

RELIABILITY
FLEXIBILITY
SIMPLICITY
SUPPORT

Diolkos is complete and autonomous new generation road design software. It covers all the cases of road design projects including highways, local and collector roads (at urban or rural regions), roads inside forests, multiple road projects such as intersections, motorways with service roads etc..

Main features

All Cases of Road Design
3D Visualization
Multiple Road Projects
Quantities Measurements
As-Built projects
River analysis



Diolkos3d
Civil engineering Software



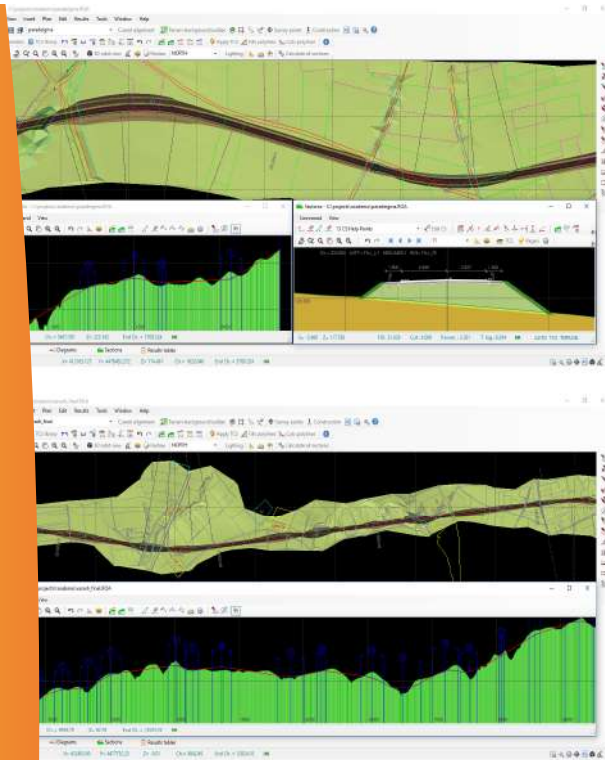
Diolkos
Road design software



Diolkos3D
Civil engineering Software

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Road design
Road Construction
Open Channels
Swept-Paths



CAPABILITIES

- ALL CASES OF ROAD DESIGN
- 3D VISUALIZATION
- DIGITAL TERRAIN MODELS
- MULTIPLE ROAD PROJECTS
- QUANTITIES MEASUREMENTS
- AS-BUILT PROJECTS
- OPEN CHANNELS DESIGN
- TURN SIMULATION



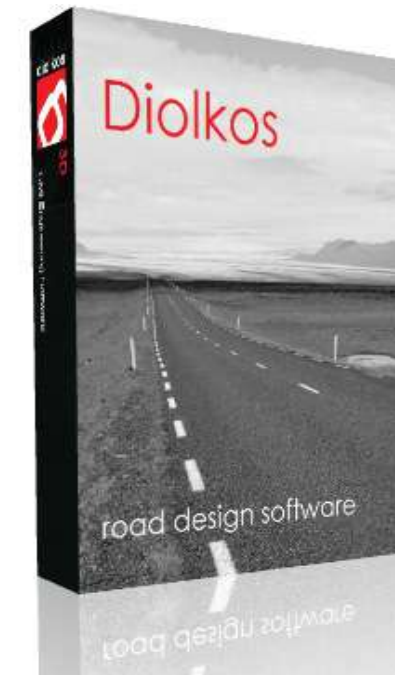
Diolkos at work for you

CONNECTING YOUR OFFICE TO THE TECHNOLOGY YOU NEED

Diolkos is complete and autonomous road design software. It covers all the cases of road design projects including highways, local and collector roads (at urban or rural regions), roads inside forests, multiple road projects such as intersections, motorways with service roads etc. Beyond the purely transportation projects, Diolkos can design hydraulic projects including riverbed delimitation and arrangement, projects for channels, ditches, booms etc. These projects are covered completely, from the preparation of background and the calculation of digital model of ground until the quantities measurement and printings.

Diolkos includes special utilities and functions for quantities and volume measurements at the construction stage of a corridor project.

The program can visually modify the cross sections lines (pavement lines, soil crown lines, etc.) either during the design or during the construction stage of a project. The program's capability to snap on any point or line of the cross section can greatly assist the user.



flexible solution for every day practice

ADVANCED CIVIL ENGINEERING SOFTWARE

ROAD DESIGN

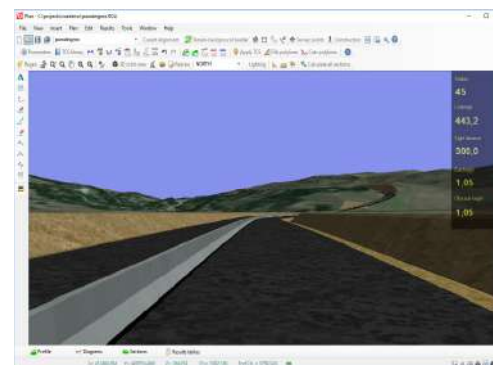
- Quick and easy insertion and modification of project's geometry. Real time 3d presentation of the project (for simple or multiple road projects). Real time 3d animation along the road axis. Checks for the final stopping sight distance along the road axis.
- Design diagrams for superelevation rate, pavement widenings, V85 and drainage layer.
- Survey terrain from set of 3d faces (TIN) or 3d lines (e.g contour lines). Custom or typical shape definition for fills and cuts side slopes. Upgrading design adjacently to existing road pavement.
- Calculation for drainage layers, capping layer, regulating course layer, benching, soil replacement cuts, walls and guardrails.
- Visual typical cross section definition, material assigning. Extensive build-in typical cross section library.
- Quick calculation for all cross sections at every plan modification. Automatically stations insertion and reconstruction of the Road-Terrain 3d model when plan geometry changes.
- Swept paths calculation to study vehicle turning maneuvers in sharp curves.

TECHNOLOGY

Slightly integrated with Direct3D, one of the most powerful graphic acceleration engine. Simply project manipulation. All design data for each road is stored in a single file.

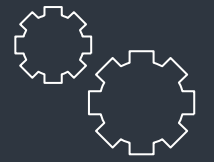
ROAD CONSTRUCTION

Import easily the survey data from total stations or GPS using text files. The program generates the horizontal alignment, vertical alignment and the cross-sections of road by using survey points taken in the worksite.



- Flexible survey data insertion.
- Create the road model by survey points.
- Calculate the cut, fill and topsoil quantities.
- Easy modification of all cross-section polylines.
- Export 3D points of the road model for worksite marking.
- Create "As Built" drawings.

Export 3D points of the road model for worksite marking. The user can insert special points in cross-section to extract their X, Y, Z coordinates for using in worksite marking of the designed project. You can customize the format of the text (X,Y,Z) for easy upload in survey equipment.



AUTOMATION

DIOLKOS is automatically computing the geometry of the plan, stations, profile, cross-sections and 3D model of road in conjunction with the surrounding terrain in every change in alignment geometry. The user conceives the above calculations as a small delay during the commands that the program executes.



SYSTEM REQUIREMENTS

Graphics: 128 MB DirectX
O.S.: Windows XP, Vista, 7,8,10



SUPPORT

All engineers in support team have special experience in variety kind of road and hydraulic design projects. We offer continuous and direct technical support without any extra fee.