Course Notes – 3D-Dig Stage Plan Course

This course introduces you to the concept of the stage plan in 3D-Dig. You will learn how to prepare a progressive stage plan for the excavation and dumping of the box cut. Also, you will make acquaintance with 3D-Dig capture functions to capture bitmap images and creating slideshows. At the end of the course, you will receive detailed information on how to export and import the data.

Set Up Module

In this module, you will make an initial acquaintance with the idea of the stage plan in 3D-Dig. You will learn how to execute the basic preparations for further work with the box cut, including placement of the different types of equipment, capture settings, reviewing of necessary settings for excavations and dumps.

Introduction

The lesson introduces you to the ***stage plan basics*** and provides the initial information about how to ***set up different types of equipment*** for further work (creation and placement of 2 excavators).

Equipment

This lesson is concentrated on the different types of equipment, which may be used during the excavation and dumping process. You will also learn about the ***equipment settings***.

Capture Settings

The lesson gives an explanation of ***how to set up the capture setting*** so you can capture the images of the different stages, while the simulation progresses.

Review Excavations

In this lesson, you will execute the ***set-up*** and ***review*** of ***Excavation Templates*** for further work with the box cut.

Review Dumps

In this lesson, you will perform the ***set-up*** and ***review*** of ***Dump Templates*** for further work with the box cut.

Pit Simulation Module

In this module, you will experience the two ways of achieving the initial goal of the stage plan while executing excavation and dumping for the box cut. At the end of the module, the work with geology in spoil will be explained with respect to the stage plan specific.

Start

In this lesson, the first steps of the stage plan completed under instruction are demonstrated.

Steps to Failure

The lesson provides a quick overview of the steps involved in the box cut ***option one*** (the ***complete sequence*** is demonstrated).

Alternative Start
In this lesson, alternative ***option two*** for the box cut is proposed and explained.

Steps to Success
A demonstration of the ***complete sequence*** of the box cut ***option two*** is given in the lesson.

Geology in Spoil
In this lesson, you will make acquaintance with the useful ***procedure of removing the rendering of geology in the spoil***.

Export Module
This module provides detailed information on the 3D-Dig communication tool and export logs. You will learn how to use the 3D-Dig special formats, like DXF and ETI, for exporting and re-importing the data.

Communication Tool
In this lesson, you will look at ***accessing*** and ***using slideshow images***, like the images capturing the different stages of the simulation progress.

Export Logs
The lesson gives an introduction to the ***process of exporting data*** from the ***Material Log***.

Crop Topography
The importance of the ***process of cropping*** in respect to the ***data exporting*** is explained in this lesson.
Also, the two ways of exporting the data will be introduced: the use of the ***ETI file format*** and exporting a single surface as a ***DXF file***.

Export as DXF
The exporting of the ***DXF file*** by using the method of ***Contours + Rarefied Grid*** is performed.
Also, you will learn about the dependency between the model's density, the quality of resolution, and the file's size for the export process.

Re-Import
In this lesson, you will make acquaintance with the procedure of ***re-importing of the exported data as an inner surface***.

Export as ETI
This lesson is concentrated on the work with the ***Earth Technology Interchange***, or simply ***ETI***, ***file format***.