

6.4 | Blade Shift & Target Adjustment

Blade Shift allows the operator to temporarily adjust the Target Position during grading.

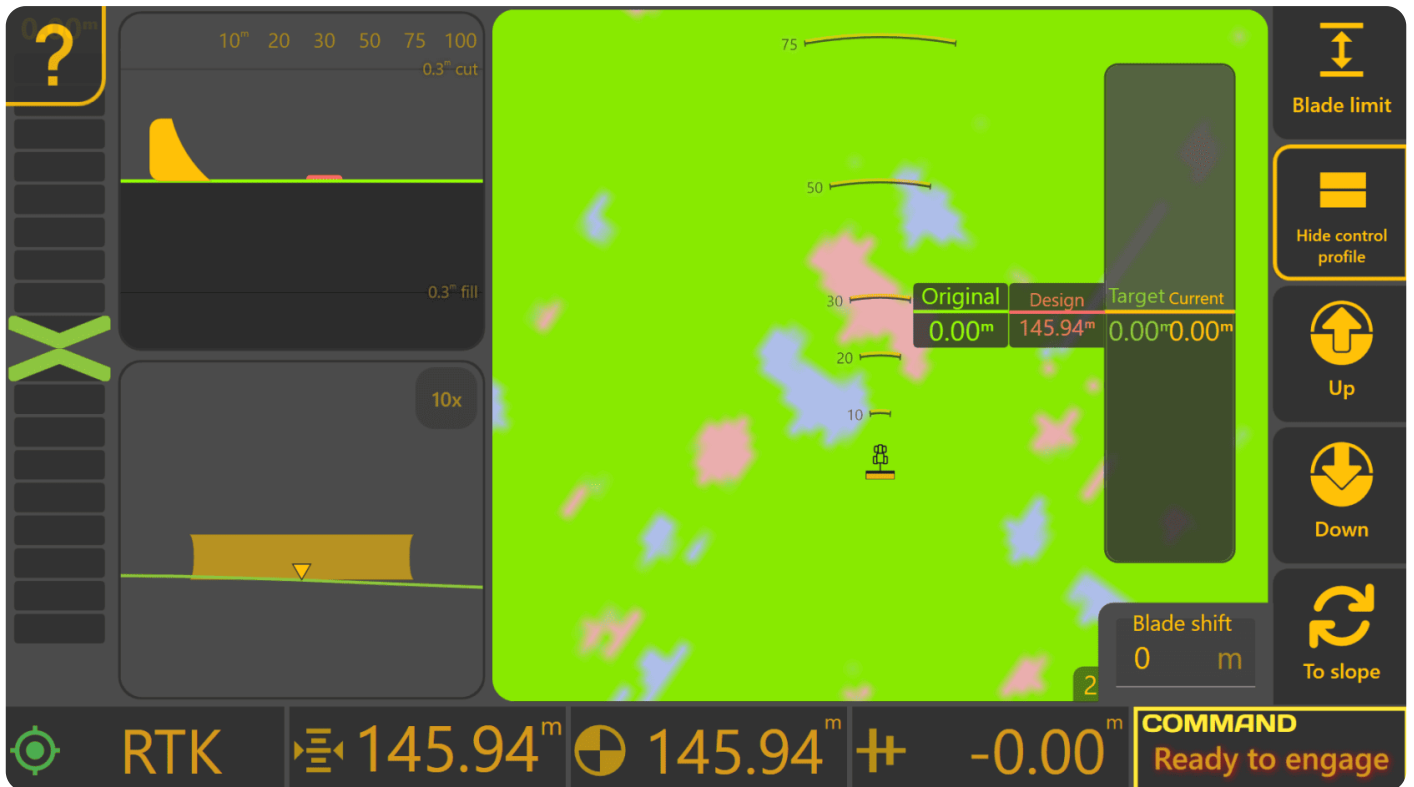
This provides a quick method of making small grading adjustments to suit changing site conditions without changing the project itself.

Blade Shift changes the current Target—not the Design. Remove the applied shift at any time to return Automatic Control to the original design surface. If large Blade Shift values become necessary, verify the project alignment and consider performing **Zero** instead.

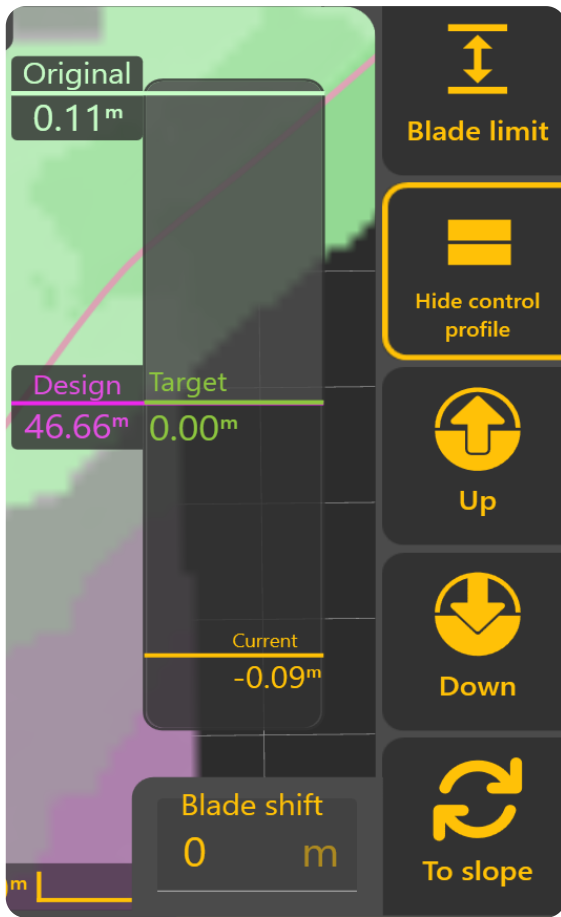
To access the Blade Shift controls from the Apply View:



Press Blade Shift.



Understanding the Control Profile



The **Control Profile** provides a live cross-sectional view of the current grading state. It allows the operator to see how the original ground, Design, Target Position and current implement position relate to one another during **Automatic Control**.

The Control Profile displays four key references:

Original

The original surveyed ground surface before grading began, shown relative to the Design.

Design

The intended finished surface. This remains fixed throughout the project and represents the final grading objective.

Target

The position currently being tracked by **Automatic Control**.

Normally, the Target matches the Design. However, **Blade Shift** or **Dynamic Cut & Fill Limiting** may temporarily adjust the Target during grading.

Current

The current implement position relative to the Design.

As **Automatic Control** operates, the Current position should progressively move towards the Target.

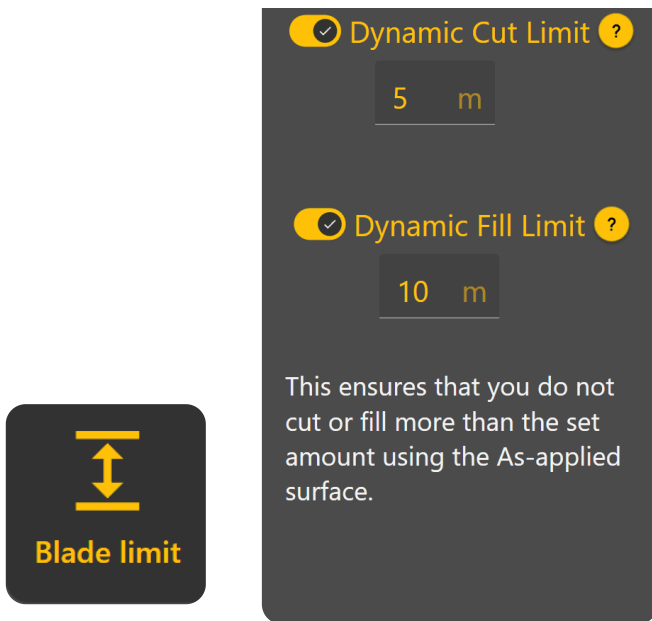


Blade Shift

The **Up** and **Down** buttons temporarily raise or lower the Target by the configured **Blade Shift Increment**.

Multiple adjustments can be applied as required, and the current Blade Shift value is displayed within the **Blade Shift** window. Selecting the displayed value allows a specific offset to be entered directly.

Dynamic Cut & Fill Limiting

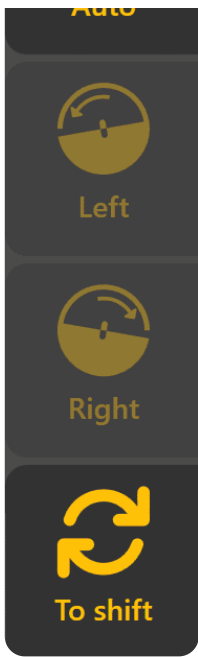


Dynamic Cut & Fill Limiting temporarily restricts how much material **Automatic Control** attempts to remove or place during a single pass.

Rather than immediately targeting the finished Design, **Level COMMAND** calculates a temporary Target Position that respects the configured Cut or Fill Limit. As grading progresses, the Target automatically moves towards the Design until the finished surface is achieved.

Dynamic Cut & Fill Limiting is useful for:

- Removing material over multiple controlled passes.
- Reducing machine load.
- Preventing excessive cutting or filling in a single pass.
- Improving control on difficult ground.



Manual X-Slope Adjustment



Machines equipped with **Height & X-Slope** control can temporarily adjust the target cross-slope.

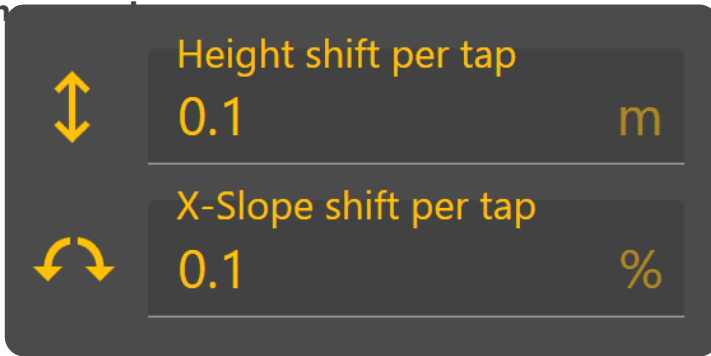
Select **To Slope** to switch from Blade Shift controls to X-Slope controls.

When **X-Slope Auto** is enabled, **Level COMMAND** automatically follows the Design cross-slope. When **Auto** is disabled, the operator may manually adjust the target cross-slope using the **Left** and **Right** controls or enter a specific value directly.

Select **To Shift** to return to the Blade Shift controls.

Blade Shift Increment

The amount applied by each press of the **Up** or **Down** buttons is determined by the configured **Blade Shift Increment**. Likewise, manual X-Slope adjustments use the configured **X-Slope Shift Increment**.



To change the Blade Shift Increment, from the

Apply View press:

More → Blade Shift Settings

Smaller increments provide finer control, while larger increments allow quicker adjustments during grading.

Typical **Blade Shift Increment** values are:

Units	Recommended Increment
Metres	0.01–0.02 m
Inches	0.4–0.8 in
Feet	0.03–0.06 ft

These values provide a good balance between adjustment precision and operating efficiency for most grading applications.

Operator Tip: Use **Blade Shift** to make temporary grading adjustments as conditions change throughout the day. If large Blade Shift values become necessary to maintain the desired grade, verify the project alignment and consider performing **Zero** again rather than continuing to increase the applied offset.

Continue to **6.5 | Position Quality & GNSS Validation** to understand how **Level COMMAND** validates positioning information before Automatic Control is allowed to operate.

