

30  
COMPLETE SOLUTION FOR  
NDT IN AEROSPACE OEM & MRO  
YEARS



NADCAP ACCREDITED FOR NDT

AEROSPACE

# NDT Solutions for Aerospace

Production ■ Qualification ■ NDT Testing ■ Cleaning  
NDT inspections ■ Consultancy ■ NADCAP implementation support

ATG NONDESTRUCTIVE TESTING DEFECTS UT EQUIPMENT  
NDT INSPECTION MRO BEARINGS ET OEM NUTS & BOLTS  
PART 21 SHAFTS MPI AXLES FPI WHEELS & BRAKES O MAINTENANCE  
NDE PART 145 TESTING DEFECTS PRODUCTION CRACKS  
CERTIFICATION NADCAP BLADES QUALIFICATION EASA

# Introduction

ATG (Advanced Technology Group), Ltd. is a company working in the field of industrial inspections with 30 years long tradition, experience and reputation for its superior quality, high product innovation, variability and experienced personnel. ATG tailor-made high quality equipment for standard NDT methods in any level of customization. Own R&D team ensures inclusion of most modern and innovative solutions for the most demanding Customers.

ATG staff consists of more than 20 NDT Level III specialists, available to perform the most demanding tasks related to NDT inspections, personnel qualification and consultancy activities including support during NADCAP accreditation or customer approval audits.

## Mission

Maximize operational safety of industrial products by top level quality of industrial inspections.



## Production of NDT equipment and systems

Without proper equipment NDT process cannot be performed. Proper equipment has to provide variability, reliability, results repeatability and testing efficiency. Alongside standard equipment ATG therefore provides options for customized or fully custom-made equipment to fit to the Customer needs.

## Target segment

- Engine parts
- Wheels & Brakes
- Nuts & Bolts
- Landing gears
- Composites



MPI - UNIMAG 1400 Aerotester NG



FPI - LPM 2600max



ET - AWT 950 NG

## NDT methods covered

### ET

- Wheeltester AWT 950 NG for inspection of wheels with diameter of up to 950 mm and weight up to 120 kg
- Wheel manipulator AWM 100 for accessible inspection of wheel bore holes
- BOLT SCAN for testing of screws and bolts
- ELOTTEST, probes, reference blocks for all ET tasks

### MPI

- Basic manual as well as highly advanced automatic MPI benches
- Benches MINIMAG, UNIMAG BASIC, UNIMAG AEROTESTER Series
- Testing of bolts, breaks, landing gears, engine components and structural parts, acc. ASTM

### RT

- Lightweight X-ray lamps FOKUS
- Digital detector ScanRay

### FPI

- Manual, semi-automatic as well as fully automatic FPI lines KPM, LPM and LPC series
- Testing from small up to large parts (engine, or structural) components acc. ASTM E1417
- Pre-cleaning and etching lines

### UT

- Fully automated UT immersion, or squirting scanners UZM and UZM NG (robotic)
- Portable equipment D-70, Wave, Prisma, or VEO from Sonatest Ltd.

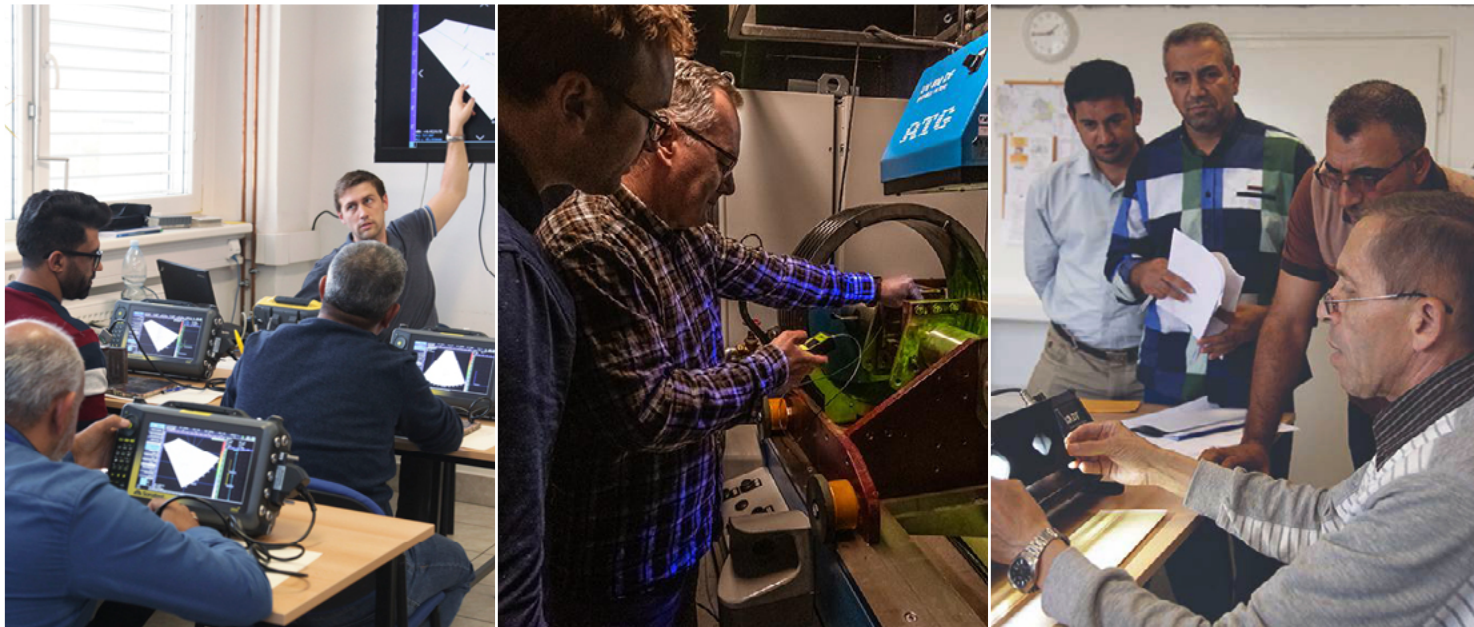
### Other

- Reference blocks (both metallic and composite) for all NDT methods
- FPI/MPI consumables Ardrex & Xmore from Chemetall
- NDT accessories, UV lamps

## Personnel Qualification

Complexity of the NDT process requires to be performed only by properly qualified staff. Qualification in aerospace industry has to be representative to the Employer's production or maintenance program. ATG during qualification follows the Employer's Written Practice and if missing, ATG is able to design the Written Practice to the Employer's needs prior qualification begins.

ATG is approved Outside Agency by Czech Aerospace NDT Board (CZ NANDTB) and it is therefore satisfying the requirements of EASA Part 145 (AMC 145.A.30.f requirement for qualification of NDT personnel).



## Courses provided for Aerospace acc. to EN 4179 / NAS 410

Method	Advanced Techniques	Sector
ET – Eddy Current Testing	ECA	OEM / MRO
FT – Flux Leakage Testing		OEM / MRO
IRT – Infra-Red Thermography		OEM / MRO
LT – Leak Testing		OEM / MRO
MT – Magnetic Particle Testing		OEM / MRO
PT – Penetrant Testing		OEM / MRO
RT – Radiographic Testing	CR/DR	OEM / MRO
TCS – Testing of Composite Structures		OEM / MRO
UT – Ultrasonic Testing	Phased Array, Immersion	OEM / MRO
VT – Visual Testing		OEM / MRO
EI – Etch Inspection		OEM

\* Qualification can be provided in all standard levels.

\*\* Qualification follows the Employer's Written Practice, advanced techniques are therefore options

## Consultancy – Outside Agency Services / Services of NDT Level 3

Complexity of the NDT process requires a proper Quality Management System is established and implemented.

Person responsible for its implementation in NDT is the Level 3. In case of absence of own Employer's NDT Level 3, the Employer may nominate to fulfill all (or a part of) NDT Level 3 responsibilities to outsourced Outside Agency, which can substitute requested activities of responsible person for given special process.

## Content of provided Outside Agency (NDT level 3) services

- Management or supervision of NDT processes
- Creation of principal legislative (QMS) structure for the Employer (Written Practice, Written Procedures, Instructions, ...)
- Qualification of operating personnel in individual NDT methods in all levels
- Experience collection under supervision for trainees
- Calibration process
- Continuous supervision/auditing of the whole process
- Preparation for Customer and/or NADCAP audits
  - These activities are backed with more than 160 references in production and maintenance and almost 100 successful NADCAP audits.
  - The service can be provided in Czech, English and Russian languages.

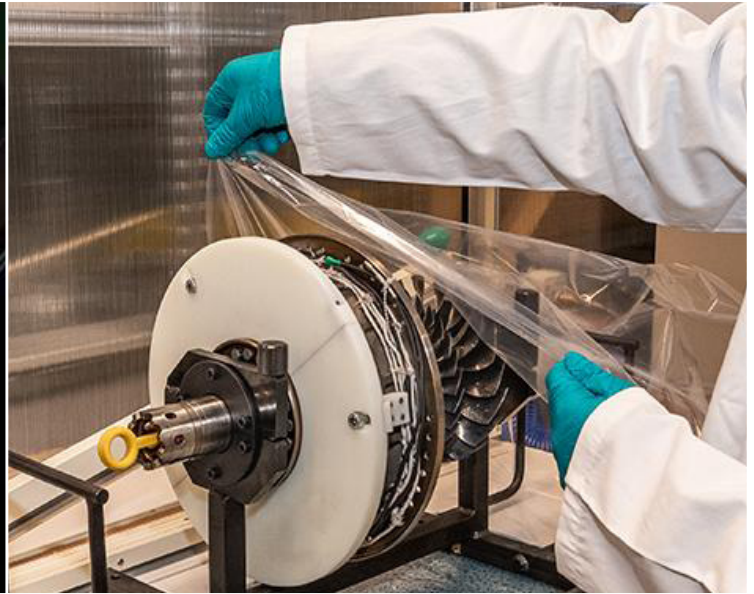
## Special Process House Services

Special processes as NDT have important value-added for the company and therefore it is desirable for the company to implement them to their production process. In aerospace it is often connected with request to become accredited by **PRI NADCAP process** or to be approved by the End Users.

In some cases the organization is unable to ensure this process alone and it is easier to transfer this process to a reliable subcontractor, who will deliver the process as a whole.



Inspection of propellers by FPI



Cleaning and cleanliness verification

## ATG offers delivery of complete NDT process for

- UT immersion testing for rotary parts in UT manipulator and standard testing of bars
- ET testing for aircraft discs and wheels and manual testing of cracks
- MPI of aerospace parts acc. to ASTM E1444
- FPI of aerospace and automotive parts including all supportive processes acc. to ASTM E1417, NADCAP accredited
- **New Cleaning and Cleanliness Verification process acc.to aerospace standards (GE Aviation)**

### Complete NDT process means the following:

- Responsible Level 3
- Operating Level 2 personnel with relevant certificates
- Own equipment, gauges, tools and supplemental technologies
- Own procedures designed by the needs of the Customers and End Users.
- Approval by the PRI NADCAP or by the End User

### ATG. s.r.o. - Advanced Technology Group

Touzimska 771, Prague 9, 199 02, Czech Republic

Tel.: +420 273 037 611

Email: sales@atg.cz

**www.atg.cz**

<b>Sales:</b>	+420 731 471 889	sales@atg.cz
<b>NDT Level 2 services:</b>	+420 731 471 890	tichy@atg.cz
<b>NDT Level 3 services:</b>	+420 273 037 627	zavadilt@atg.cz
<b>SPH services:</b>	+420 273 037 622	pacan@atg.cz



LinkedIn



YouTube



WWW

