



Innovative complete laser solutions for industrial applications

ATN / Trotec - world-leading specialists in high-quality automated laser applications for precise engraving and marking.

ATN APPLICATION TECHNOLOGY INTRODUCTION

Application technology for manufacturing industry

Who we are

ATN is a global leader in industrial application systems. We offer everything from components and assemblies to complete systems for handling and processing a wide range of materials of all viscosities: from material delivery from various types of receptacle to the reliable, repeatable application of fluids. In addition to bonding systems, this includes sealing, potting, filling, cavity foaming and surface treatment.

The ATN portfolio also includes laser marking ranging from simple and secure marking of components to deep engraving such as vehicle identification numbers. High-performance lasers made by Trotec guarantee precise marking on a wide variety of materials, flexible installation and automation options, short cycle times and safety.

As a full-service provider, we offer our customers individual components, systems and turnkey solutions – from the conception to commissioning of their fully automated application system. Creating application solutions that are optimized to meet our customers' requirements we help ensure that their end products meet the highest quality standards and yield a high level of customer satisfaction.



Highlights ATN marking systems powered by Trotec

Robust and compact

Despite being one of the smallest and lightest integration lasers on the market, these robust lasers meeting the requirements of IP 54 protection class, making them suitable for use in harsh environments.

Rapid and reliable

The InMarker series eliminates the need for clamping or high transverse forces associated with other technologies, which in turn speeds up the production line. In addition, the optional laser protection "Safetycone" is the perfect safety-related solution for laser operations without the need for additional protective housing!

Flexible selection of materials

Irrespective of whether you're working with plastic, metal or hard alloys, you can always enjoy high-contrast precision marking.

New:

Laser marking on car windows

Simple integration

Complete, comprehensive safety documentation and fieldbus interfaces mean they can be rapidly integrated into your new or existing production line, robot cell or production facility in a cost-effective manner

Stable and powerful

Compatible with all common fieldbus systems and with the option for it to be fitted with a fiber laser source (of fixed or variable pulse duration) ranging from 20 watts to a powerful 200 watts, it is possible to achieve continuous, accurate marking with short cycle times.

Extensive data variables

Up to 255 marking variables can be used to Transfer data from the control system to the laser job. The content can, for example, be used as marker Content.



TECHNOLOGY The powerful industrial laser engravers quarantee precise labeling with short cycle times as part of your production line, robot cell or production facility. Optionally equipped with a fixed or variable MOPA pulse duration, Yb fiber laser source with 20, 30, 50 or 100 watts; these lasers produce perfect annealing marking and surface engraving. **INMARKER - MARKING LASER**

Industrial equipment

Designed to meet the requirements of Industry 4.0, the InMarkers are fitted with field bus interfaces such as Profinet, pilot laser for simply commissioning, different lenses, a trailing cable in different lengths of your choice, and much more, making them well-equipped to comply with the standards for labeling components and workpieces. This also means there is no need for unnecessary displays or extra personnel for controlling the system.

Safetycone - safety solution

The "Safetycone" laser protection cone for integrated laser marking saves both the effort and cost of housing and a control cabinet. A patented safety solution in Austria, you can read more about it on page 7.

Simple integration

Complete, comprehensive safety documentation, easy step-by-step assembly instructions, Sistema modules and all of the industrial equipment noted above ensure that the Integrator and production manager can rely on full support when integrating the laser into your production line. The InMarker does not need any force-fit clamping to take place with regard to the robot, manipulator or balancer.

Flexibility across the industry

The design of the InMarker marking lasers is both compact and lightweight, enabling it to be used within multiple industries and production units. Very compact and weighting just 4.6 kg, the InMarker is one of the smallest and lightest integration lasers on the market. This in turn allows multiple industrial sectors and their suppliers to use them flexibly within their production machines and production lines.

Powerful and stable

Irrespective of the data that is being labeled, such as PIN and serial numbers, logos, or data matrix and QR codes, InMarkers are designed for consistent precision labelling on an ongoing basis in short cycle times, even when used as part of shift work (24/7).

The optimal choice for DPM and PIN marking

Compared to needle embossing, laser marking is contactless, thereby allowing reliable labelling to take place without the need for any interruption to production that can be timeconsuming and costintensive.

No scratching of tools or components, no smudged markings. It is therefore possible to quickly implement practically any industrial labeling in short cycle times without fixing the material.

^{*}DPM stands for Direct Part Marking PIN stands for Product Identification Number



Powerful fiber laser

These powerful integration lasers offer the perfect turnkey solution for the automotive industry and associated suppliers. Co-developed, tested and used by household-name car manufacturers, they meet all the requirements of Industry 4.0.

Compact integration laser

The VIN Marker is suitable for harsh environments due to its robust housing and IP 54 protection class, while also remaining one of the most compact integration lasers on the market. A further advantage is that the VIN marker does not need any force-fit clamping to take place with regard to the robot, manipulator or balancer.

High-quality marking

Developed specifically for 24/7 use, the VIN marker consistently and repeatedly presents a perfect type-face at high speed on every type of chassis. All with the need for any reworking!

Industrial equipment

Looking at fieldbus interfaces such as Profinet or Profisafe and trailing connection cables and laser fibers that are monitored for fiber breakage, the air-cooled VIN markers are optimally designed to provide VIN marking that is compliant with the standards.

Flexible selection of materials

The use of non-contact laser technology means the VIN Marker can also be used to seamlessly engrave materials such as hard metals like titanium, hardened steel, cast aluminum and others. This means you remain flexible in with regard to choosing materials in the future.

Simple integration

Complete, comprehensive safety documentation, easy step-by-step assembly instructions, Sistema modules and all of the industrial equipment noted above ensure that the Integrator and production manager can rely on full support when integrating the laser into your production line. The ability to fully integrate it in the production line means there is no Need for time-consuming adjustment work on the chassis.

Economical and full of performance

Depending on the project implementation, the VIN marker takes just 15 seconds to engrave a complete Vehicle identification number (FIN/VIN) that includes 17 characters + 2 special characters and moreover, is cheaper than many other systems.

Safetycone - safety solution

The "Safetycone" laser protection cone for the VIN marker saves both the effort and cost of housing and a Control cabinet. It simultaneously removes particles and smoke in an effective manner. A patented safety solution in Austria, you can read more about it on page 8.



InMarker Safetycone

Depending upon whether you select the option to include the pilot laser with the InMarker or not, the complete System meets the requirements for laser class 1 (with laser class 2 for pilot laser). The labeling area with the Safetycone is either 50 x 40 mm or 90 x 70 mm, or can be individually adapted to your requirements. The standard versions are designed for flat surfaces. It is possible to customize the Safetycone if the surface is curved or bent.

VIN Marker Safetycone

The marking area with the Safetycone is adapted to the VIN number for 120 x 20 mm. The standard version meets the operational requirements under laser class 1. Simultaneously, the way in which the Safetycone works with the extraction and ventilation system means that controlled air flow is generated to efficiently remove particles and smoke. This provides protection for both the working environment and any expensive material components.

Patented safety solution

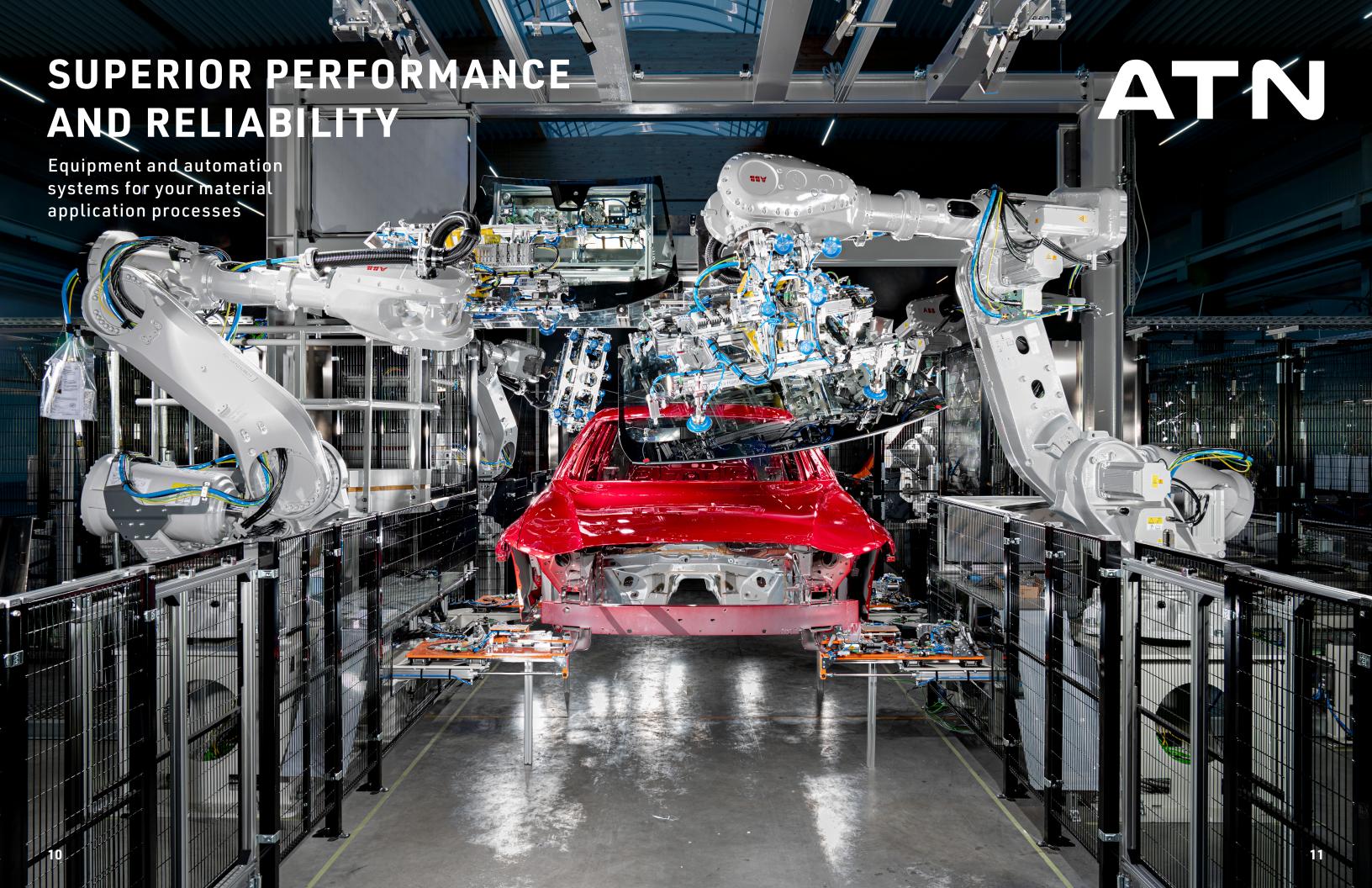
The "Safetycone" laser protection cone, which is patented in Austria, saves both the effort and cost of protective housing as part of the production process. With protection in place through a number of sensors, the Safetycone isolates the laser beam during the marking or engraving process on your component. This allows the highest levels of safety to be achieved within your production environment.

Cost-effective and space-saving

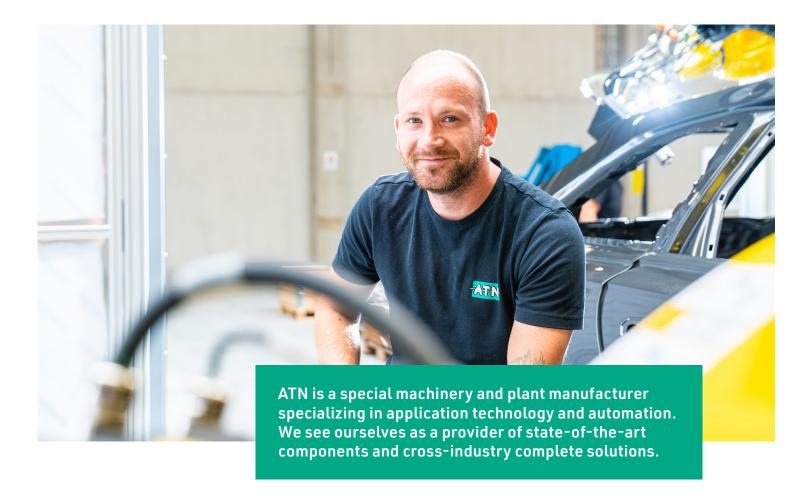
In the same way as our integration lasers, the "Safetycone" laser protection cone was designed to be particularly compact so that it can be installed in confined and restricted areas. This means the Safetycone is more cost-effective and takes up less space than laser protective housing, but still meets all occupational safety requirements in relation to employees.

Simple integration

The modular design of the Safetycone allows it to be easily mounted on all InMarker series integration lasers; it can also therefore be optimally integrated into existing or new production lines. By using our compact Integration lasers that are fitted with the Safetycone safety solution, it is possible to eliminate the need for clamping and high transverse forces that are associated with other technologies, which in turn speeds up your process line.



On Stop Shop - we are Automation



As a supplier of application technology and automation systems completely from one source, we see ourselves as a service provider for your planned project and the entire process from development to production and commissioning of a product or system.

For this purpose, highly qualified and motivated employees are available to you from all departments,

who will develop your requirements individually according to your specifications into an optimal solution and implement it.

Take advantage of having one contact person for your application and automation project and trust in our international and cross-industry experience as a special machine and plant manufacturer.

Application & automation solutions are of great importance in industrial production. Wherever fluid materials have to be dosed with pinpoint accuracy and repeatability or where automation processes have to ensure consistent quality, ATN is your one-stop partner for component and system technology as well as for automation solutions.

ATN

Engineering & Consulting	PLC, software & robot programming	After Sales Service
Project management	One stop shop	Mechanical and electrical production
Mechanical and electrical design	Research & development	Commissioning

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Since 1999 ATN has stays for very high expertise in the automation of application systems or the integration of assembly and third-party technologies.

A high level of engineering competence and a broad range of expertise in the various robot manufacturers are the basis for individual system concepts and a wide range of activities.

Semi & fully automated systems

- Cooperation and system partnerships with ABB and Kuka
- Knowledge of other robot types such as Fanuc, Kawasaki, Comau or Yaskawa

Integration of third-party technologies

- Camera & monitoring technology (e.g. ISRA, VMT or INOS)
- Safety systems
- Shuttles & manipulators
- Foreign application, screwing and assembly technology
- higher-level control systems

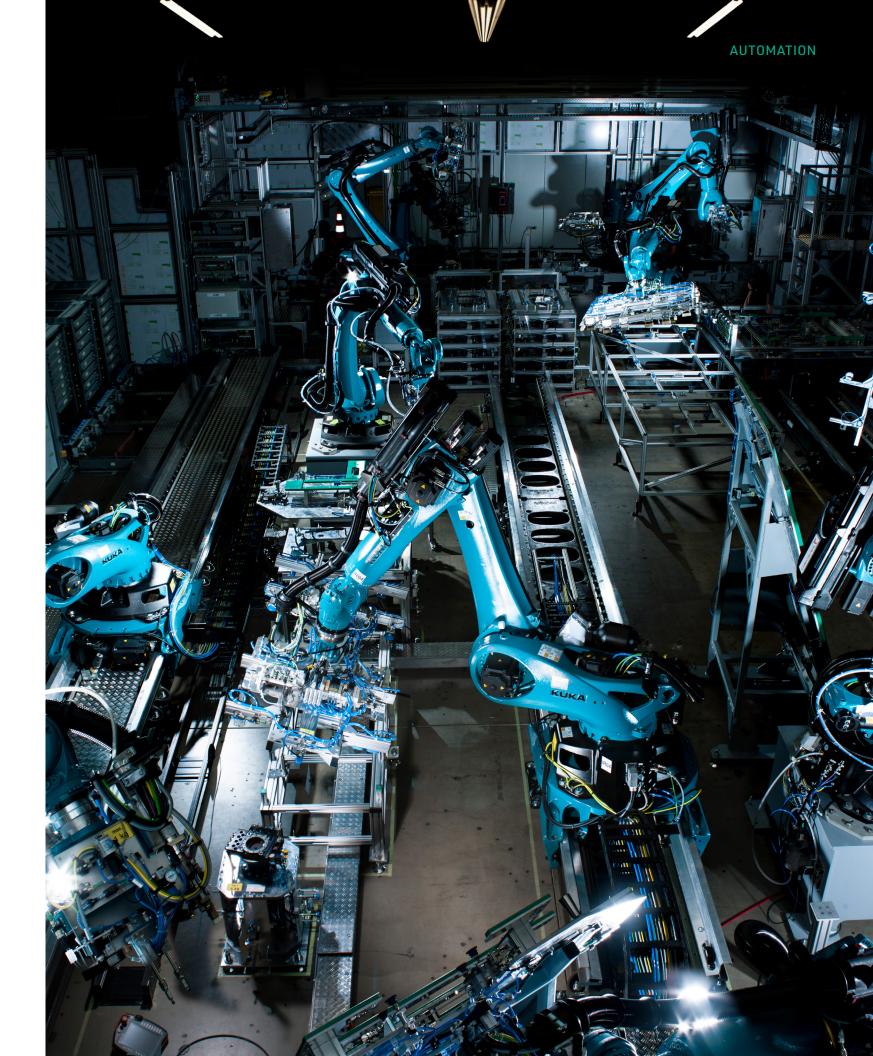
Human-Robot Collaboration

- Development and implementation of classically automated processes to cobot applications
- close cooperation with UR, Kuka and Fanuc

Engineering Consulting

- Concept development
- Design of single plants or assembly lines
- Consideration of safety aspects





Engineering Consulting

ATN has a track record as a reliable partner for comprehensive application technology, Automation and robotics solutions. Our long-standing experience in implementing automation projects shows that getting our specialists involved early in the process shortens the time it takes to issue and award your tender as well as speeding up your planning.

Our customers benefit from this consulting and support service in bringing their projects to a successful conclusion. Our engineering consultants have plenty experience and expertise as well as an extensive range of tools at their disposal. They will always find the best possible solution for our customers, be it through exploratory discussions, workshops or complex engineering projects.

01 Preliminary System planning

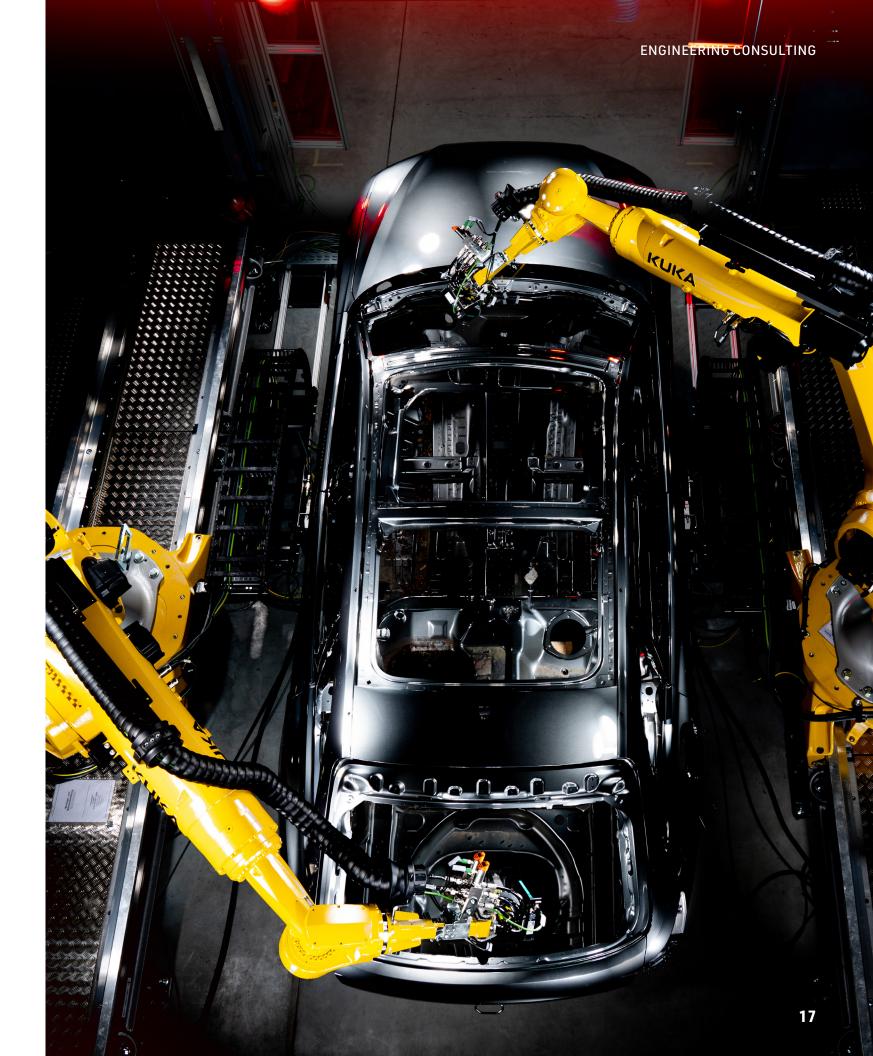
- Consultancy services for all aspects of plant engineering
- Layout development of individual cells and cell clusters
- Process and workflow
 planning
- Cycle time analyses
- Support in drawing up specifications

02 Feasibility analyses

- Verification of product manufacturability with robot systems
- Identification of conclusions on required product properties
- Recommendations for Action with variant comparison for critical conditions

03 Investigation of application processes

- Technology recommendation based on available parameters
- Application process feasibility analysis
- Identification of technical Limits for e.g. discharge quantities, accuracies and cycle times
- Integration in Automation projects
- Test project planning
- Material, process and component testing

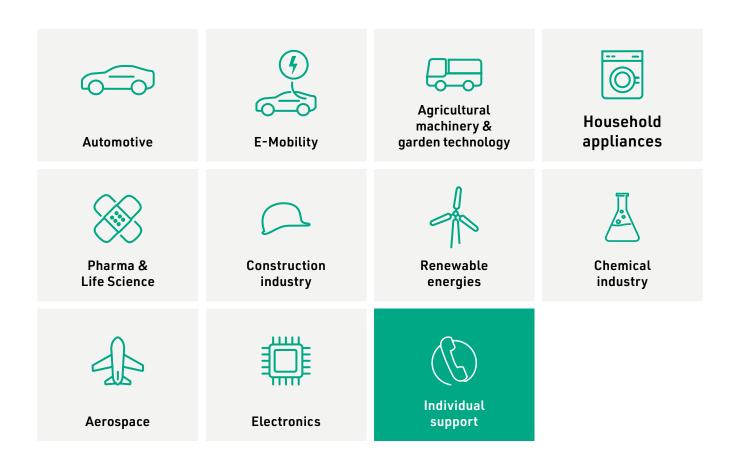


INDUSTRY SECTORS REFERENCE CUSTOMERS

Industry solutions

Application and automation solutions are a high priority in industrial manufacturing. ATN's component technology and system engineering from a single source are suitable for every application.

For accurate, repeatable liquid dosing, where markings must be applied reliably and precisely, as well as for automation processes that ensure consistent quality.



References of application technology and automation























































































































































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