

Automatic profile milling



Plug & Play Interface

Leica Geosystems offers a range of premium total stations with prism target lock ATR+, smart spare and automatic leap frogging ensuring continuous milling and making it ideal for any highway project, airport project and tunnel work.

High Accuracy

High precision instruments from Leica are the base for high accuracy in milling operation on any road work, airport projects or race track renovations etc.

Logistics

TPS must be positioned and embedded in system. During milling, max distance between prism and TS must be considered. And leap frog has to be planned moving forward in the project.

Sensor Flexibility

- Combination of 2D on side and 3D on the other side of the machine (e.g. Matching to existing surface).
- 3D Position sensor flexibility with TPS or 1UP or Dual GNSS.

Continuous Improvements

- MC1 sends deviation of current position of the machine against project.
- As-built ensures feedback loops resulting in continuous correction of results.

Target Market

Ideal for MC1 users and milling specialist globally.

Models supported

- Any Wirtgen cold planer (compact, medium and large cold planers) with Level Pro, Level Pro Plus or Level Pro Active Controller
- Roadtec cold planers with ACE levelling system
- Any cold planer brand with Mobamatic CAN 1 or 2

Supported 3D project file format

- Stringline model (land XML)
- Terrain models (TRM, LandXML, DXF)

Flexibility for all use cases

Profile milling is possible to use for all classes as defined by FHWA:

- Class I consists of milling the existing surface to the extent necessary to remove surface irregularities
- Class II consists of milling the existing surface to a uniform depth as shown in the plans
- Class III consists of milling the existing surface to a uniform depth and cross slope as shown in the plans and/or special provisions
- Class IV consists of milling the entire depth of existing surfacing from the underlying base or subgrade
- Class V consists of milling to a variable depth of the existing surfacing as shown in the plans and/or special provisions.

Automatic differential milling



Plug & Play BT Interface

Quick and easy installation. Simple wiring set-up.

Models supported

- Manual Milling Pilot solution: Any cold planer
- Auto Milling Pilot solution: Wirtgen large and compact cold planers with set-value interface (Level Pro, Level Pro+ or Level Pro Active)

Almost no limitations

- Improve the work compared to classical 2D milling tasks.
- Productivity gain in any large milling area where the existing surface has been measured/ scanned in a reasonable accuracy.
- To directly achieve the desired level, profile milling is recommended

Target market

- Ideal for specialised milling contractors (rental companies).
- Option for construction companies owning milling machine and already working with an iCON site solution. Small investment for additional license and BT-Interface to Wirtgen.

Higher speed & less logistics

- Parallel work with several mills possible.
- Place GNSS receiver on machine frame connect CC80 via BT to the machine and start milling (no spray marks on the road necessary).

Lower costs & less complexity

- Acceptable quality road renovation.
- Lower solution costs

Sensor Flexibility

- Combination of 2D one side and 3D on the other side of the machine (e.g. Matching to existing surface).
- 3D Position sensor flexibility with single GNSS or TPS.



2 files needed

- Surface file
- Target file
- (Road Design: DXF, LandXML, StringlineModel).

