

Machine Control & Guidance (MC&G) is a mainstream technology that is helping the industry win bids by providing: quantity calculations, bid logistics, construction layout, machine production/operations cost and quantity tracking.

BENEFITS OF MC&G

- Reduce Survey costs 90%
- Increase Productivity 50%
- Reduce Material Costs
- Eliminate rework
- Reduce Labour
- Improved Operators Safety
- Extends work day
- Reduced operating costs
- High accuracies 3mm to 2cm
- No Staking
- Real time production results

ACHIEVE RESULTS WITH MC&G

Integrate engineering design, machine and material management and production reporting in a Real Time format to achieve;

- Reduced administrative costs
- Easier data management and faster implementation of change orders
- Automatically transmit revisions to machines
- Precise, consistent grading results, independent of the operator
- Improve safety by reducing the number of ground personnel
- Improve machine utilization
- Reduce machine wear, fuel consumption, operator fatigue, etc..

MACHINE CONTROL & GUIDANCE OPERATOR TRAINING PROGRAM



TOROMONT OPERATOR TRAINING



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MACHINE CONTROL & GUIDANCE OPERATOR TRAINING PROGRAM

TERRAMODEL CAD SITE DESIGN SOFTWARE

This 2-day course provides detailed training to further develop CAD savvy users of digital data to have a better understanding for today's site development construction needs.

COURSE OVERVIEW:

- Understanding Digital Terrain Models and how to control them
- Importing Digital files from Auto CAD
- Creation of DTM's from Contours & other Digital files. Fixing information imported from other sources
- Quantity generation and analysis
- Design export to Machine Control and GPS Survey Equipment

PREREQUISITES:

- Knowledge with Windows format, i.e. Excel, Word, Internet Explorer
- Knowledge with surveying, estimating and drafting in construction

TARGET AUDIENCE:

- Construction Surveyors, Estimators, Draftspersons and Machine Control & Guidance champions requiring Terramodel CAD training to automate or further develop current digital practices.

CLASS SIZE: Maximum 10 students

TERRAMODEL CAD ROAD DESIGN SOFTWARE

This 2-day course builds on the TERRAMODEL CAD SITE DESIGN (Introductory) curriculum to provide a foundation for road construction design development or modification.

COURSE OVERVIEW:

- Input Horizontal and Vertical Alignments
- Create Shapes and Templates for a Road job
- Setup of multiple "Roadways" in a Road job
- Discussion and Input of Super Elevation Data
- Usage of different Transitions for Ramps and Widening
- Creation of 3D points and 'Offset Points' for stakeout
- Output different Reports for stakeout, Export to Data Collectors

PREREQUISITES:

- Terramodel CAD Site Design Introductory course or equivalent experience

TARGET AUDIENCE:

Construction Surveyors, Estimators, Draftspersons and Machine Control and Guidance Champions requiring Terramodel CAD training to automate or further develop current digital practices, specifically geared towards road construction applications.

CLASS SIZE: Maximum 10 Students

OPERATING IN-FIELD TRAINING

- Equipment and machine operation
- Survey equipment operation
- Managing production
- Data preparation & quantity verification software courses

We develop these courses for your own needs and the cost will vary depending on the content, location and class size.



We also offer Operator Training on the following machines:

Track-Type Tractors Safety, inspection, pre-operating basics, operator's compartment, start up, dozing techniques and shutdown.	Wheel Loaders Safety, inspection, operator's compartment, start up, VCTC/impeller clutch control, bucket loading, truck loading, load and carry and shut down.	Hydraulic Excavators Safety, inspection, operator's compartment, start up, basic excavation, trenching, mass excavation, lifting techniques and shut down.
Wheel Tractor-Scrapers Safety, maintenance, lubricants, pre-operating basics, operator's compartment, transmission usage, spotting/loading and dumping, cycle segments and shut down.	Backhoe Loaders Safety, maintenance, lubricants, pre-operating basics, operator's compartment, loader procedures, backhoe operations, trench safety and shut down.	Articulated Trucks Safety, inspection, operator's compartment, start up, transmission usage, braking/retarding procedures, truck cycles and shut down.
Off-Highway Trucks Safety, inspection, operator's compartment, start up, transmission usage, braking/retarding procedures, truck cycles and shut down.	Motor Graders Safety, inspection, operator's compartment, start up, blading basics and shut down.	Waste Handling-Landfill Compactors Safety, inspection, operator's station, startup, spreading and compaction techniques, working with other machines, shut down.
Waste Handling-Wheel Loaders in Transfer Stations Safety, machine arrangements, loading and hauling techniques, working with other machines, shut down.		Waste Handling-Track-Type Tractors Safety and maintenance walk around inspection, operation of differential steer, finger tip control and hydrostatic control, use of the cooling systems, guarding package and blades.



Out of town travel expenses are in addition. Please contact us for larger group costs. For further information on the **TOROMONT MACHINE CONTROL & GUIDANCE OPERATOR TRAINING PROGRAM** Contact **Training Registrar** at **416-514-4752**