

AutoPLAN

DTTOOLS

DrawingTools

Slope
Construction

Ramp Systems

Deposit Model

3D-
Modelling

2D-3D
Conversion

Translation
&
Restructuring of
Data sets

Slope Signatures

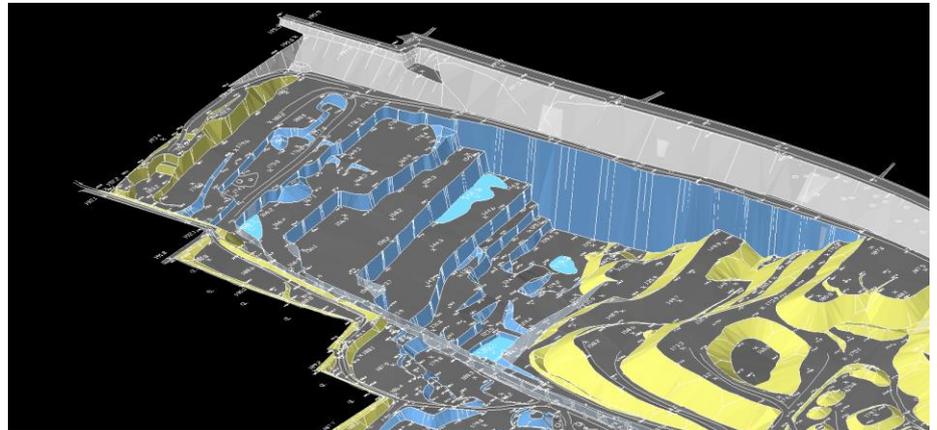
Map Sheets

For mining engineers and planners in the sectors of raw materials, surveying, infrastructure and dump construction, or any other kind of landscaping the AutoPLAN module DTOOLS offers diverse construction applications. Especially three-dimensional mine planes can be realized efficiently.

DTOOLS

With DTOOLS various applications for the construction of three dimensional string models (line and point models) are available. Core of the string models are digitalized or surveyed points, lines and polylines. Based on this data a three dimensional planning of quarries, dumps, garden, infrastructure and landscape constructions are possible. Therefor slope and ramp systems, signature and landfill bodies can be constructed and calculated interactively and in 3D.

The construction of slopes and ramps can either be defined onto a fix mining level or onto a specific geological layer e.g. the overburden base. For this work step the modules DTOOLS and DTM can be used combined. AutoPLAN calculates for instance automatically the foot slope appropriate to the selected head slope and the defined properties (inclination, height

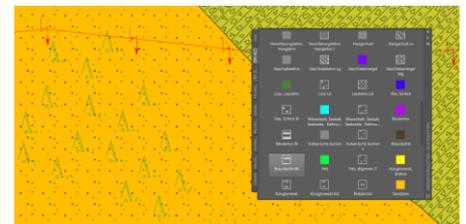


and bench offset, etc.).

By the use of the function "Model Slope" automated mine models can be realized fast and efficiently. DTOOLS calculates slopes, berms, signatures and the appendant DTM within seconds. Parameters such as berm width and slope inclination can be configured individually. Furthermore suitable ramps with configurable gradient, slopes and road width can be integrated into the mine model.

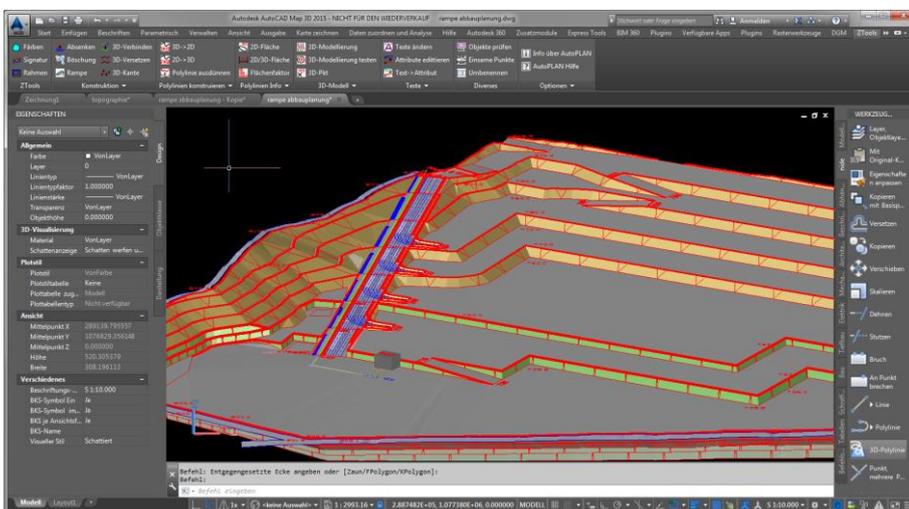
For an appealed visualization of the planned models diverse

slope signatures according to national standards are additionally available. Moreover AutoPLAN offers a hatch database as well as an icon library for the design of your project.



With DTOOLS print outs of the planning in map sheets are possible. Therefor maps in different scales from the drawing database without a fixed sheet line system are available.

Additionally diverse tools for a fast conversion of 2D in 3D data and the generation of 2D and 3D color fields or boundaries are included in DTOOLS.



Following applications are available for DTOOLS:

Construction

- Lowering of 2D-points, lines and polylines onto a 3D-surface network (calculation of 3D-data)
- Construction of ramp systems with variable slope angles, road widths and gradient
- Automated model slopes and ramps. DTOOLS calculates slopes with berm width, inclination etc. and generates the appendant DTM
- Automated generation of boundaries with line tracing dependent on the layer or line type

3D Modelling

- Conversion of 2D in 3D data
- Offset and connection of 3D-polylines within the space
- 3D edges with fix start and end height. Automated calculation of connection points
- Thin out of polylines: automated algorithm with configurable tolerance range

Signatures

- Creation of slope signature according to DIN 21912

Map sheet

- Creation of maps in different scales from the drawing database without a fixed sheet line system
- Independent orientated map sheets (rotated)

Icon library

- Substantial icon library for topography, geology and cadastre
- Hatch database according to DIN 21920 and 4023

Editing

- Editing of text and block attributes

Transformation

- Restructuring and translation of datasets (Layer property assignment)

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