to swiftly move products, relocate inventory, and prepare loads for shipment



in the air. The IPC also needed to incorporate WLAN, so Erdrich could connect to their network, have sufficient performance to run SAP software, and enough interfaces to integrate their barcode scanners. After conducting an online search, noax was discovered. After an initial conversation with the noax sales team, Erdrich was pleased to hear that all of their requirements could be met with the noax C12, a 12" IPC that was specifically engineered for mobile applications. Additionally, Erdrich liked the fact that despite being a German-based manufacturer, noax had a fully functioning sales, service, and support location in Charlotte, NC. "We were satisfied with pursuing the noax product offering once we learned there was also German-based support for our headquarters in Germany. When you are just coming online with a new facility, having the ability to get immediate support from any location is critical," stated Head of Operations Alex Kehrer. Once the precise configuration had been chosen, noax offered Erdrich a demo IPC which was in stock and ready to ship. Within days of receiving the IPC, Erdrich had the unit configured and installed on one of their forklifts for real-world testing. "In our initial examination of the unit, we could tell that it was very well built and could easily withstand the conditions of our facility. What we didn't know however, was whether or not it would have the performance needed to run our cloud-hosted SAP application and the ease-of-operation necessary for our forklift drivers to be able to interact with the touchscreen," stated Kehrer.

Performance where it counts

After a week of testing the C12, the benefits became apparent. According to Erdrich's

Logistics Coordinator Moises Sanchez, "Before noax, everything that I had to move, I had to



noax industrial PC being used on Erdrich's forklift application

write down. Then, I had to find an available computer on the plant floor to enter data. Normally this is not such a big deal, but when you have several people stopping to ask you questions, it can be time consuming. With the noax PC, I can see where I need to go, scan and

move parts, and then record the action in real-time... all from the seat of the cab." After weeks of testing, the decision was made to go with the noax C12 IPC. The C12's two integrated 2.4 GHz antennas, Intel WLAN card offering a/b/g/n connectivity, and a dual-core processor allowed Erdrich's SAP software to run smoothly and reliably for the duration of the testing. Additionally, Erdrich was impressed with the C12's integrated optional uninterruptible power supply (UPS) system, which uses supercapacitors to stabilize power and prevent hard shutdowns to the IPC as a result of turning off the forklift ignition or changing the forklift battery. With the UPS preventing possible corruption to critical operating system files, or potential losses of data, Erdrich was confident that the noax IPC would be reliable over the long-term. According to Erdrich's Purchasing Agent Hana Cerninova, "That was all we needed to hear. With noax, we found exactly what we were looking for."

"We found exactly what we needed thanks to noax."

Poised for growth

Erdrich is known for its constant drive to innovate and increase efficiencies. When it comes to quality, it is clear Erdrich not only sets high standards, but is able to maintain those standards by choosing to partner with suppliers that share their same mindset. Although only in a part of the facility, Erdrich has experienced significant process improvement and efficiency through the use of the C12 industrial computers. As Erdrich's Dublin, GA facility continues to grow, noax is looking forward to supporting their industrial PC needs for many years to come.



Erdrich USA Inc.

Company Profile:

Erdrich, a German-based automotive supplier, manufactures complex metal parts and subassemblies for the automotive industry, and has been in the metal stamping business for more than 50 years. The company has developed consistently and reliably into a global player in the metal forming industry. Erdrich has five facilities throughout Europe, the US, and China which supply parts to other automotive supplier companies as well as to BMW, Mercedes, and Volkswagen.

For more information, please visit
www.erdrich-usa.com

Requirements and Applications

Objectives:

- ✓ Control and traffic product to final destination
- ✓ Data recording directly on site
- ✓ Documentation of orders for tracking purposes
- ✓ Easy access to all logistics information right from the forklift

IPC Requirements:

- ✓ Completely sealed enclosures
- ✓ Simple, intuitive operation by employees
- ✓ Easy-to-read touchscreen displays
- ✓ High level of reliability to eliminate human error
- ✓ Interfaces to various peripheral devices such as bar code scanners
- ✓ Professional support and service
- ✓ Use in battery-driven (electric) forklifts

Overview of Components

Hardware:

- C12 industrial PC
- In-house developed all-in-one mainboard
- Input: particularly robust touchscreens
- IP65 (NEMA 4) protection rating
- Completely sealed, with internal fan
- WLAN with integrated antennas

Software:

- Operating system: Windows 7
- Application program: SAP

© noax Technologies
Case Study arranged 2015

Headquarters

noax Technologies AG
Am Forst 6
85560 Ebersberg (Germany)
Tel. +49 8092 8536-0
Fax +49 8092 8536-55

noax Technologies Corp.
10130 Perimeter Parkway, Suite 230
Charlotte, NC 28216 (USA)
Tel. +1 704 992-1606
Fax +1 704 992-1712

noax[®]
Technologies

For worldwide locations, visit www.noax.com or e-mail info@noax.com.