

# Paint Systems



You can find further information about  
CTI Systems and the solutions we offer  
in the following brochures:



Aviation MRO

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Aviation OEM

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Paint Systems

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Intralogistics


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Software & Automation (WMS & MES)

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A photograph of a large industrial paint booth. A heavy metal structure, likely a trailer or bus chassis, is being painted. The structure is suspended by a system of orange overhead cranes. The paint is being applied by a spray gun, creating a mist of paint particles. The background shows the interior of a large factory with various pipes, structural elements, and other machinery.

*Automated Paint Systems for large machinery like HGV trailers, buses, agriculture equipment, commercial vehicles or construction equipment.*

# CTI Systems

The Luxembourg-based company with about 200 employees has over 60 years of experience in the field of intralogistics, with further divisions operating in the fields of aviation and surface treatment.

CTI Systems is a leading supplier of integrated automated handling and processing systems, with a focus on heavy loads. Our portfolio includes automated material handling solutions, aircraft servicing systems, storage systems, surface treatment installations, assembly lines, as well as software solutions for production control or the optimisation of storage & distribution systems (MES & WMS), including the integration of machinery from other suppliers.

As a company, CTI Systems is large enough to provide highly complex turnkey installations, yet small enough to have direct management contact allowing quick and dependable decision-making.



## Paint systems solutions for heavy and/or bulky products

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CTI Systems provides highly-automated paint systems fully integrated into your manufacturing processes.

Our outstanding modular design concepts allows us to offer turnkey systems including sophisticated material handling and state-of-the-art surface treatment processes.

Acting as a general contractor, CTI Systems will partner you from the initial conceptual designs to the full implementation and commissioning of your system. Our comprehensive team of experienced technicians and engineers is your guarantee to get a best-in-class CTI paint shop system fully meeting your requirements.







**6** E-coat & ACC

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**12** Shotblasting, powder coating, wet painting

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**14** Teleplatforms

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**16** Surface treatment for aircraft components

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**18** Software & Automation

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**Best-in-class  
equipment for  
top anti-corrosion  
coatings**







# E-coat & ACC

## HIGHEST PRODUCT STANDARDS WITH STATE-OF-THE-ART EQUIPMENT

For the application of reliable and high-quality primer paint, CTI Systems offers the most advanced electro-coating and autophoretic chemical coating equipment in the industry. In combination with our specially developed automation software, we are able to achieve the highest degree of production flexibility, while at the same time documenting all relevant paint parameters.



# Washing & pre-treatment

## DIFFERENT TECHNOLOGIES UNDER SINGLE CONTROL

Surface preparation prior to paint application is one of the most critical steps in the finishing process. CTI Systems offers highly-automated pre-treatment lines including washers and immersion bath equipment covering all state-of-the-art technologies for conversion coatings. Alongside iron and zinc phosphating lines, you will also find specific thin film technology equipment in our portfolio. All auxiliary equipment for water and waste water treatment are integral parts of our installations.





**Automated pre-  
treatment under  
single control**







# Material handling systems

## BEST-IN-CLASS INTRALOGISTICS SYSTEMS

CTI Systems' proven expertise in developing automated material handling systems for heavy and bulky parts serves as a guarantee that you will get the optimal solution for your production needs; not just for months but for decades. Fully automated material handling covering all production steps eliminates damage to products, while at the same time improving product quality. With CTI's combination of automated floor and overhead transport, high throughputs together with process flexibility are ensured. The modular process and material flow design typically includes various storage options.

CTI Systems' material handling systems are delivered together with sophisticated process automation software modules. We offer software solutions for material flow control and warehouse management systems as well as specific manufacturing execution systems for our turnkey paint shops.







**Entirely automated  
material flow  
concepts**



**Fully integrated  
state-of-the-art  
surface treatment  
technologies**







# Shot blasting

## **AUTOMATED SHOT BLASTING AND CLEANING**

CTI Systems can integrate automated shot blasting units into a comprehensive system covering all coating steps. Their embedded CTI cleaning stations ensure the fully automated cleaning and handling of large and heavy parts, specific to your needs.

# Powder coating

## **OPTIMAL PROCESSING PARAMETERS**

Multicolour and unicolour powder paint booths are fully integrated in the coating flow. Equipped with the necessary technologies, they allow the highest degree of automation to be achieved during application of the top coat.

Combining this environmentally-friendly technology with CTI Systems process automation software will allow you to achieve significant operational cost savings while meeting your specific production and quality requirements.

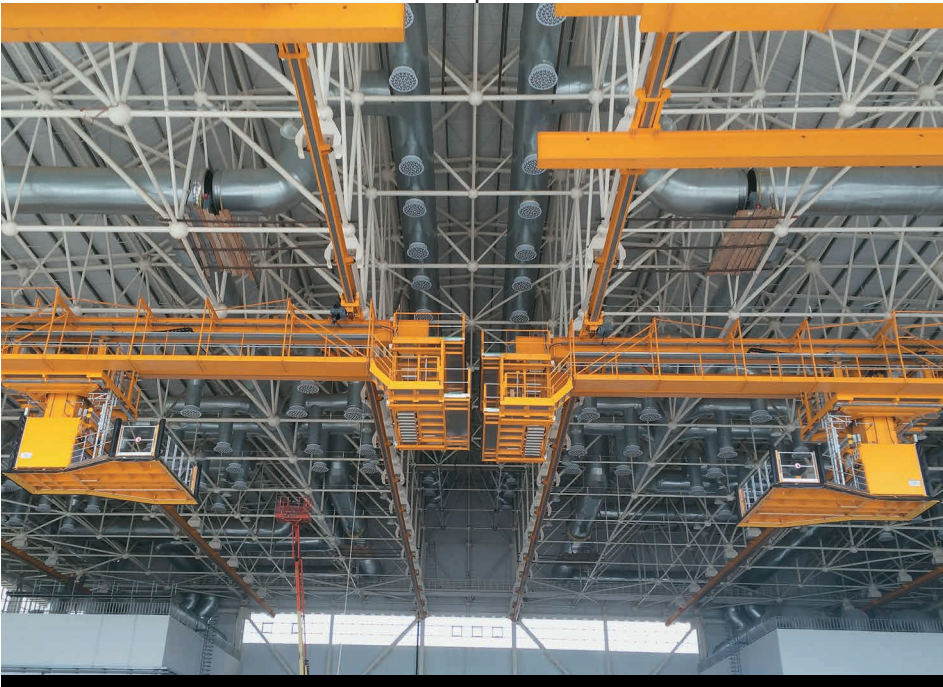


# Wet coating

## **ROBOTISED FINISHING**

Alongside traditional manual wet paint booths, CTI also offers turnkey robotised wet paint solutions in line with your product and production requirements.





# Teleplatforms

## **FLEXIBILITY AT ANY HEIGHT**

CTI teleplatforms provide quick and safe access to elevated work areas. The telescopic arm is suspended from a specially designed trolley able to travel to any point over the entire span of the crane. Depending on the design, it is even possible to move from one crane to another.

The arm is fitted with a work platform which can be raised to any height required or lowered to the floor to provide access for materials and operators. The work platform can also be rotated, for instance when working on aircraft.

Top priority is given to safety. Integrated collision guards prevent contact with the product being worked on and any resulting damage. The elevator gear has a fail-safe design and all movements are controlled and monitored by our reliable high-efficiency RMC (relative-motion control) system.





A large, white, aerodynamic nose cone of an aircraft is the central focus, positioned in a vast industrial facility. Several workers in white protective suits are visible, working on the structure from elevated metal platforms and scaffolding. The ceiling is high with numerous industrial lights and structural beams. In the background, another aircraft component, possibly a wing, is visible, partially covered in plastic. The overall scene depicts a high-precision manufacturing environment.

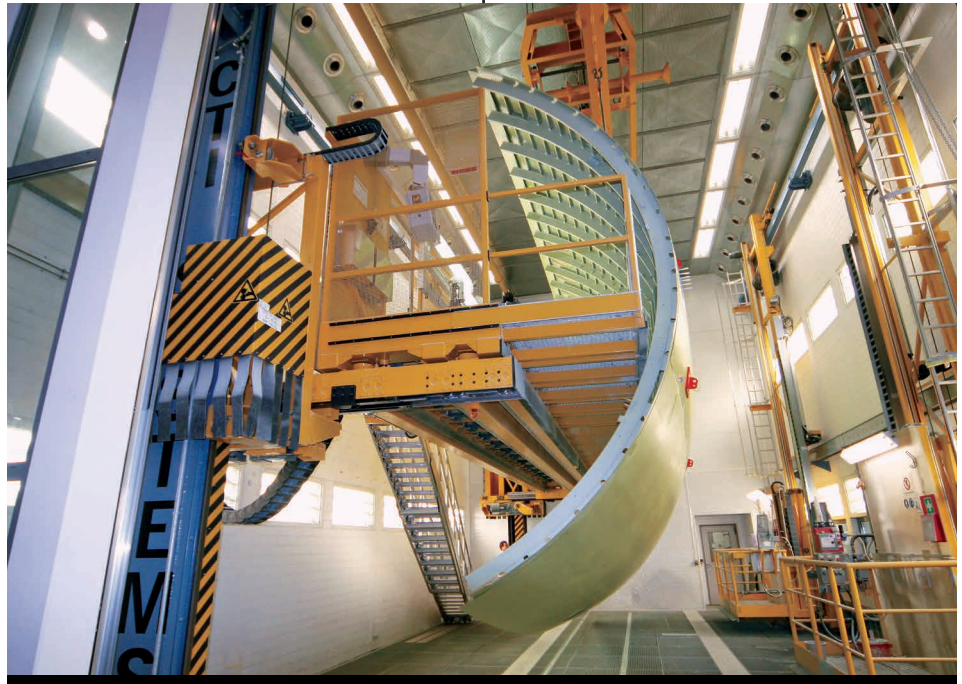
**CTI Systems'  
platforms provide  
fast and safe  
access to overhead  
working areas**





**Customised  
surface treatment  
solutions for aircraft  
manufacturers**





# Surface treatment of aircraft components

## ONE-STOP-SHOP TURNKEY SYSTEMS

CTI Systems is your global partner for fully integrated surface treatment systems. One of our key target sectors is aviation, where we supply solutions individually customised to aircraft dimensions and material flows. All solutions include state-of-the-art automation software.

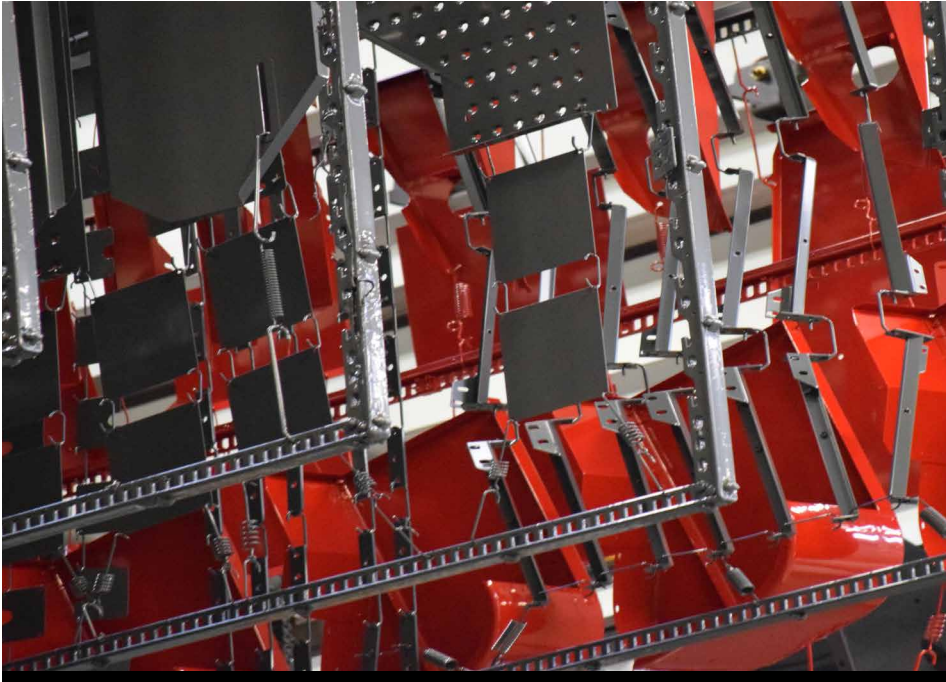
CTI Systems offers efficient handling, storage and intermediate surface treatment systems:

- Priming
- Painting
- Curing and drying
- Chemical milling and galvanising

CTI Systems provides a one-stop-shop service – from systems planning through engineering and production to installation and commissioning.

If required, we can also include equipment from third-party suppliers.





# Software & Automation

## COMPREHENSIVE SOLUTIONS

To meet the demands of new and smart paint systems, CTI Systems provides specialised and modular software packages for automated production facilities. The CTI software modules can be customised to meet specific requirements

### CTI Systems MES

- Basic Module
- Automated Production Module
- Message & Alarm Module
- OEE Module
- Tracking & Tracing Module

### CTI Systems WMS:

- Tankline Module
- Load Carrier Management Module (ST)
- Buffer Management Module
- Work List Management Module

In combination with our PLC Automation Software, we offer the highest level of flexibility for your production needs.







**Paint systems including  
comprehensive  
software solutions**



# Contact data

Whatever your sector, whatever your product – if you need a paint system for heavy or bulky products, please do not hesitate to contact us at CTI Systems. Together we will find the solution best suiting your specific needs.

We look forward to hearing from you.

## **CTI Systems S.à r.l.**

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