

COMPANY PROFILE



FIRSTLY THANKYOU FOR CONSIDERING US!

Contec is evolving as a key contributor to a growing and dynamic market, driven by Industry 4.0

By utilising the newest technologies and innovations in industrial automation we strive to grow with this market. We deliver state of the art automation systems to make our clients successful, as we believe their success is our success.

Contec delivers its services in an increasingly competitive environment, where IT and automation systems are converging, where talent is scarce and there is an increased demand for smart connected systems to deliver "big data".

Contec differentiates itself by:

- Focusing on its client-orientated approach, independency in the market, delivery of high added value services and engaging employees in the company through financial participation.
- Incorporating high-level industrial IT and manufacturing software solutions
- Being present, locally, in different geographical locations across Europe
- Having strong partnerships with leading industrial automation suppliers such as Rockwell, Siemens, Honeywell, VMware, Wonderware, Schneider and Mobile Industrial Robotics (MIR).

We are here, ready to find solutions for your industrial automation challenges.

Patrick De Pryck Managing Director (CEO)

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CONTEC ACTS -GLOBALLY

Contec operates across a wide range of sectors including the petrochemical, chemical, pharmaceutical and food industries. Contec's activities are not limited to Europe. With a large number of successful international projects executed from our offices and implemented in different countries across the world.



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OUR STORY A STORY OF CONTINUOUS GROWTH

Our story begins back in 1986, at that time three instrument engineering friends joined forces and started up their own business. Initially, Contec started out as a cooperative society that focused mainly on instrumentation projects.

Over the years we have grown into one of the leading system integrators, delivering turnkey industrial automation solutions worldwide. Notwithstanding we have been able to hold onto the cooperative nature of the company which we value greatly today. Contec is fully owned by its own employees. Our people can choose to invest in company shares with a result that they are not only engaged mentally and emotionally but also financially.



The Trends Gazelle? A yearly Belgian ranking of the fastest growing companies (turnover, personnel & contribution) in Belgium. Companies are divided in three categories: small, medium & large-sized.

² | SIMPLE FACTS **ABOUT US**



Working at Contec means life-long learning - everyone attends trainings to develop and keep their skills up to date.



We have offices in Belgium (Antwerp, Kortrijk, Hasselt), France, Poland, Romania and the UK as local support for many of our clients.



A passion for technology and the right attitude have been more important selection criteria than experience for the newest members of the Contec

CERTIFICATIONS



OUR STRENGHTS



Long-Term RELATIONSHIPS

Over the past 37 years, we have built up an enormous wealth of experience. The far-reaching insight we have gained into our customers' activities today enables us to think along with them fundamentally about their processes and needs.

Our success stories have not gone unnoticed by our system suppliers either. For example, Contec has been certified at the very highest level by many partners. This enables us to offer our clients a castiron guarantee of quality.



Independent MARKET POSITION

We realise industrial automation projects entirely in-house and with our own specialists, making us completely independent of third parties. In this way, we can also work tailor-made for each customer. Moreover, we are an SME with a flat organisational structure. Both internally and externally, there are short lines of communication that enable us to make decisions quickly. Our independent structure means that we do not have to take foreign capital into account. We respond very quickly to new technologies or changes in the market. This enables us to continuously offer our clients innovative solutions that provide them with added value and a competitive advantage.



Professionals with a sense of RESPONSIBILITY

Our work and success stand and fall with our people. We find it important to invest in our people and relationships. Our employees are given the space to train and develop themselves. They are one by one professionals who can commit themselves flexibly and take ownership of every project. The customer feels that: they can sleep on both ears.

ROUND-THE-CLOCK-SUPPORT

You can rely on us 24/7. A standby engineer, familiar with your process, is available day and night. Call us and we'll be there to intervene either remotely or on site within the agreed times.

PARTNERSHIPS





3 AUTOMATICALLY BETTER.

BRINGING INDUSTRY 4.0 TO LIFE

In today's world digital networks already form a vital part of everyday life. Technology is constantly evolving at a rapid pace. At Contec we continuously monitor and evaluate new technologies and products.

Every project is a creative process; a search for the best possible solution tailored to your needs and means. Within the world of fast moving technologies and multiple suppliers, we are your partner that can help bring it all together.

We can't predict what factories will look like in 10 years from now. We couldn't predict it 37 years ago either. However we have always succeeded in co-creating the future together with our clients and continued to help them grow to their fullest potential.

YOUR PARTNER IN CREATING THE FACTORY OF THE FUTURE

ELECTRICAL ENGINEERING



Working closely together with your piping and process engineers we ensure that your existing hardware infrastructure is safe, reliable and upto-date. Expanding your production capacity? We can help you throughout the project life cycle and design your production infrastructure from the start.

MANUFACTURING OPERATIONS MANAGEMENT



More than ever manufacturing companies need stable software platforms that are flexible, efficient and most of all easy to use. Our MOM team has over 20 years of experience in designing solutions to increase productivity.

MANUFACTURING CONTROL

We help you adapt and optimise your production facility. The projects we deliver range from making small improvements to developing entirely new production systems.

INDUSTRIAL IT

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IT (Information Technology) and OT (Operational Technology) have been operating in two different domains for decades. IT departments focus on security and technology updates. OT prioritises production and stability.

We are driven by creating solutions that deliver results for your business, your clients and consumers.





Working closely together with your piping and process engineers we ensure that your existing hardware infrastructure is safe, reliable and up-to-date. Expanding your production capacity? We can help you throughout the project life cycle and design your production infrastructure from the start.

KEY SERVICES

- > Feasibility, basic and power studies
- Instrument, analyser and valve specification
- > Design of electrical systems and (Ex) control panels
- > Termination and control room design
- Development of E&I construction work packages
- > Commissioning and construction supervision
- > Technologies used: Eplan, Autocad

POWER STUDIES & ELECTRICAL SAFETY



INDUSTRIAL SAFETY

Our power team specialises in a broad range of electrical studies, high voltage projects and electrical safety calculations.

- > Short circuit calculation studies
- > Equipment evaluation studies
- > Load flows and voltage drops
- Motor start studies
- > Coördination studies
- > Arc Flash Hazard calculations
- Technologies used: Caneco, SKM Powertools, Easypower



Our certified functional safety experts carry out risk analyses of your existing and new infrastructures. Based on these findings, we decide together on the safety level requirements for the installations. We then design and validate your safety loops to ensure your systems are safe for operation.

- Process safety
- Machine safety
- Technologies used: ExSilentia, Sistema

CASE STUDY

A client asked us to design and deliver the electrical and automation systems for a new tank farm to store heavy acid. The acid would be unloaded from barges into the tanks and then loaded into trucks and ships. Clearly safety was an extremely important consideration.

The scope for our team included specifying the main instruments as well as the engineering and design of the power distribution, motor controls, PLC-automation, electrical tracing and lighting circuits. The power study, done by using SKM PowerTools, ensured the failsafe design of the power distribution and motor feeding cables. The control architecture of the ring network guaranteed the high availability of the automation systems. The redundant PLC automation system was engineered to combine safety and control signals. We validated the SIL level by means of calculations in exSILentia. Since we don't have an inhouse construction team we partnered with experienced E&I contractors. Together we successfully started up this new installation.





Because the majority of our clients are in fast moving markets we are used to tight deadlines. We pay a lot of attention to delivering projects in such a way that minimises production downtime. We have rigorous internal procedures and test plans to be able to do this, all of which have been proven in practice.

Our structured approach to projects and working according to standards – whether our own or the customers ones – has been instrumental in establishing our successful and long lasting cooperation. We help you adapt and optimise your production facility. The projects we deliver range from making small improvements to developing entirely new production systems.

MANUFACTURING CONTROL

Our team specializes in FDS creation, PLC programming, HMI development, tests in simulation and on-site tests, commissioning and start-up.

TRANSPARENCY

Correct agreements make close partnerships.



A systemic approach allows us to deliver quality work fast which helps keeping agreed timings and budgets under control.



Staff changes cause less impact when software has been developed according to an unambiguous standard.



TECHNICAL DOCUMENTATION

We are keeping record of what we do and how we do to be sure we can support you in the future, even 10 years down the route.

CASE STUDY

The objective of this particular client's project was twofold. First of all the control system of the existing quay needed to be replaced and the functionality expanded. And secondly, three additional storage tanks had to be installed and integrated. The challenge was the 1st phase to migrate 10.000 I/O's in a very short time span. We had only 3 months to prepare the details. We made a plan and managed to check all I/O's in just 3 days and completed the final system changeover in less than 12 hours.

We were on full standby during the 72 hours following the changeover to ensure continuity and availability. The 2nd phase of the project took 2 weeks of I/O testing per new tank park and this was carried out without a production shut down. The integration of the new tank parks into the existing installation needed a shutdown of 1 hour per tank park. As a result, effective preparation & efficient teamwork at its best!





AMR

Autonomous mobile robots (AMRs) can take your production facility to a higher level of automation. Due to their collaborative and autonomous nature, they can be easily integrated into the existing infrastructure of the plant.

To complete the picture in the full automation of the production floor for our clients, Contec can provide a turnkey solution for the equipment and the supply and removal of material. In order to provide our client with a quality AMR solution, Contec has entered into a partnership with MIR (Mobile Industrial Robots), a leading manufacturer of AMR robots.

ROEQ

CONTEC TURNKEY SOLUTION

Contec is able to fully integrate the MIR robot into the production environment, this includes:



The benefit of AMRs can only be fully realised if it is correctly integrated into the plant's workflow. This can be achieved by using an existing MES system or our CPMS framework, which is able to adapt to the existing software package already present on the shop floor and send the requested commands to the AMR solution. Our CMPS framework is built on top of the MIR solution and takes care of the interactions of the production software packages (ERP, WMS, MES, ...) with the necessary data. Depending on the desired solution, additional workflow tasks/checklists for operators can be included in our CPMS system.

- Increasing the system's security when required for the customer's application;
- Supply and installation of standard top modules (ROEQ);
- > Design, delivery and assembly of customised top modules;
- > Interfacing with the fire system;
- > Control of automatic doors;
- > Communication with the lift system if necessary;
- > Control of warning lights at critical locations;
- Communication with the production lines for material or material transactions;
- > Adaptation to the presence of existing AGVs.



SOME EXAMPLES OF TASKS THAT CAN BE HANDLED BY CPMS:

- > Material request to the WMS system;
- Operator tasks in the prep centre that must be carried out before the goods can be transferred to the right location by MIR;
- > Tracking of material;
- > Material request from the production lines;
- > Coordination of AMR & AGV systems.

We start projects by creating a blueprint based on ISA-95 guidelines, the international standard for developing automated interfaces between enterprise and control systems. Then we support you in choosing the software modules and technology best suited to your needs. At Contec, we developed our own production management solution: **CPMS**. We are able to develop solid and tailored MOM layers within the plants and across plant sites which takes your production to the next level of manufacturing excellence and industry 4.0 standards. МОМ

More than ever manufacturing companies need stable software platforms that are flexible, efficient and most of all easy to use. Our MOM team has more than 20 years of experience in designing solutions to increase productivity.

THE JOURNEY TO SMART MANUFACTURING

SMART MANUFACTURING ASSESSMENT

ISA 95 Introduction Visionary Roadmap Management Presentation Technology selection

IMPLEMENTATION

POC

Engineer Pilot Review Session Start up Training Commissioning

KEY SERVICES

- CPMS integration
- Consultancy and functional design specification (ISA-95)
- Integration of work processes and technology based on lean manufacturing by use of VSM, SMED, Six Sigma, TQM, TPM, Kaizen CI
- Selection of technology and/or software customisation
- Digitised work flows (paperless production floor integration)
- Production optimisation
- Performance optimisation
- Quality optimisation
- Product definition and recipe management

ROLL-OUT

Other production lines Multi areas / disciplines Multi sites

AFTER CARE

Service Adopt learnings Maintenance Support Level Agreements (SLA)

CASE STUDY

One of our clients was dealing with various challenges on 3 packing lines; the changeover time was longer than the actual run time, changeovers required high levels of manual intervention and paperwork.

As a result of the project our software teams have been able to fully digitalise the work processes on a new overall standard for the complete packing line. The recipe parameters have been configured digitally and the machine setting are now communicated via tablet computers. Additionally manual sampling was replaced by a historical database of flowmeter measurements. Quality Assurance (QA) checks are now done digitally and reports created automatically. As a result the changeover time was successfully reduced from 25 to 5 minutes (including product release) including sequential changeovers. These improvements allowed this client to triple their number of product changeovers and double their productivity on the packing lines!



INDUSTRIAL IT



The true challenge of modern technology lies in converging IT and OT. Internet Protocol (IP) devices have replaced legacy OT technology and OT has implemented virtualisation and disaster recovery. Now smart devices and industrial Internet of Things (IOT) are introduced in OT. OT is facing the challenge of implementing a new, higher standard of technology and security while maintaining focus on production.

As industrial IT professionals we understand your unique needs and can assist in moving to Industry 4.0 and delivering a converged IT/OT structure. IT (Information Technology) and OT (Operational Technology) have been operating in two different domains for decades. IT departments focus on security and technology updates. OT prioritises production and stability.

INDUSTRIAL IT

We can assist you in assessing your IACS (Industrial Automation & Control System) platform, making use of our Framework based on the 100 most occurring vulnerabilities / issues, according to ISA/IEC 62443.

We examine physical security, network setup, industrial applications, servers and clients OS systems, documentation, monitoring, and lifecycle management; and provide a lean summary of recommended actions / budget for future mitigation.

Technologies used:

- VMware Datacenter Virtualisation
- Windows Server platforms
- Cisco Industrial Network Specialist
- Thin client and mobile HMI solutions

KEY SERVICES

- Highly available virtualised infrastructure
- Converged Plantwide Ethernet
- Business Contingency planning
- Migrations and upgrades
- Cybersecurity audits and integration
- Pro-Active monitoring
- Support contracts 24/7



CASE STUDY

One of our clients, building a new factory required a plantwide, coherent ICT network that should be simple, durable, secure and expandable. More than 1000 Internet Protocol (IP) devices needed to be integrated. As a start we physically segmented the network in three: Office, demilitarized zone (DMZ), and Manufacturing. To reduce cabling costs and to increase network redundancy we used ring network structures. The networks were logically segmented using VLAN's. The server room was organised using VMware High Availability and stacked switches, to ensure fast recovery after possible hardware failures.

Using virtualisation and thin clients, 40 operator stations received their published applications automatically and replaced in minutes. We utilised redundant firewalls to enable secure office access, remote start-up assistance and remote diagnostic support. Today, the system has been running free from failure and our client is planning to expand the plant with a new production line and additional operator stations.



4 JOIN FORCES

LOOKING FOR A PARTNER?



Get in touch with our sales team to explore opportunities sales@contec.be

INTERESTED IN JOINING OUR TEAM?



Apply for one of our vacancies, or get in touch +32 (0) 3 288 37 94 recruitment@contec.be

NEED ANYTHING ELSE?



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