

# INCREASED CUSTOMER ORIENTATION AND EFFICIENCY IN ORDER ACCEPTANCE

Free-form orders arriving as e-mails or documents meant considerable manual effort for thyssenkrupp Materials Services. Modern AI technologies have significantly accelerated order acceptance through intelligent document reading and processing. A significant proportion of enquiries and orders received via email in the future will be processed automatically. This automation creates greater customer satisfaction and the potential for more individual customer support time within sales.



thyssenkrupp

## CUSTOMER

thyssenkrupp Materials Services

## COUNTRY

Germany

## HIGHLIGHT

Significant gain in efficiency and quality in the ordering process

## PRODUCTS

smart ORDER

As the biggest mill-independent materials trader and service provider in the western world, thyssenkrupp Materials Services offers a unique range of materials, raw materials and services - more than 150,000 products in over 30 countries. Around 15,900 employees serve more than 250,000 customers globally with recorded sales of €16.4 billion in the fiscal year 2021/22.

With its Digital Technology Office, thyssenkrupp Materials Services has put together a team of digital pioneers who see digitization as a key business strategy. With a focus on process automation, data science and customer experience, they are driving the company's digital transformation.

With the goal of increasing efficiency in strategically important areas, the Digital Technology Office team turned its attention to sales, which is characterized by high document volume, and harnessed the power of AI-based data capture to automate routine order entry and processing tasks.

## CHALLENGES

- ✓ Customer base of more than 250,000 customers in more than 30 countries
- ✓ High volume of incoming enquiries and orders via informal e-mail or as structured documents
- ✓ Orders often without unique ID's for items
- ✓ Manual order taking, processing and transfer to ERP is time-consuming and labour intensive
- ✓ Solution must be rolled out to work within a complex organization - 10 companies with more than 80 sales offices in 9 countries with 5 languages



## HIGH VOLUME OF ORDERS BY E-MAIL OR DOCUMENT

Whether standardized products or tailored solutions - a high degree of customer focus is key for thyssenkrupp Materials Services.

This is also reflected in the acceptance of material enquiries and orders - the company deliberately doesn't limit its customers to online stores or EDI, as it also accepts customer requirements in free form - for example; as freely formulated e-mails or documents attached to e-mails.

This means the incoming requests and orders are rarely standardized and completely variable in form and structure. Often, they do not even contain unique IDs for the desired items.

In the past this has resulted in a high level of manual effort for opening, reading and classifying the customer enquiry as well as the subsequent creation of the quotation or order in the ERP.

The time in sales then had to be spent accordingly on less value-creating work - instead of on individual customer support.

## WITH AN AGILE APPROACH FROM POC TO A GLOBALLY USED SOLUTION

After a comprehensive evaluation, thyssenkrupp Materials Services decided on a proof-of-concept with the smart ORDER product from Insiders Technologies. Within just eight weeks, the project team set up a pilot version for a selected thyssenkrupp Schulte GmbH sales office in Germany, and tested it extensively. With close coordination between business users, the

*"For us, customer focus also means not forcing customers onto EDI or online-shops, but also accepting their enquiries and orders by e-mail or document and processing them as quickly as possible. With smart ORDER, we can do this incredibly efficiently."*

**DR.-ING. ARNE CONRAD**

DIGITAL TECHNOLOGY OFFICE,  
THYSSENKRUPP MATERIAL SERVICES

*"The cooperation with Insiders Technologies is extremely open, friendly and solution oriented. With Insiders Technologies' product portfolio, we have a powerful basis for automating document-heavy processes."*

DR.-ING. ARNE CONRAD

DIGITAL TECHNOLOGY OFFICE,  
THYSSENKRUPP MATERIAL SERVICES

## BENEFITS FOR THE CUSTOMER

- ✓ Higher customer satisfaction through flexible and faster order acceptance
- ✓ Significant acceleration in order acceptance and processing
- ✓ Goal of high ratio fully automatic processing will be achieved
- ✓ More time freed up for individual customer care creating new sales potential
- ✓ Speed of delivery from idea to implementation: Germany-wide productive operation in just 14 weeks

Digital Technology Office, the Digitalgarage of thyssenkrupp Schulte and the expert product team from Insiders Technologies, optimal processes were defined, the solution customized and the necessary integrations with SAP ERP created.

The solution was then rolled out across Germany, with the users being trained under pandemic conditions with appropriate sessions.

In parallel, the functionality had to be refined and optimized based on user feedback. After only six weeks, all the sales offices in Germany were successfully working with the new solution and the international roll-out for other group subsidiaries began. Today, more than 600 users at over 80 locations in nine countries are working

with the new solution, in ten thyssenkrupp Materials Services companies worldwide.

## IMPRESSIVE SUCCESS

In the fiscal year 2021/22, more than 1.5 million items were processed with smart ORDER. The team is well on the way to achieving noticeable process improvements through the fully automatic processing of the incoming enquiries and orders without any manual intervention.

Overall, the processing time has been noticeably reduced. Manual interventions are required much less frequently than before. As a result the employees in the sales teams now have much more time to provide individual support to customers, which delivers huge benefits for the



*"The implementation of smart ORDER is the first project of its kind that I know of where IT, development, business and external teams have worked together so effectively, without bureaucracy or hierarchy to make the solution what it is today."*

OLIVER BENDER

DIGITAL IMPLEMENTATIONS MANAGER,  
THYSSENKRUPP MATERIAL SERVICES



Image: thyssenkrupp Material Services

business.

## CONTINUOUS IMPROVEMENT IMPORTANT

The key to this success relies on 2 things; firstly the performance of smart ORDER in recognizing information within a wide variety of documents, including those with a less clear structure. Secondly, in the continuous improvement process set up by thyssenkrupp Materials Services.

To do this a dedicated team of data analysts, process experts and product specialists from IT and business teams, analyzed the results weekly and identified and implemented any potential improvements. For example, a targeted search was conducted for document groups where only one field was not recognized in order to be able to transfer more documents to fully automatic processing. Gaps in the mapping of external customer part numbers to internal part numbers were identified and filled. With in-depth Power BI reports, the performance of the solution could be improved even further.

The introduction of the solution was accompanied by positive change management measures - the project team clearly illustrated and communicated the benefits of the new solution.

Employees were provided with extensive training material in the form of user guides, videos and FAQs. A dedicated community in Microsoft Teams not only addressed technical issues, but

also provided practical tips.

## NEW AREAS OF APPLICATION ALREADY IN SIGHT

Spurred on by the success of the AI-based automation of document-heavy processes with the smart products from Insiders Technologies, the Digital Technology Office is already working on further areas of application. Often, the initial idea comes from the business team. For example, two new use cases, the automatic checking of order confirmations and the automatic processing of material certificates are currently being implemented.

### KEY FACTS

- ✓ Thanks to smart ORDER, thyssenkrupp Materials Services can automatically process high volumes of semi-structured enquiries and orders.
- ✓ Modern AI methods are once again proving their worth in the automated processing of highly diverse documents.
- ✓ Other application areas such as AI-based processing of order confirmations or material certificates have been implemented.



## SMART ORDER: BOOSTER FOR THE ORDERING SYSTEM

smart ORDER is our flagship product for automated order processing. It instantly captures all necessary business information within the order and re-routes any missing or unreadable information to a human verifier. Thanks to intelligent learning algorithms, only minor system adjustments or pre-trainings are required. smart ORDER allows to export structured data extracted from the order into any process automation, CRM or ERP system.

[insiders-technologies.com/de/o2c-automation/](https://insiders-technologies.com/de/o2c-automation/)

## ABOUT THYSSENKRUPP MATERIALS SERVICES

With around 380 locations - including around 260 warehouse sites - in more than 30 countries, thyssenkrupp Materials Services is the biggest mill-independent materials distributor and service provider in the Western world. Their versatile range of services allows customers to focus even more strongly on their individual core businesses. As part of its strategic development program "Materials as a Service" the company is focusing on the supply of raw materials and materials as well as products and services, in the area of supply chain management. Digital solutions ensure efficient and resource-saving processes for customers and provide the basis for sustainable action. From 2030 thyssenkrupp Materials Services also aims to operate on a climate-neutral basis.

[www.thyssenkrupp-materials-services.com](http://www.thyssenkrupp-materials-services.com)



## ABOUT INSIDERS TECHNOLOGIES GMBH

Insiders Technologies is a technologically leading and market-established provider of software for Cognitive Process Automation. More than 4,000 customers from all industries rely on the innovative solutions of the product house from Kaiserslautern to optimize their document-centric business processes. As the most successful spin-off of the German Research Center for Artificial Intelligence (DFKI), Insiders has made it its mission to transform cutting-edge AI into real customer benefits. Thanks to the latest Deep Learning technologies, the software solutions understand heterogeneous content, extract business-relevant information, automate transactions and shorten response times. In doing so, the technological pioneering spirit and agility are a guarantee for continuous innovations and products on the pulse of time.

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