

MM22

Take your design into the field.

GNSS machine guidance with Model Maker.



POINTS / STRINGS / SURFACES

For bulldozers, excavators, piling and pole planting: bring the design into the operator's view with a compatible machine and RTK GNSS setup.

MMS Design - authorised Model Maker Systems reseller for the Cape regions of South Africa.
Software developed by Model Maker Systems.

Guide the work. See the next move.

01 To Point

Reach a planned position.

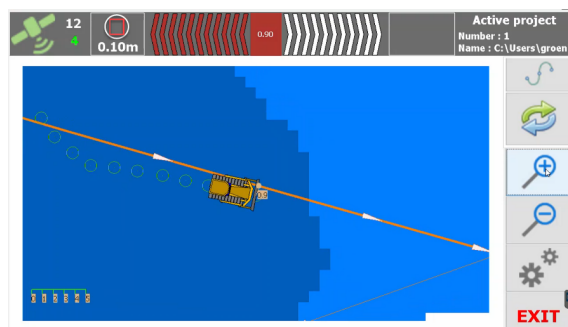
Guide the operator towards a chosen DTM point — for work that depends on reaching specific design locations.



02 To String

Follow the design alignment.

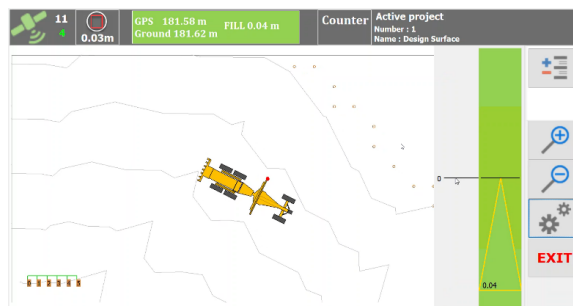
Use a geometric alignment string to see where the machine is relative to the intended line.



03 To Surface

Work towards the target level.

See cut-and-fill information against a design surface to help guide the operator's work.



Illustrative software screens from the supplied MM22 documentation. Interface and configuration may vary by version and installation.

Bring the design to the blade.



FIELD APPLICATION / BULLDOZER EARTHWORKS

Cut and fill

Use surface guidance to see the relationship between the working position and the design level.

Follow an alignment

Use string guidance to follow a planned alignment. The field examples include bulldozer ridging work.

Photographs supplied by MMS Design show its MM22 bulldozer application. Machine setup, offsets and positioning must be configured for the work. Automatic control requires a separately confirmed compatible system.

Different jobs. One design connection.



FIELD APPLICATION / VINEYARD POST INSTALLATION

Bulldozers

Guide earthworks against design surfaces and planned alignments.

Excavators

Use design positions and levels to guide excavation work.

Piling

Guide positioning against planned pile locations.

Pole planters

Follow planned pole positions and row alignments, including vineyard work.

Guidance, with the right machine setup.

MMS Design can assess the machine, attachment, GNSS installation and offsets for your application. Confirm coordinates and heights before work.

Automatic steering or hydraulic control requires a separately confirmed compatible system and configuration.

CHCNAV CGI-610

The positioning hardware we use with MM22.

MMS Design uses the CHCNAV CGI-610 in its MM22 setup. It combines dual-antenna GNSS with an industrial-grade MEMS inertial measurement unit (IMU).

GNSS + inertial navigation

Position, attitude and velocity data from an integrated GNSS/INS system.

Up to 100 Hz output

Receiver output capability for dynamic applications. The configured MM22 interface determines the data used.

Rugged and connected

IP67-rated hardware with Ethernet, serial, CAN and PPS interfaces.

CGI-610 provides positioning and orientation data; MM22 provides the Model Maker guidance interface. Automatic steering or hydraulic control requires a compatible control system and configuration.

Hardware specifications: CHCNAV CGI-610 product page, checked 26 September 2026. Receiver capabilities are not a guarantee of complete-system accuracy or automatic control.



Let's put your design to work.

Start with the machine. Build around the work.

The machine

What equipment will be used?

The task

Which positions, lines or surfaces matter?

The positioning

Which GNSS equipment is already available?

The design

What data and Model Maker modules do you use?

Talk to MMS Design

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MMS Design is an authorised Model Maker Systems reseller for the Cape regions of South Africa. Model Maker Systems develops and owns the software.

Product reference: modelmaker.co.za/products/model-maker/