

MEKANIKA

ADVANCED SPOILERBOARD KIT

HOW TO FACE THE BOARDS AND PLACE THE INSERTS



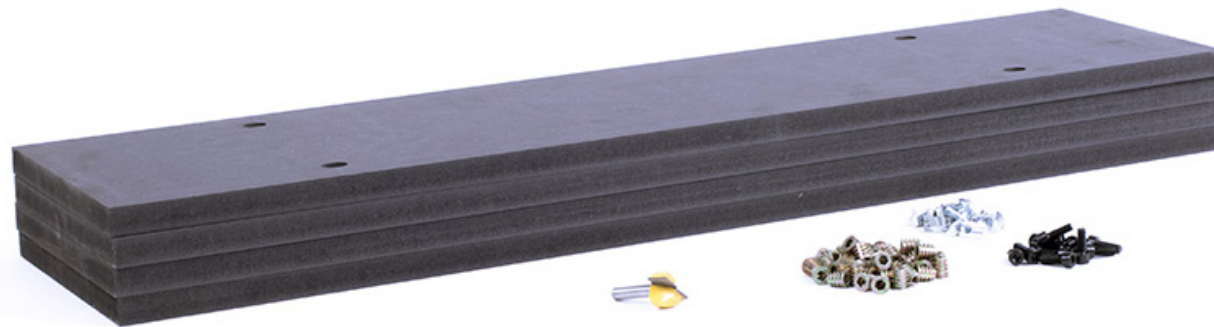
INTRODUCTION

SPOILERBOARD KIT

This documentation will guide you step by step to surface your spoilerboard and to correctly place the threaded inserts. Before starting, download the kit content on our support page and verify that you've received everything.

This written tutorial is organized in three chapters:

- 1. Facing the spoilerboard**
- 2. Drilling the holes for the inserts**
- 3. Placing the inserts**



If you haven't attached the boards on the machine yet, please refer to the document available on our support download page, or to the [last chapter of the mounting video of EVO](#).

1. FACING THE BOARDS

STEP #01 : HOMING THE MACHINE

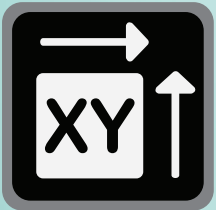
1. Switch on the control unit of the CNC router
2. Press the **"Home"** button



1. FACING THE BOARDS

STEP #02 : DEFINING THE WORKING COORDINATES

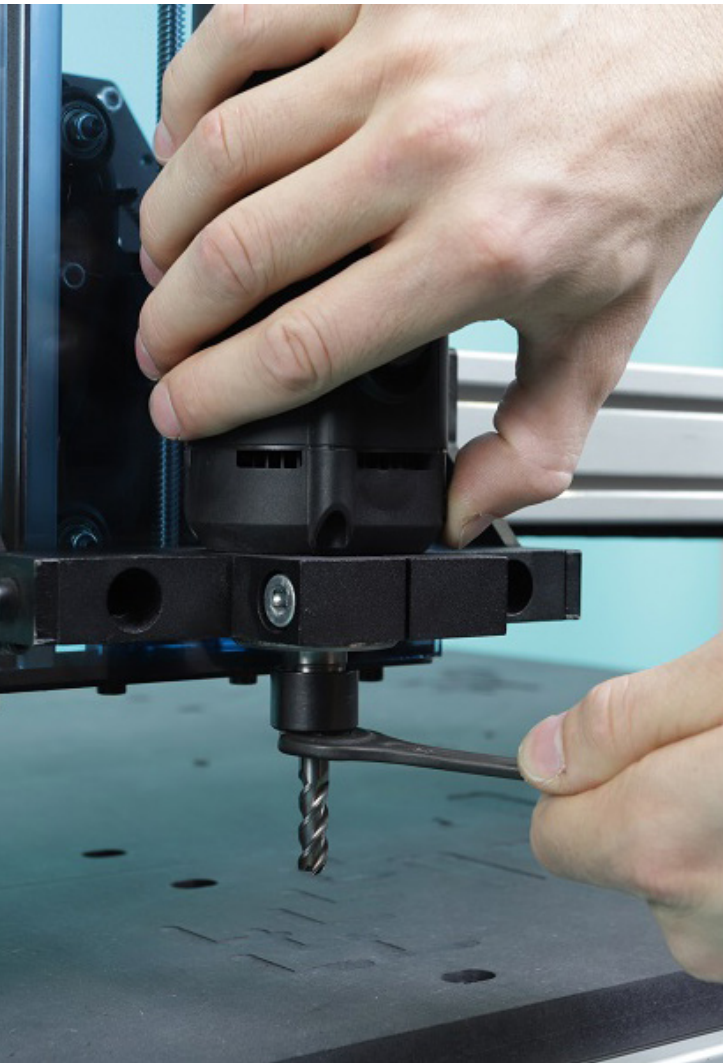
1. Press the "XY" button to define the current position as the X0 Y0 working coordinates



1. FACING THE BOARDS

STEP #03 : CHANGING THE ENDMILL

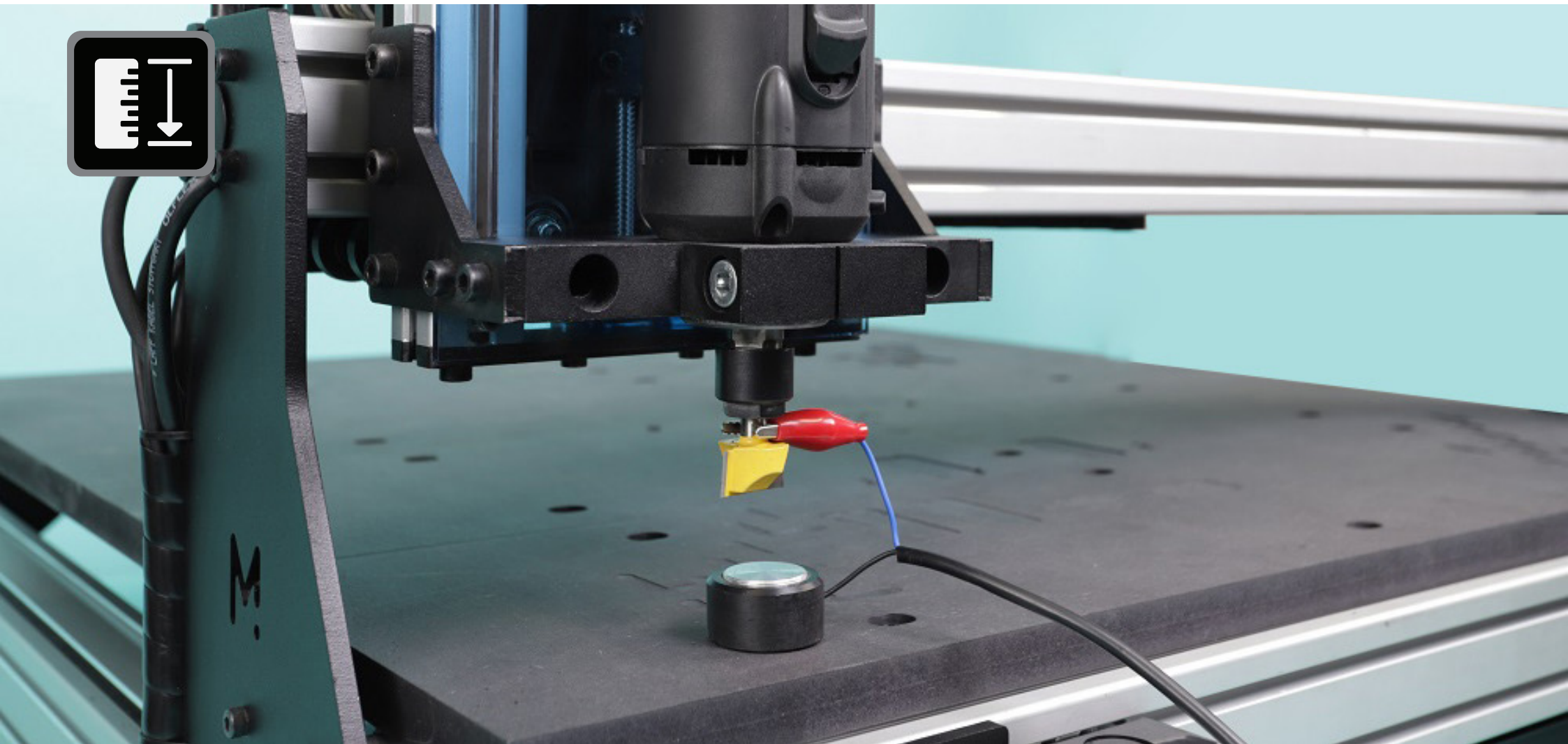
1. Remove the endmill in place
2. Place the **8mm collet** inside the clamping nut and **insert the 25mm endmill**
3. Tighten the clamping nut with the spanner



1. FACING THE BOARDS

STEP #04 : MEASURING THE TOOL LENGTH

1. Place the crocodile clip on the endmill shaft
2. Place the probing device underneath the endmill
3. Press on the **"Tool measure length"** button

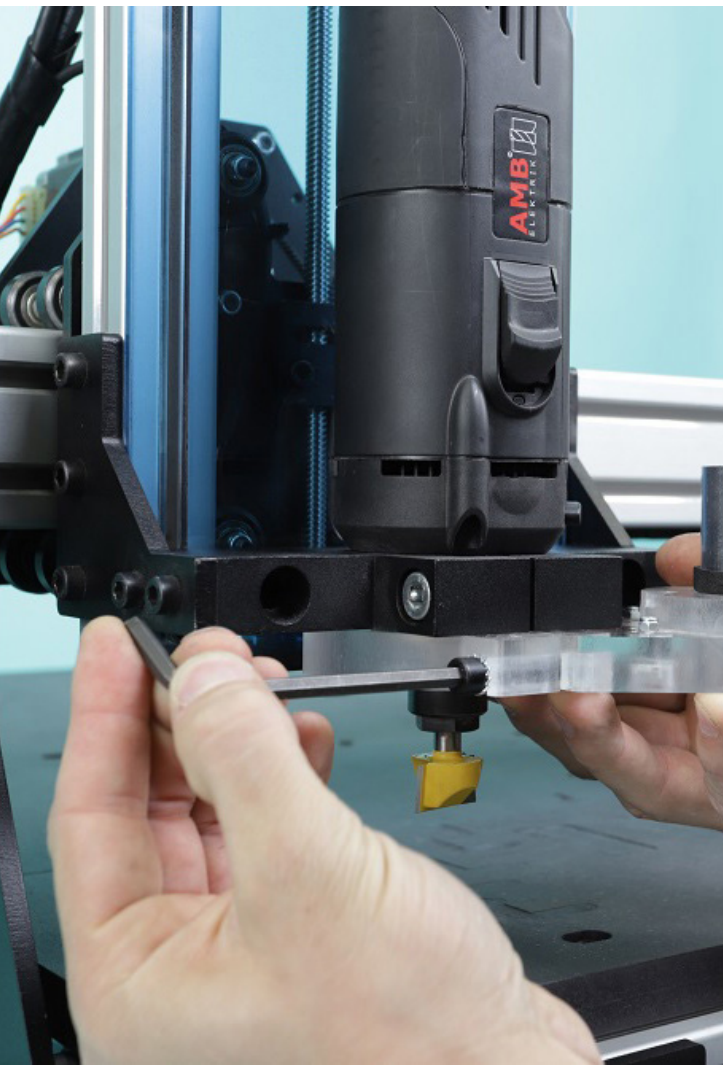


1. FACING THE BOARDS

STEP #05 : INSTALLING THE DUST SHOE

For this facing operation we highly recommend placing the Mekanika Dust shoe.
To install it properly, please refer to the relevant documentation on our support page.

DO NOT SWITCH ON THE SPINDLE BEFORE INSTALLING THE DUST SHOE SHOE



1. FACING THE BOARDS

STEP #06 : LOADING THE GCODE

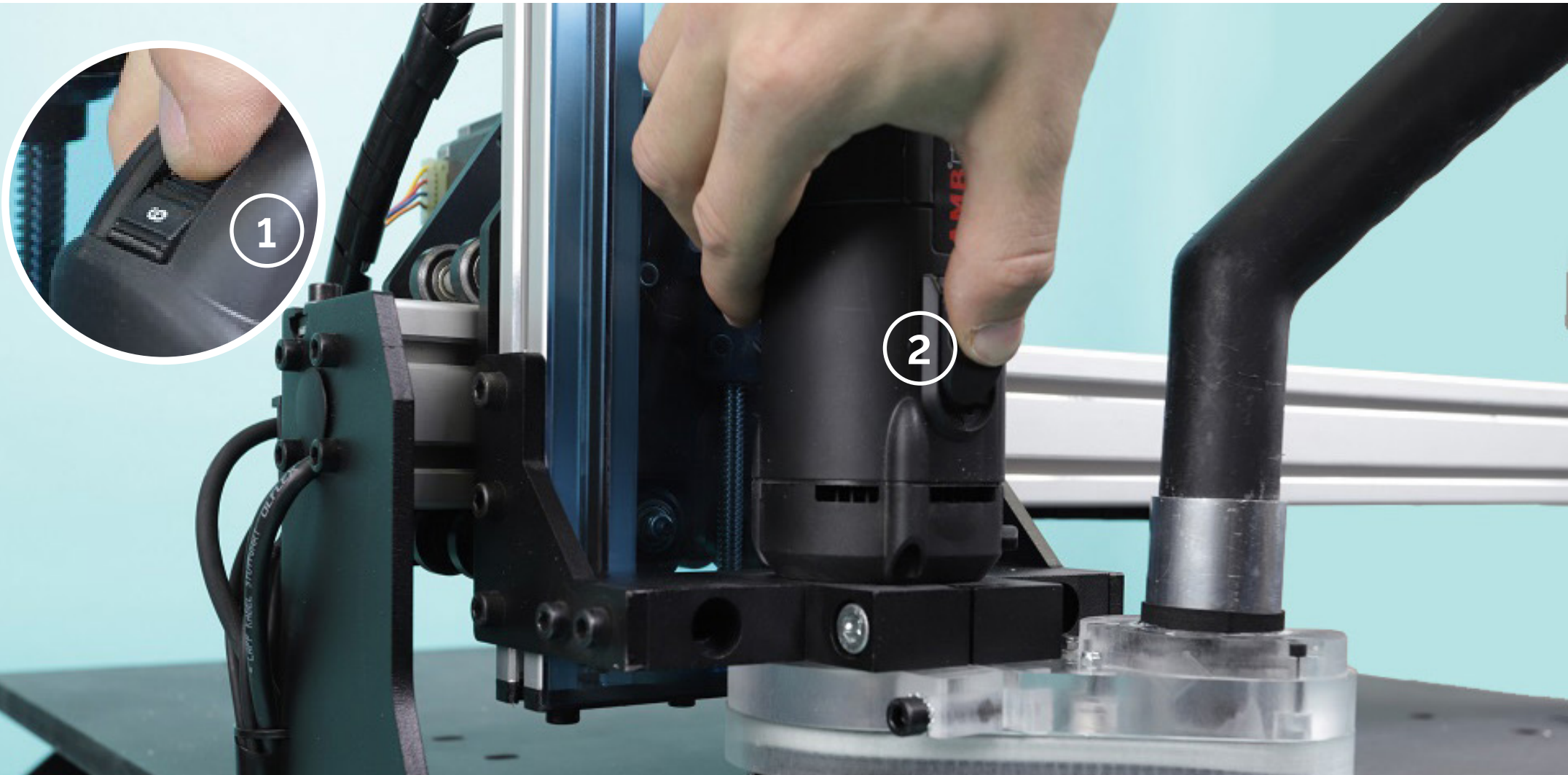
1. Download the [Surfacing and Drilling G-codes](#) on our support page
2. Load them on your control unit with a USB key or using the Shared folder of the Raspberry Pi
3. Press the **"Open G-code"** button
4. Open the **"Facing - Endmill 25"** that corresponds to your Evo model (S, M or L).



1. FACING THE BOARDS

STEP #07 : SWITCHING ON THE SPINDLE

1. Set the rotation speed on "6"
2. Switch on the spindle

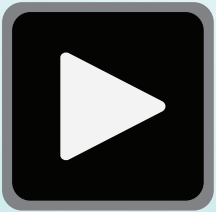


1. FACING THE BOARDS

STEP #08 : MILLING

1. Press the "Play" button

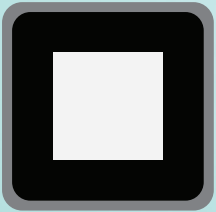
WEAR SOME SECURITY GLASSES AND EAR PROTECTIONS



1. FACING THE BOARDS

STEP #09 : PREPARING FOR THE NEXT STEP

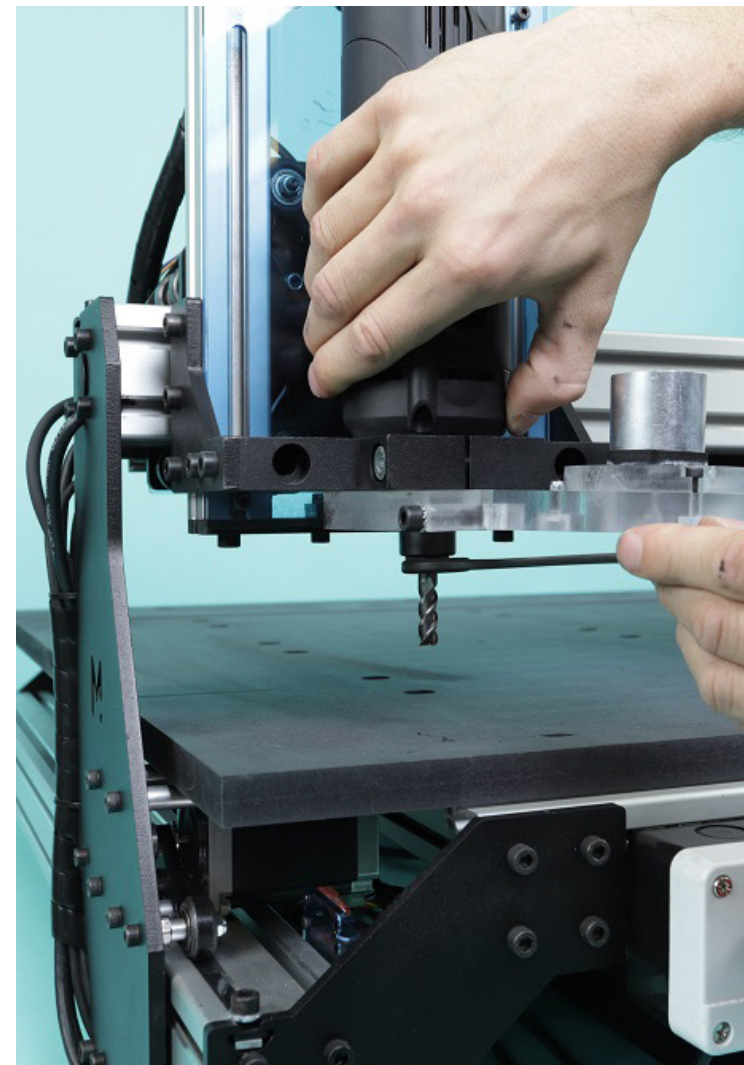
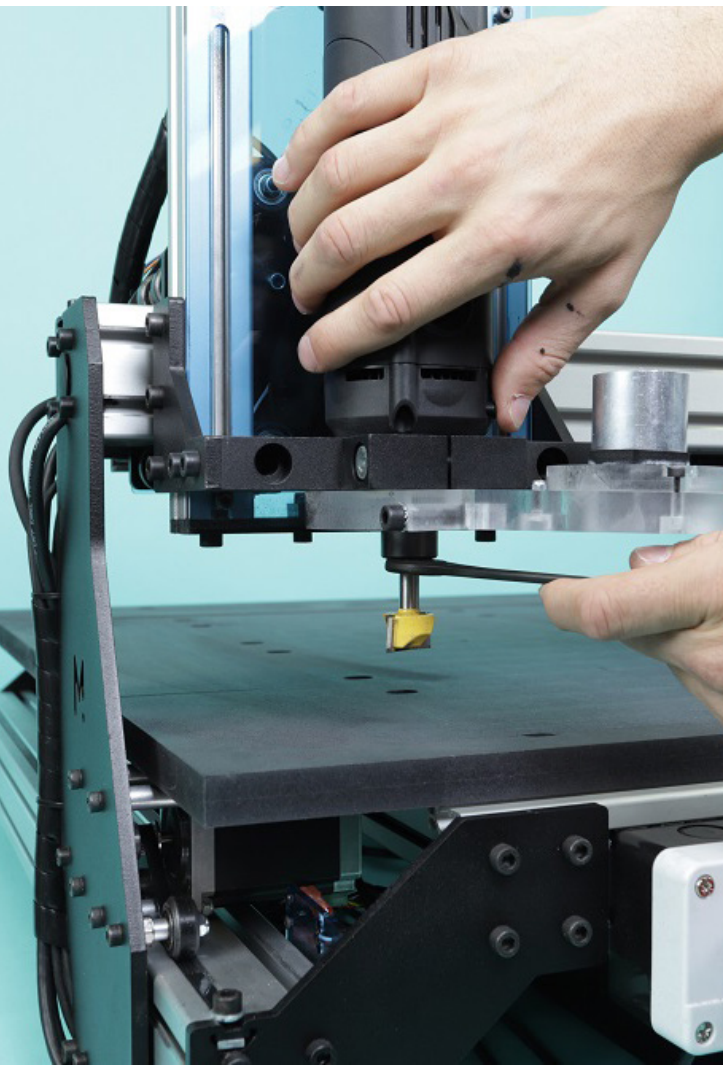
1. Once the work is finished, press the **"Stop"** button
2. Switch off the spindle
3. Bring the machine to the front with the **"Y- arrow"** button
4. If the spoilerboard hasn't been milled over its entire surface, go back to **STEP #05** to make a new tool measure length on the milled surface and repeat the operation with the same G-code.



2. DRILLING THE HOLES

STEP #01 : CHANGING THE ENDMILL

1. Remove the 25mm endmill
2. Place the **8mm endmill** and let it **stick out of 25mm** at least.

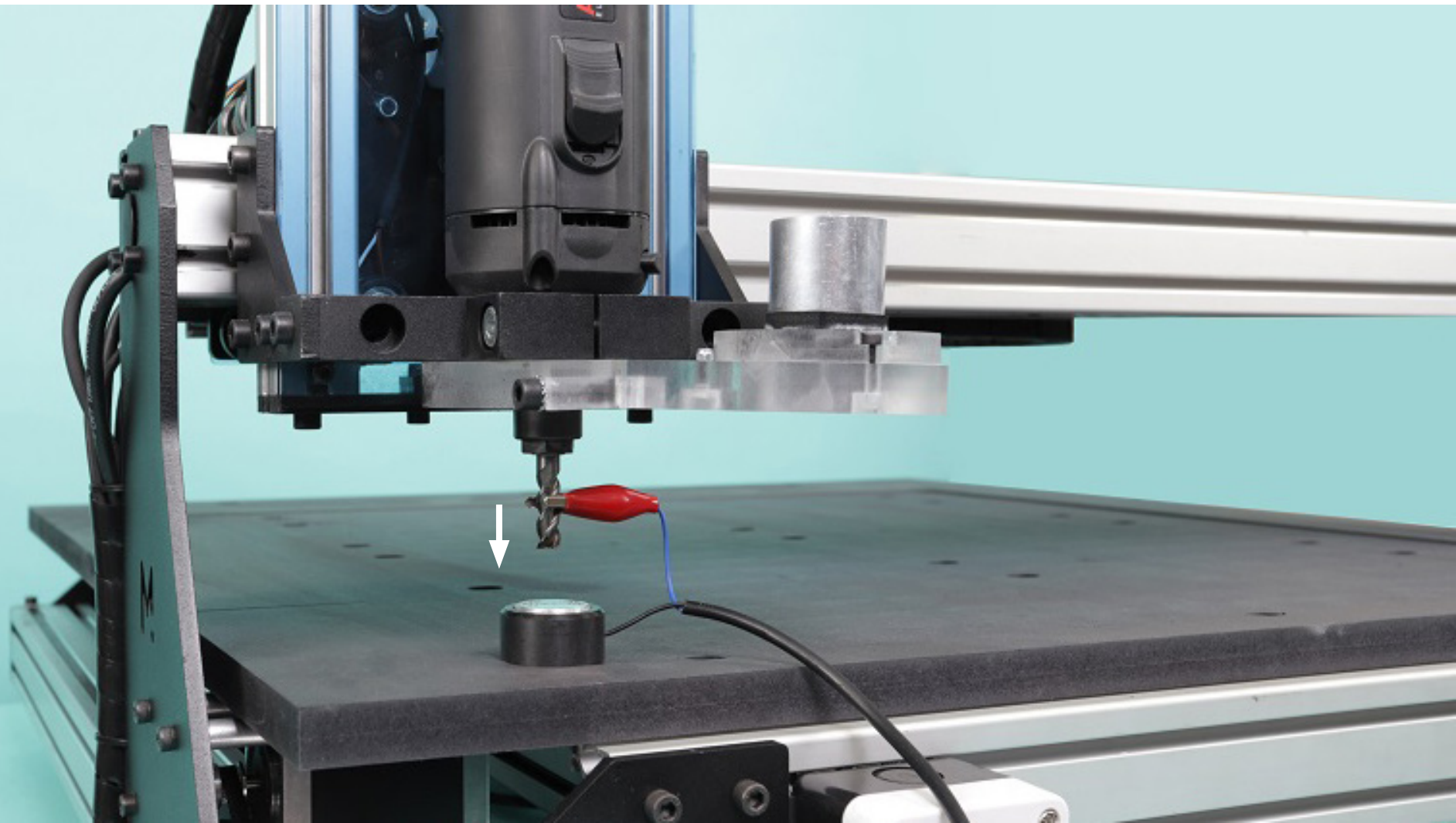
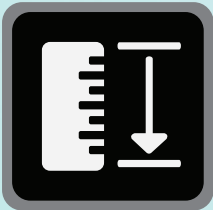


2. DRILLING THE HOLES

STEP #02 : MEASURING THE TOOL LENGTH

1. Place the crocodile clip on the endmill
2. Place the probing device underneath the endmill
3. Press on the **"Tool measure length"** button

PLACE THE PROBING DEVICE ON THE BRAND NEW FLAT SURFACE



2. DRILLING THE HOLES

STEP #03 : LOADING THE GCODE

1. Press the **"Open Gcode"** button
2. Open the **"Holes - Endmill 8"** that corresponds to your Evo model (S, M or L).



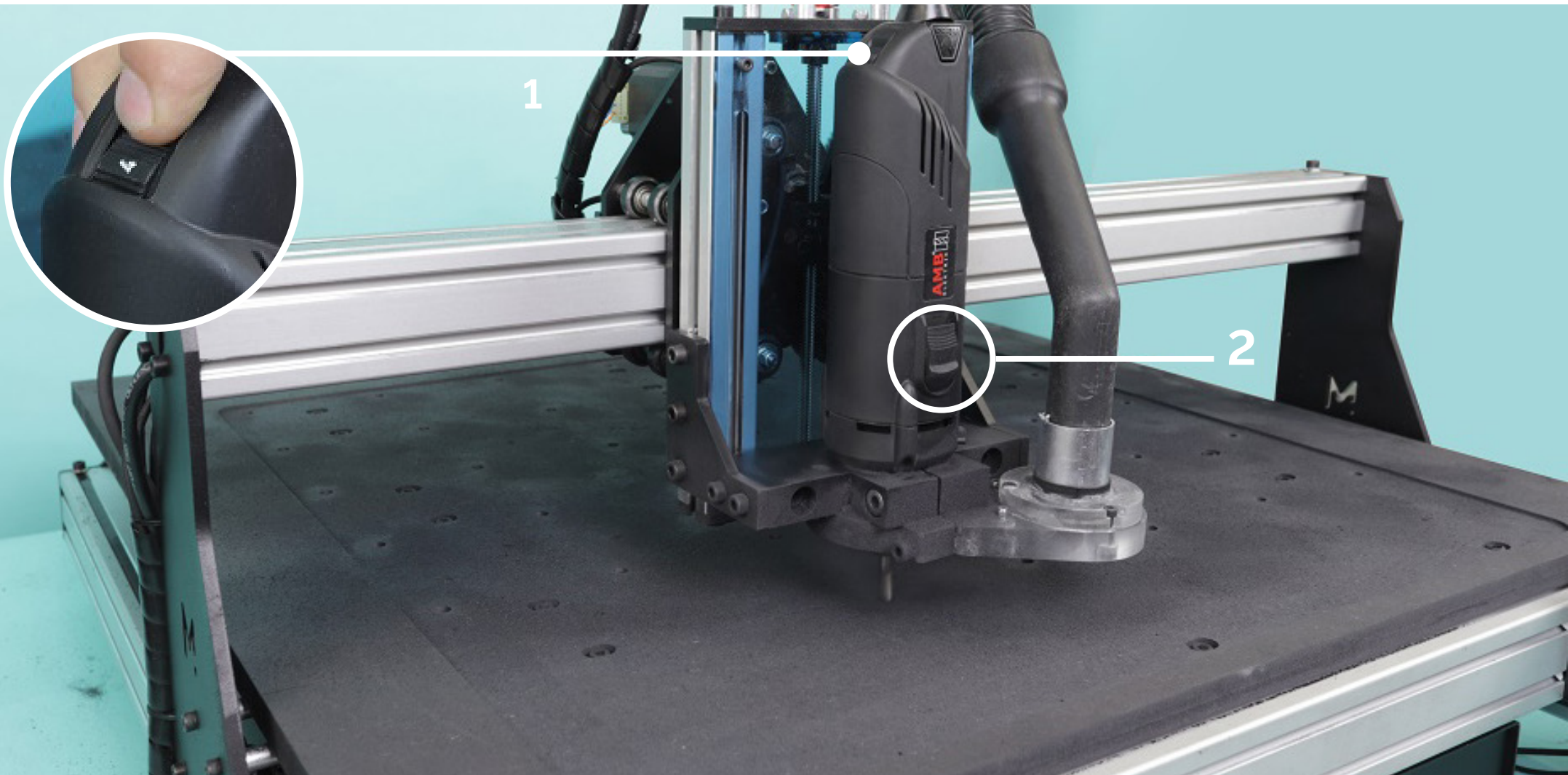
2. DRILLING THE HOLES

STEP #04 : SWITCHING ON THE SPINDLE

1. Set the rotation speed on "4"
2. Switch on the spindle

WEAR SOME SECURITY GLASSES AND EAR PROTECTIONS

NO NEED TO INSTALL THE DUST SHOE FOR THIS OPERATION



2. DRILLING THE HOLES

STEP #05 : MILLING

1. Press the **"Play"** button



3. PLACING THE INSERTS

STEP #01 : PLACING & TIGHTENING THE INSERTS

1. Gently place the inserts **as vertical as possible** thanks to the **6mm hex key** (included in the EVO kit)
2. Tighten the inserts until the flanged part touches the surface of the board

DO NOT OVERTIGHTEN THE INSERTS

