Empowering Aviation Planners
Airside planning, design and operations software
Airside Planning, Design and Operations Software

AVIPLAN, with renowned market-leading technology at its core, delivers a unique feature-set tailored to meet the specific challenges faced by today’s airside planning, design and operations professionals. Analyze aircraft and support vehicle movements on airport aprons and taxiways, plan complex docking scenarios with multiple passenger boarding bridge -lead-in-line- airplane combinations, assess jet blast impacts and safety clearances, simulate complex pushback maneuvers and more.

Extensive Object Library

Accurate airside planning is only possible with accurate equipment specifications. AVIPLAN’s extensive 2D and 3D object library, which includes more than 500 passenger, cargo, military and special purpose airplanes, has been developed in close collaboration with major manufacturers and objects are put through thorough quality-control checks to ensure the utmost accuracy, both visually and technically.

Accurate Pushback Maneuvers

AVIPLAN’s dependable path simulation algorithm allows users to accurately simulate complex airplane-towbar/towbarless tractor pushback maneuvers in 2D and 3D. Ensure that minimum safety clearances are respected and that no undue strain is placed on equipment when executing maneuvers on the tarmac.

Safe Aircraft Maneuvering

AVIPLAN’s powerful 2D and 3D maneuver simulation tools allow users to define and adjust parameters such as aircraft/vehicle type, turn types and angles, construction points and offsets, speeds and much more. Analyze jet blast impacts, assess taxiway fillets or control clearance compliance, either by following existing CAD geometry or by generating new marking designs.

Intelligent Stand Planning

AVIPLAN provides airside planning professionals with the tools required to plan and optimize 2D and 3D airplane parking stands, including Multiple Aircraft Ramp System (MARS) stands, in an unrivalled level of detail. Factor in parameters such as the underlying terrain, passenger boarding bridge model, fixed apron services and airplane misparking margins. Leverage built-in software capabilities to optimize airplane parking positions, minimize bridge slope or tunnel extension or even the number of stop bars required.

Airside Design Standards

AVIPLAN incorporates International Civil Aviation Organization (ICAO), Federal Aviation Administration (FAA) and European Aviation Safety Agency (EASA) aircraft groups and associated minimum safety clearance distances to provide operators with the essential tools required to efficiently complete airside studies.

Reporting & Visualization

Fully integrated within AVIPLAN comes a tool-set for converting technical maneuver and docking simulation analysis into professional movies in 2D and 3D, ideal for succinctly visualizing complex technical results. Further, AVIPLAN includes tools to produce detailed Microsoft Word® and Excel® reports with text and graphic details.
**Airside Planning, Design and Operations Essentials**

Thanks to its user-friendly interfaces, intuitive workflow processes and extensive object library, AviPLAN Airside makes easy work of airside planning and design tasks ranging from analyzing the swept path movement or jet blast profile of a commercial airplane through to designing a contact or non-contact parking position. Dynamic, intuitive, accurate and fast!

- Perform aircraft and ground vehicle simulations, accounting for speed and turning angles
- Analyze aircraft pushback operations with towbarless and tractor/towbar configurations
- Display jet blast contours and impact surfaces for various engine thrust levels
- Design gate or remote parking positions
- Display safety clearance lines and individual or merged safety clearance box(es)
- Animate maneuver simulations directly in CAD

**Fundamentals for the Airside Planning Professional**

With a comprehensive 2D object library containing passenger, cargo and military airplanes plus ground support vehicles, AviPLAN Airside provides the core tools required for fast and reliable airside design and analysis studies. Engineers, architects, planners and designers can assess aircraft space requirements, jet blast impacts, taxiway traffic, contact or non-contact gate layouts and more with ease.

AviPLAN Airside incorporates essential design tools and intuitive graphical interfaces, allowing users of all experience levels to generate aircraft maneuver and parking stand simulations with ease.

**Complete CAD Software for Airside Planning, Design and Operations**

AviPLAN Airside Pro is the ultimate solution for any engineer, architect, draftsperson or planner involved in the field of airside planning, design or operations. Including a comprehensive 2D and 3D object library as well as functionality for simulating airplane and vehicle turn movements, designing ground markings, analyzing taxiway fillets, planning MARS stands and more.

- Perform aircraft and ground vehicle simulations, accounting for speed and turning angles
- Analyze aircraft pushback operations with towbarless and tractor/towbar configurations
- Display jet blast contours and impact surfaces for various engine thrust levels
- Generate detailed nose-gear or cockpit ground markings
- Design taxiway intersections, including fillets
- Plan complex stands with multiple boarding bridges, lead-in lines and ground services
- Display safety clearance lines and individual or merged safety clearance box(es)
- Produce sophisticated presentations and top-level reports

**Ramp up Design Efficiency**

AviPLAN Airside Pro is the number one choice for the vast majority of the world’s largest airports, aviation consultancy firms and passenger boarding bridge manufacturers. Whether planning a greenfield project, revising an apron layout, reviewing safety requirements, or carrying out operational efficiency checks, AviPLAN Airside Pro has all the features and functionality built in to one complete software solution.

AviPLAN Airside Pro incorporates advanced design tools and intuitive graphical interfaces, allowing users of all experience levels to generate and visualize aircraft maneuver and parking stand simulations with ease.
Accurate Aircraft Turn Simulation
AviPLAN Turn unites fundamentals such as a comprehensive aircraft and ground support vehicle library with intuitive step-by-step design tools to simplify the task of aircraft maneuver simulation.

- Perform aircraft and ground vehicle simulations, accounting for speed and turning angles
- Analyze aircraft pushback operations with towbarless and tractor/towbar configurations
- Display jet blast contours and impact surfaces for various engine thrust levels
- Animate maneuver simulations directly in CAD

Operator Friendly, Fast and Accurate
With AviPLAN Turn, simulating aircraft movements has never been easier. Incorporating an intuitive graphical user interface, users of all experience levels can generate turn simulations with just a few clicks of the mouse. Elements such as swept paths, jet blast, clearance areas and much more can be displayed with ease. Simple, fast and most important of all, accurate.

AviPLAN Turn incorporates essential design tools and intuitive graphical interfaces, allowing users of all experience levels to generate aircraft maneuver simulations with ease.

Aircraft Turn Simulations and Presentations
Be assured of accuracy, reliability and efficiency in all 2D and 3D apron, taxiway and runway movement evaluations with AviPLAN Turn Pro, the ultimate CAD-based software for aircraft and ground service equipment turn and swept path analysis.

- Perform aircraft and ground vehicle simulations, accounting for speed and turning angles
- Analyze aircraft pushback operations with towbarless and tractor/towbar configurations
- Display jet blast contours and impact surfaces for various engine thrust levels
- Generate detailed nose-gear or cockpit ground markings
- Design taxiway intersections, including fillets
- Produce sophisticated presentations and top-level reports

Complete Aircraft Turn Simulation Solutions
Working with an extensive library of 2D and 3D passenger, cargo and military aircraft and ground support vehicles – engineers, architects, planners and designers can easily assess aircraft space requirements, jet blast impacts, taxiway traffic, fillet designs and more with AviPLAN Turn Pro. Together with features to produce sophisticated presentations and generate top-level reports, AviPLAN Turn Pro is the ultimate aircraft turn simulation software.

AviPLAN Turn Pro incorporates advanced design tools and intuitive graphical interfaces, allowing users of all experience levels to generate and visualize aircraft maneuver simulations with ease.
Platform Compatibility

**Platform Requirements**
- Autodesk® AutoCAD® 2013 – 2022 (except AutoCAD LT)
- Autodesk® Civil 3D® 2013 – 2022
- Bentley® MicroStation® V8i, CONNECT Edition
- Bentley® MicroStation PowerDraft® V8i, CONNECT Edition
- Bentley® OpenRoads Designer® CONNECT Edition
- Bentley® PowerCivil® V8i
- Bentley® Power GEOPAK® V8i
- Bricsys® BricsCAD® V16 – V21 (except BricsCAD Classic/Lite)

**Languages Available**
- English

**System Requirements**
- Full support for 32 and 64-bit operating systems
- Workstation: Windows® 7 SP1 – 10
Maintenance Assurance Program

Our technical support personnel are always well informed of new product functionality and issues can be quickly resolved. With our Maintenance Assurance Program (MAP), you receive premium assistance for all your technical needs. Subscribing to the MAP gives you freedom from costly upgrades, unexpected staff downtime, or any disruptions due to operating and CAD system conflicts without the concern of per incident charges.

The benefits of being on MAP includes; cost protection, priority support treatment and exclusive privileges.

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Transoft Solutions offers innovative, state-of-the-art software and services for the aviation industry. Whether a project involves airport or airspace modeling, airside planning and design, obstacle limitation compliance or terminal simulation, Transoft has a solution to help complete the task confidently and accurately in a time-efficient manner.

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