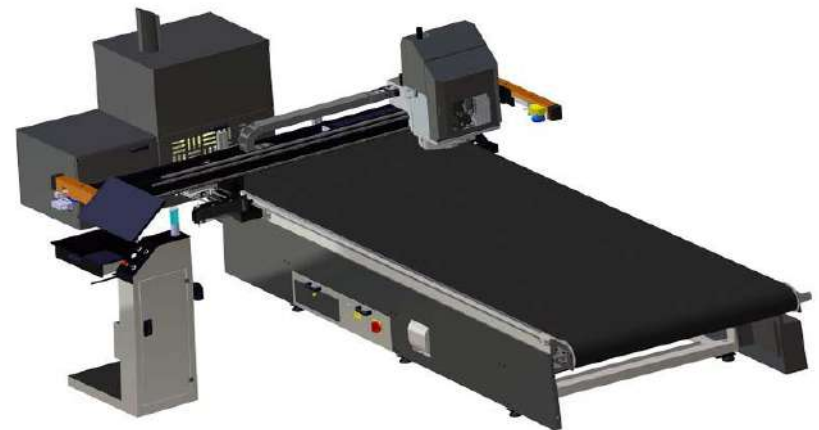


The new EMHD: robustness & reliability



- As you guys know Atom created the first combine system to cut and mill and its main feature was the high robustness of the structure. Then in order to suite the market demand of reducing the costs we designed the lighter version.
- Unfortunately, with this version we lost our main competitive advantage.
- Taking all this into consideration we decided to move back to the old structure and create a new model more:
 - ✓ Robust
 - ✓ Accurate
 - ✓ Flexible
 - ✓ Reliable
 - ✓ Friendly



The new EMHD: robustness & reliability

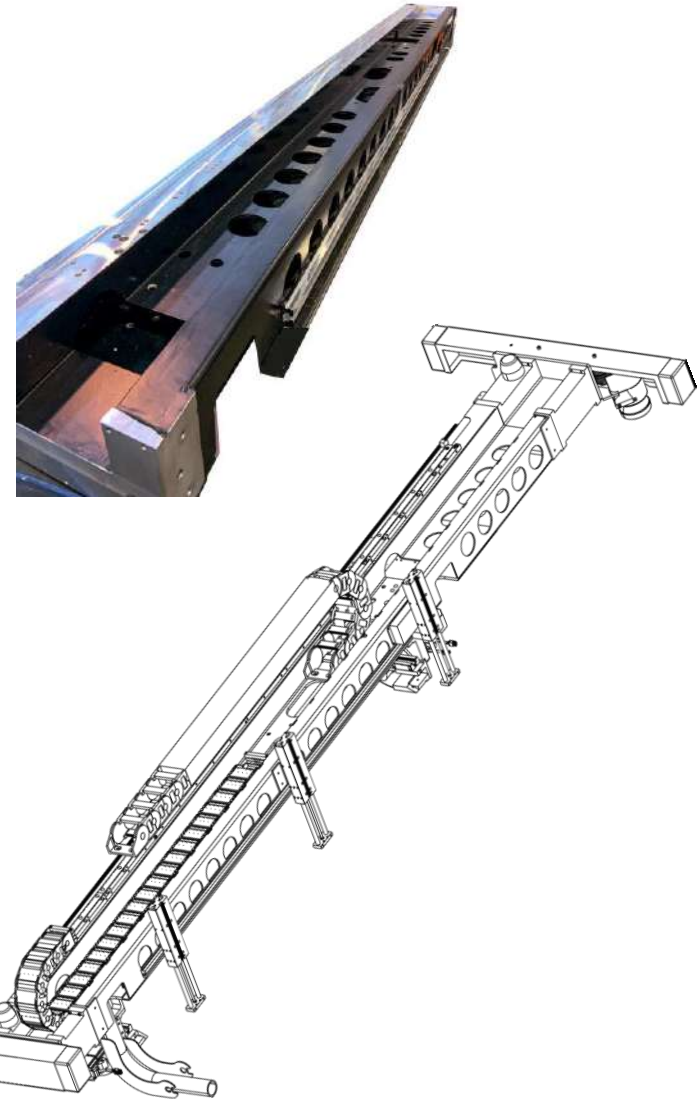


➤ **ROBUSTNESS**

The new beam is one of the main innovation of this structure. To empower the machine performances, we decided to enlarge the beam and rack and pinion dimensions. So, we return to the original welded design that granted high reliability and satisfaction.

Of course, the main machine frame is our standard and extremely robust one able to grant the EMHD series to perform cutting and milling operations on materials up to 130mm in thickness.

About the 130 mm thickness we want to claim that our systems are the unique on the market capable to really cut and mill such a depth.



The new EMHD: robustness & reliability



➤ **ACCURACY**

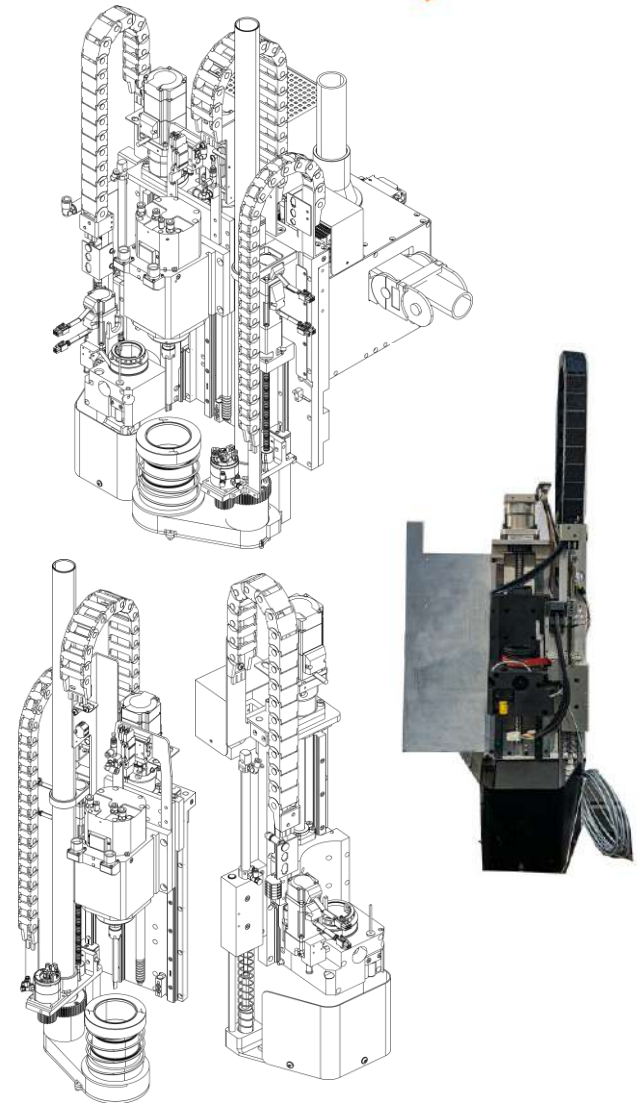
Another crucial news of this model is the head, it has been divided into two separate modules: one holding the cutting chuck the other the milling spindle and shaving exhauster with automatic high setting.

The separate modules are more robust of the single one but lighter so they're easier to disassemble for ensuring quicker maintenance.

The milling module accommodates a brand-new spindle of 5 kW power capable to turn from 1.000 to 35.000 rpm. It's supplied by a new trusted manufacturer and made by high reliable and tested components.

The combination between the new beam and head allows the reduction of the working vibrations (above all during milling) to achieve:

- ✓ top dimensional accuracy
- ✓ best milling finishing
- ✓ High cutting and milling speed



The new EMHD: robustness & reliability



➤ **FLEXIBILITY**

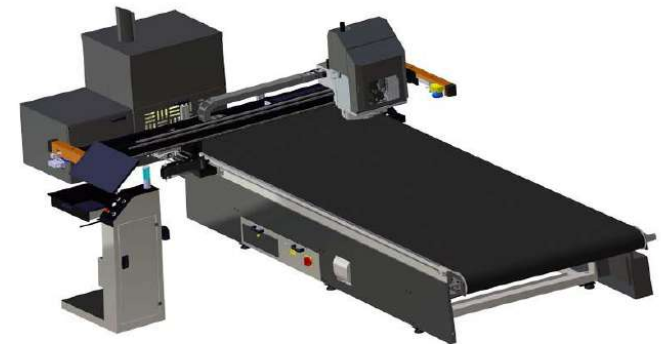
It's granted by: the larger number of tools available, the automatic tool changer and the auto-settings which increase the capability of working a wide range of materials and be employed in many industrial applications.

The CAM software supplied with the machine together with the 6 position automatic tool changer, beside allowing a large number of tool workings reduces the production time and save labor cost since it allows to work without a continuous operator control.

Machine setup time is heavy reduced through the automatic settings which controls:

- Mill shaving exhauster
- Material holder
- Knife height pre-setting
- Mill height pre-setting

Among the number of tools available we can mention the inkjet printer, the marker and the camera for fiducial detection.



The new EMHD: robustness & reliability



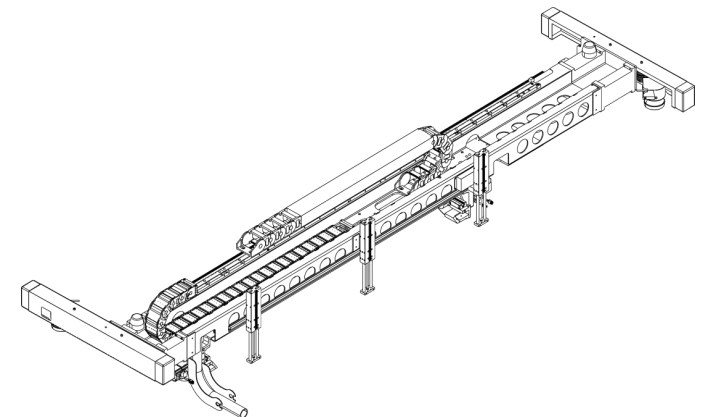
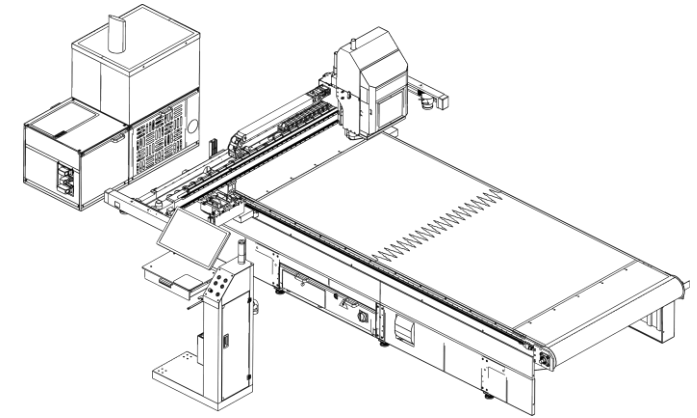
➤ **RELIABILITY**

The new architecture foresees the adoption of two separate cable chains in order to remove the EMC interferences so improving the electrical stability which in the past was one of the main cause of troubles.

Another novelty is the usage of new I/O digital modules that contributes to make the communication more stable through the reduction of the total number of cable connections.

Another function of this new I/O facilitate and increase the trouble shooting control for a quick and accurate error identification.

Last but not list new I/O modules are the base of the introduction of the future adoption of IOT sensors. The smart machine components for system auto-tuning and predictive maintenance

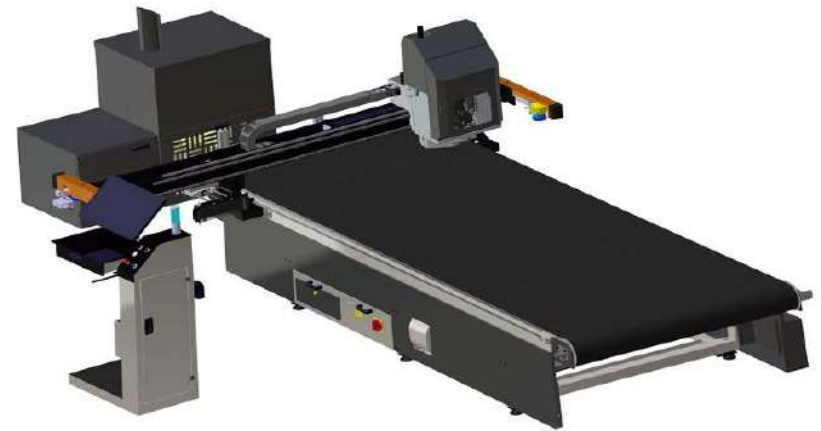


The new EMHD: robustness & reliability



➤ *Easy of use and better interaction*

The majority of us already know the present INTERACTIVE LAY the well appreciated grey and orange interface, with friendly and attractive appearance.



In addition to the traditional Aspire CAM we have presently available another CAM software, more powerful and allowing better 3D shapes forming through fine axis interpolation.