

TALPAC BASIC

SOFTWARE TRAINING COURSE

PURPOSE

The aim of this course is to provide users with an overview of Talpac: Runge's Truck and Loader productivity analysis software. Upon completion of this course, users will be proficient in navigating core Talpac interfaces and in using Talpac functionality to estimate and compare fleet productivity, evaluate alternative equipment sizes and configurations, assess haulage costs and generate user-defined reports.

WHO SHOULD ATTEND?

This course is recommended for mining professionals who want to become proficient in the use of Talpac in evaluating haulage fleet productivity. Participants typically include mine planning engineers, operations engineers and supervisors and equipment supplier personnel.

PRE-REQUISITE SKILLS

Participants are required to be computer literate. Participants should also have completed the Runge *Principles of Mine Planning Course* or have equivalent knowledge or experience. Some exposure to truck and loader operations would be ideal.

DURATION

1 day

DATES & LOCATIONS

This course is delivered on request at a client's site or at one of Runge's international offices. For further information please refer to the Calendar section of the Runge web site.

LEARNING OUTCOMES

At the completion of this course participants will be able to:

- Estimate truck travel time for alternative haul routes
- Estimate fleet productivities for use in long and short term planning studies
- Compare productivities and determine the optimum loading technique, loading unit bucket size, truck capacity and number of passes
- Determine optimum fleet size
- Estimate load and haul costs per unit of production using discounted cash flow methods
- Estimate fuel usage and tyre duty

DELIVERY METHOD

This course is delivered in a classroom environment with an emphasis on participant involvement through practical workshops.

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COURSE CONTENT

Module 1: Getting Started

- Creating a new project
- Program and project settings
- Data inputs and outputs
- Haulage system components
 - Working with templates

Module 2: The Material Type

- Creating a material template
 - Entering material characteristics and fill factors

Module 3: The Shift Roster

- Setting up a shift roster template
 - Entering working and operating hours per shift for trucks and loaders
 - Specifying a weekly shift pattern
 - Allocating lost shifts and shift delays
 - Calculating annual working hours for trucks and loaders

Module 4: Selecting a Loader

- Navigating the loader database and reviewing loader specifications
 - Reviewing the selected loader template and selecting a bucket size
 - Entering user-defined operational, costing and statistical data

Module 5: Selecting a Truck

- Navigating the truck database
- Reviewing truck specifications and rimpull/retard performance curves
- Reviewing the selected truck template
- Entering user-defined operational, costing and statistical data
- Varying truck fleet size and truck type

Module 6: Setting up a Haul Cycle

- Deriving a haul cycle from a case study (provided) and entering it into Talpac
- Importing a haul cycle into Talpac from a text file
- Entering rolling resistance, super-elevation and speed restriction data into a haul cycle

Module 7: Production Analysis

- Calculating fleet productivity and cost using a quick estimate or full simulation
- Calculating comparative productivities and load and haul costs as an aid to equipment selection
- Setting a production target
- Reviewing production, fuel and tyre usage and cost reports

Module 8: Incremental Analysis

- Generating an array of haul cycles by incrementing selected segments
- Reviewing and graphing production analysis results

Module 9: Fleet Size Optimisation

- Contrasting fleet productivity and cost to deduce optimum number of trucks allocated to loader
- Reporting marginal productivity and cost from each additional truck

Module 10: Talpac Options

- Project options and customization: re-setting global variables and default values in Talpac
- Project Management: batch processing of a large number of production analyses

Module 11: Calibrating Talpac

- Calibrating your Talpac haulage model against actual fleet performance results