30 YEARS
COMPLETE SOLUTION FOR **NDT/NDE**

ATG

FPI Systems and Equipment

Advanced Fluorescent Penetrant inspection lines for Aerospace, Automotive, Railways and other industry applications

Designed for performance
Trusted Worldwide

ATG delivers high-end Fluorescent Penetrant Inspection (FPI) lines tailored to the customer's specific needs. We supply both fully automated systems for mass testing industrial use and manual systems for versatile applications. Our solutions are designed in compliance with ASTM E1417, ISO 9432 and other industry-specific standards.

- Designed fully in accordance with Customer's requirements for inspection capacity, dimensions of tested parts, and requested transport system
- Manual systems with overhead hoist systems or rollers (LPM) or automated (LPC) lines with automatic manipulators or endless chain conveyors
- Customized testing solutions for a wide range of industries, including aerospace, automotive, power, oil & gas, and more
- Installations worldwide
- Compliant with NADCAP, Rolls-Royce, GE Aviation, Pratt & Whitney and other industrial standards and specifications

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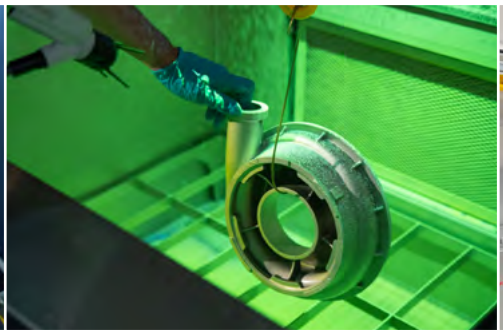
FPI for Aerospace

In aerospace FPI systems are essential in for detecting surface defects across a wide range of materials (aluminum, titanium, Inconel, etc.) and parts (blades, wheels, shafts, landing gear, and structural components).
ATG testing lines comply with the highest aerospace standards and requirements: ASTM E1417, NADCAP and customer specifications from e.g. Rolls & Royce, GE Aviation, Pratt & Whitney, Honeywell, Safran and more.

LPM 320 / 530

Modular FPI lines are the most versatile systems covering most of the typical requirements. ATG offers these lines in many variations of penetrant and developer application including immersion, electrostatic spraying, storm box etc.

- Manufactured from stainless steel for long lifespan
- Various tank sizes available
- Modular design allowing to fit the line to your needs
- Fulfills requirements of NADCAP and other aerospace standards
- ISO and ASTM standards compliant



LPM 2600max

Concept of this line combines manual roller track for smaller parts in a basket, and overhead hoist for manipulation of larger parts.

- Stainless steel design
- Various penetrant application possibilities
- Tank sizes able to process large parts up to 1500 mm in diameter
- Roller track and overhead hoist for choosing the best method of manipulation
- Powerful lifts in tanks, up to 250 kg capacity

LPM 1900

Cabin-based line for easier access to hanging parts with space-saving design for testing MRO and OEM aerospace parts.

- Maximum diameter of tested part 1800 mm
- Walk around part possibility for the operator for better reach
- Suitable for hanging larger parts or smaller parts in baskets
- Economical electrostatic spraying of penetrant and developer
- Meets all common requirements in aerospace as NADCAP and customer specifications of Rolls-Royce, GE Aviation, Pratt & Whitney etc.

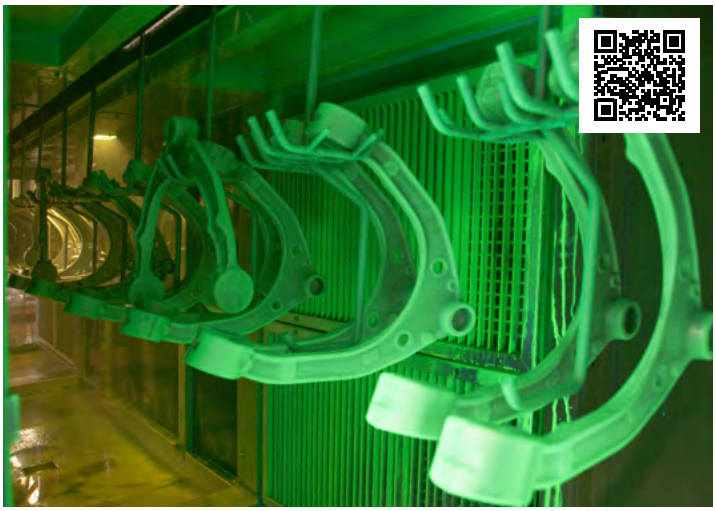
FPI for Automotive

High capacity FPI systems are crucial in automotive manufacturing for detecting defects in cast, forged, or machined parts made from non-ferromagnetic materials. Typical parts: suspension arms, wheels, battery pack covers and similar. Demand for high level of automation results in automatic or semi-automatic FPI lines.

LPC–D1

Fully automated line with highest per hour capacity of testing. Based on actual setup and type of test parts its capacity exceeds 900 suspension parts / hour. The line is equipped with automatic endless continuous chain conveyor, automatic process cabins and automated waste water treatment.

- Small footprint due to the 2-floor concept
- Very high testing capacity
- Low penetrant consumption due to electrostatic application
- Reliable chain conveyor part movement
- Output of parts from the FPI line on belt conveyor for better connectivity to following processes



FPI for Large Products

Large parts like engine cases or battery pack housings often require special testing setups. ATG offers lines for parts over 1500–2000 mm, suitable for aerospace, EV, energy, and oil & gas.

LPM 110 K/S

Designed for easy testing of small series of large parts this FPI line allows to test parts up to size of approx. 3000 mm.

- Spacious cabins of 4 x 4 x 4 m size
- Flexible size of tested parts up to approx. 3000 mm
- Operator friendly design where operator can freely walk around tested parts
- Robust line design
- Powerful built-in exhaust system

FPI & Other Industry Applications

R&D centers, training institutions, and special production sites need compact yet versatile FPI lines.

LPM 45

Compact stainless-steel FPI line for labs or qualification centers.

- Versatility and variability on a small footprint
- Dry powder filter included
- Stainless steel design
- Included drain areas for samples
- Tank's sizes suitable for laboratory purposes

Advantages of our FPI Lines

- Stainless steel design for lifespan
- Modular and flexible design tailored to your needs
- Fully compliance with standards and requirements: ASTM, ISO, NADCAP, and other customer standards
- Customization of FPI lines: can be delivered with immersion, spraying, electrostatic penetrant application, all possible types of developer applications (immersion, storm box, electrostatic generator) and all penetrant systems (especially water-washable and post-emulsifiable)

Qualification and Training for Fluorescent Penetrant Inspection

The deliveries of FPI systems are joined with a possibility to qualify NDT operators and provide on-the-job training in the ATG Training Center on our FPI lines, or directly on the equipment delivered to the customer's site.

References

FAGOR EDERLAN (BMW), Spain | CHEMETALL, France | GE AVIATION, Czech Republic | PRATT&WHITNEY, Poland | STROJMETAL ALUMINIUM FORGINGS (Audi), Czech Republic | SOLAR TURBINES, Czech Republic | TAE AEROSPACE (GE, Pratt&Whitney), Australia | SAUDIA TECHNIC PROPULSION CENTER, Saudi Arabia | HONEYWELL AEROSPACE, Czech Republic | GE AVIATION, Czech Republic

Let's Build the Right FPI Line for You!

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