



GROUP OF COMPANIES
PROGRESSTECH

Founded on January 3, 1991



PROGRESSTECHGROUP

Overview 2021

HISTORY MILESTONES


LAUNCH
1991-1998

- Established Progresstech brand
- Focus on scientific research and consulting for aviation industry
- Expansion into airport and infrastructure design and construction

TRANSITION PERIOD
1999-2005

- Expansion into engineering services with Boeing as launch customer
- Consolidation of research and engineering services and creation of Progresstech Group

FOCUS ON INTELLECTUAL
SERVICES AND RAPID GROWTH
2006-2016

- Rapid growth of engineering business with major commercial aircraft OEMs offering outsourcing design and development work
- Intensified cooperation with key customers; PROGRESSTECHGROUP becomes an integral part of the Boeing's engineering supply chain
- Established subsidiaries to broaden service offering, increase proximity to customers, tap into new markets, local engineering base and increase operating efficiency. Introduced  **TUCANA** as a second major brand within PROGRESSTECHGROUP.
- Expansion with services offering into automotive and energy markets

FOCUS ON OPERATIONAL
EXCELLENCE AND STEADY GROWTH
2017-2021

- Implementation of Ukraine-based growth strategy
- Expansion into mobile apps development market
- Focus on new markets and growth



GROUP
PROGRESSTECH

30 YEARS

Successful track record on the global market

**4 YEARS IN A ROW
(2006 -2009)**

Ranked among fastest-growing
technology companies by Deloitte's
Technology Fast 500 EMEA Ranking

Profile

- International engineering and IT services provider
- Over 2,200 engineering professionals
- Broad domain capabilities integrated with all international standards and practices
- Close integration in the global supply chain due to established relationships with OEMs and Tier-1 suppliers
- Certified management system supported with in-house developed project management tools
- Unique relationship with educational institutions, particularly in Ukraine

Business lines

- Engineering services for aerospace, automotive, and energy industries
- Airport infrastructure design/project management
- Civil Engineering and manufacturing facilities design
- IT projects and mobile apps development
- Research, consulting and certification

Strategy

- Build on leading market position in existing segments
- Expand service offering to the Middle East, Africa and Asia Pacific markets via creating local presence and global project execution capacity

Customers

- Global customer portfolio



Opportunities

- Good fit of offered services with market projects profile
- Outstanding market potential with significant expected growth in airport and transport infrastructure segments
- Shortage of engineering resources worldwide
- Ability to scale proven business model and grow resources pool

2200+
ENGINEERS GLOBALLY

30
YEARS OF EXPERIENCE



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CONTINENTS

7
COUNTRIES

Engineering for Aerospace

Comprehensive range of services to support projects of major aircraft manufacturers (OEMs), tier-suppliers, airlines and MROs

- Structural design
- Structural stress analysis
- Systems design and integration
- Manufacturing support
- Structures Repairs
- Testing coupons and structures
- Aftermarket Support
- Technical publications



Automotive Engineering

Comprehensive range of services to support passenger and commercial vehicles development

- Concept development
- Interior and Exterior Design
- Systems design and integration
- Concept development
- Stress analysis
- CFD analysis
- Prototype production support
- Technical publications



Airport and Infrastructure Design

Complete package of design documentation for construction and reconstruction of airports and related infrastructure

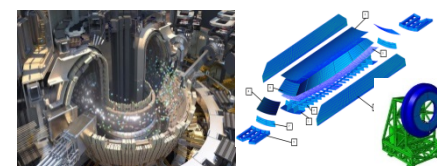
- Business plans
- Conceptual designs
- Feasibility studies
- Master plan development
- Factory Design
- Project and working documentation
- Construction project management

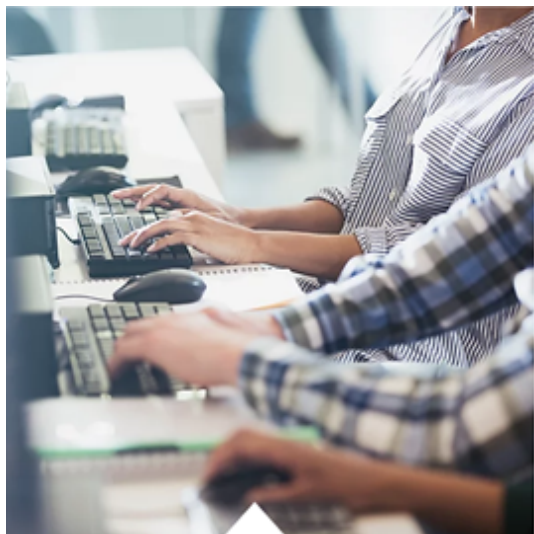


Energy and Science

Wide range of research studies and engineering services for various projects

- Trade-studies
- 3D-layout modeling
- Tubing routing
- Assembly and parts drawings release
- Assembly instructions
- Static and seismic events stress analysis
- Special load cases stress analysis
- Tooling design





STRUCTURAL DESIGN

- Conceptual and detailed design
- Wing and fuselage, nacelle and pylon, door and door surround structures
- Metallic and composite structures
- Interiors design and reconfiguration
- Systems design and integration



STRUCTURAL STRESS ANALYSIS

- Classical static stress analysis techniques
- Fatigue and damage tolerance analysis, vibration analysis
- Structural optimization on metallic and composite structures
- Finite element modelling



SYSTEM DESIGN AND INTEGRATION

- Electrical & optical routing (cable, wire, e.g.)
- Equipment placement
- Installation attachment device (V-support, clamp, ramp)
- 3D models checks and clash analysis



TESTING COUPONS AND STRUCTURES

- Testing of metal and composite coupons, samples and elements
- Testing of metal and composite elements, sub-components and components
- R&D and certification tests



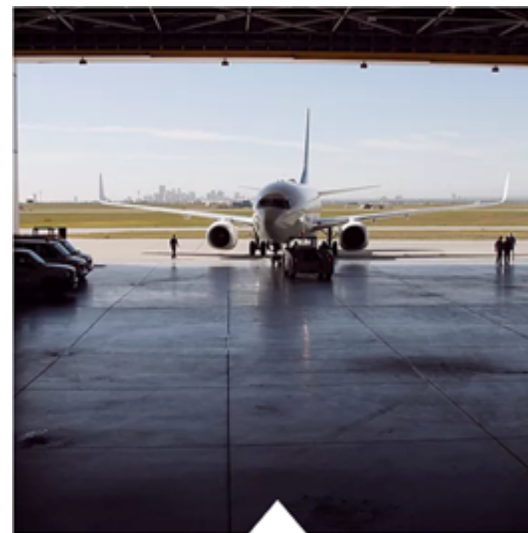
MANUFACTURING SUPPORT

- Tooling design
- CNC programming
- First article inspection planning



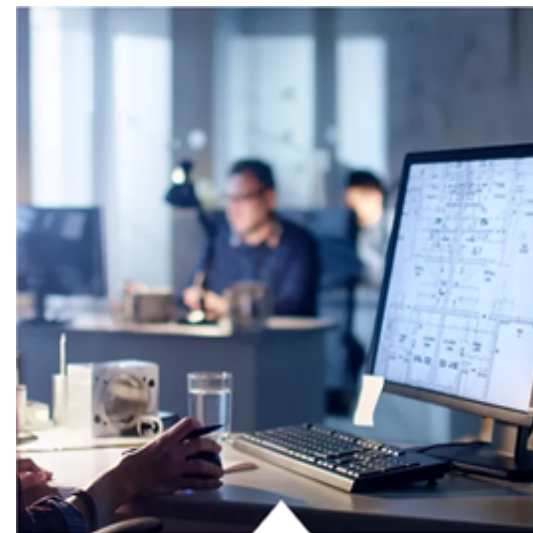
STRUCTURES REPAIRS

- Nonconformities justification – MRB/liaison/concessions
- Analysis methods development and SRM preparation
- Nonstandard repairs justification



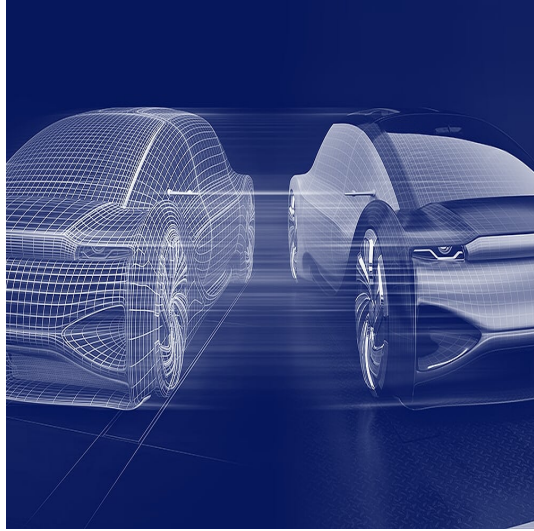
AFTERMARKET SUPPORT

- MRO engineering support
- Fleet support
- STCs justification
- Development of technical manuals
- Ground support equipment design



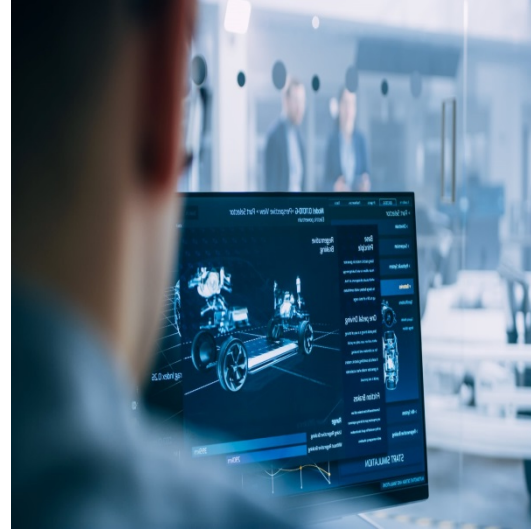
TECHNICAL PUBLICATIONS

- Aircraft maintenance manuals (AMM)
- Fault isolation manuals (FIM)
- Structural repair manuals (SRM)
- Component maintenance manuals (CMM)
- Illustrated parts catalog (IPC)
- Service bulletin index (SBI)
- Maintenance steering group – 3rd task force (MSG-3)



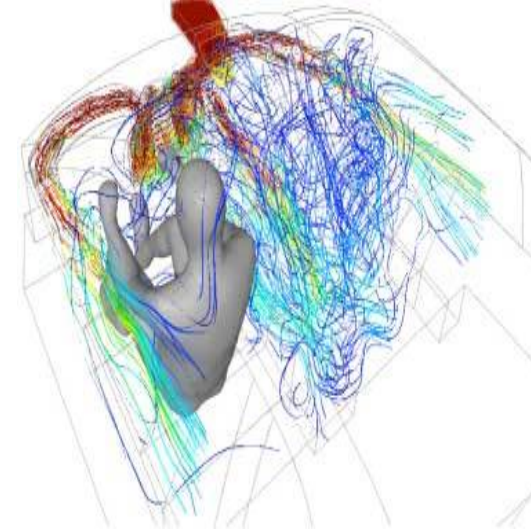
PRODUCT DEVELOPMENT

- Concept and series development
- Design ideas
- Overall vehicle design
- Vehicle body and openings
- Exterior and interior



DESIGN AND STYLING

- Class A surfaces (concept to final design)
- Reverse engineering
- Visualization (2D, 3D, rapid prototyping)
- Dimensional chains calculation and tolerancing
- Systems layout



SIMULATION AND STRESS ANALYSIS

- Finite-element modeling
- Weight optimization
- Static, dynamic, linear and non-linear analysis
- Fatigue analysis
- Virtual crash tests
- Stress calculation automation



PRE- AND POST-PRODUCTION SUPPORT

- Production process and facilities planning, machines, tools and jigs design
- Interactive maintenance documentation creation
- CNC programming

VARIETY OF COMPETENCES

- ☐ Conceptual and detail design development
- ☐ Technical audit and design review
- ☐ Feasibility studies and master planning

- ☐ Architectural design and visualization
- ☐ BIM (Building Information Modeling)
- ☐ Passenger flow simulation

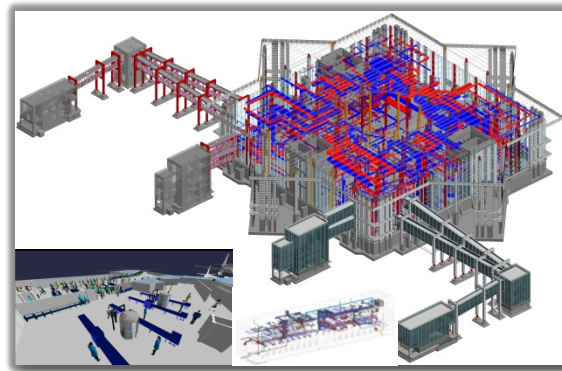
- ☐ Airport site and buildings inspection
- ☐ Airfield pavement inspection
- ☐ Project and construction supervision

AIRPORT COMPLEXES AND OTHER FACILITIES



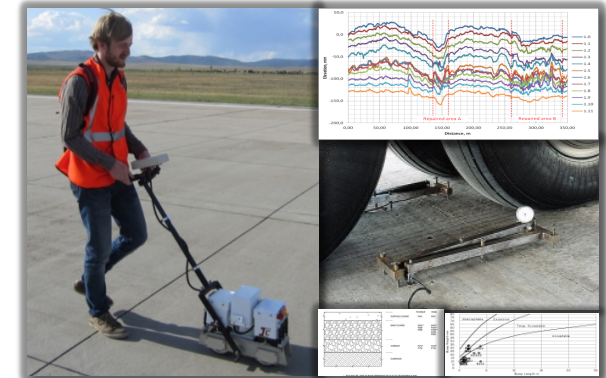
- Terminals and hangars
- Airfields and heliports
- Fuel farms and hydrant fueling systems
- Airport service facilities
- ATC, nav aids and lightning systems
- Flight training centers
- Assembly plants and delivery centers

BUILDING INFORMATION MODELING (BIM)

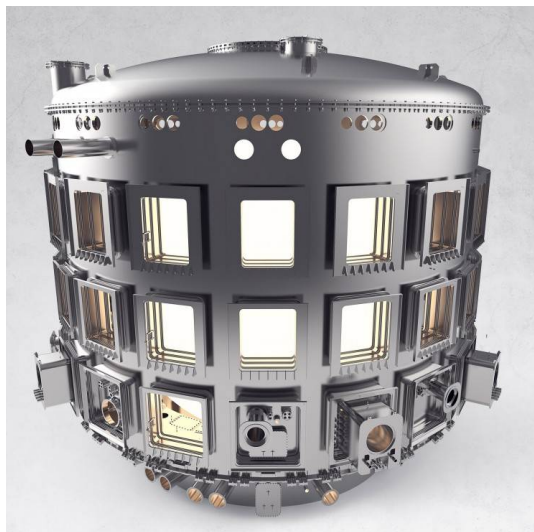


- Entire project documentation combined in one model
- Construction cost savings due to design documentation accuracy
- Model implementation from 2D drawings and for existing facilities

RESEARCH AND CERTIFICATION FOR AIRPORTS



- Customized research studies
- Certification of airports and airfields
- Runway surveys and materials tests
- Obstacles analysis and limitation
- Noise contamination analysis



ITER
**INTERNATIONAL
THERMONUCLEAR
EXPERIMENTAL REACTOR**

Layout, design and stress analysis of test chamber and port plug test facility's

- Vacuum system
- Handling system
- Heating system
- Pressure suppression system
- Test tank and key interfaces



WIND POWER

- Strength analysis of 2 MW wind turbine nacelle and nosecone through FEM analysis by various load cases



**JOINT INSTITUTE FOR
NUCLEAR RESEARCH**

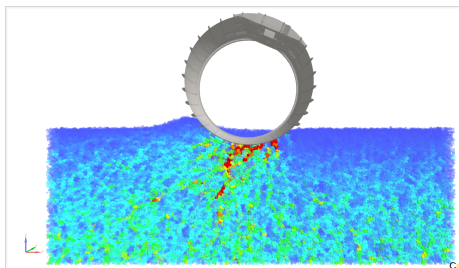
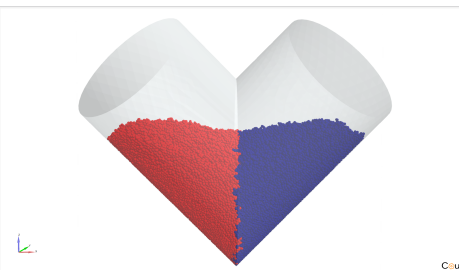
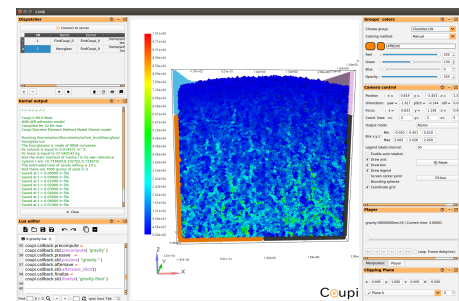
NICA (Nuclotron-based Ion Collider fAcility) multi purpose detector:

- Design and 3D modeling of precision positioning manipulator
- Detector systems tracing
- Assembly planning and tooling design



**WASTE-TO-ENERGY
INDUSTRIAL FACILITIES**

- Design of technological complexes for recycling bio-organic and carbohydrate waste into alternative synthetic liquid fuel used for green energy production



SOFTWARE

- CAE, Research
- Database
- Navigation
- Mobile

OPERATING SYSTEMS

- Windows
- iOS
- Linux
- Android

EXPERTISE

3D Graphics
GUI
Meshes
Physics
GPU
Mobile apps
Database

TOOLS

Qt
OpenGL
CUDA
OpenMP
SQL
Lua
Python
HDF5
OpenGL
Android Studio



PROGRAMMING LANGUAGES

- Swift
- C/C++
- Objective-C

DEVELOPMENT TOOLS

- Xcode
- Jenkins
- SonarQube

MOBILE OPERATING SYSTEMS

- iOS
- MacOS
- Android

FRAMEWORKS / LIBRARIES / API

CoreData
iOS SDK
Realm
OpenFire
WordPress API
RESTful API
OpenSSL

PLATFORMS / TOOLS

MacOS SDK
Atlassian Cloud
Bitbucket
GitHub
Sketch
Cucumber
Shell script
MySQL
PostgreSQL
SonarQube
Sqlite

WHY PROGRESSTECHGROUP?



Successful Projects

Our multicultural team successfully supports numerous large-scale international engineering projects



High Quality

Our highly qualified specialists apply the state-of-the-art techniques including composite structural design and analysis, methods development, and use the advanced engineering software tools



Efficient Organization

We are a very efficient organization with highly skilled and experienced team that utilizes the most advanced project management procedures and approaches



Worldwide Service

Our Global Delivery model supports worldwide clients through our engineering footprints around the world



Customer Service

We assist our customers throughout the entire product life cycle and provide them with the most performing and adapted technical solutions



Cost Efficiency

We provide an optimal combination of required skills and competences to meet our clients' cost expectations