



MONSTER MACHINES

This Gigantor CNC Machine is Longer Than a Football Field

The days of the assembly line as Henry Ford envisioned it are fading, as manual labor is replaced by mechanical. In fact, tomorrow's factory floors could be covered with gigantic 5-axis CNC machines like this one.

Built by EEW Maschinenbau in Germany, the HSM-Modal, as it is called, is a 5-axis high-speed processing center. Superficially, it works just like any other CNC platform—even this [desktop model](#)—it's essentially a mechanical arm moving in three dimensional space at the command of a CAD program. Its functional size, however, sets the HSM-Modal apart.

The Modal operates in a huge area, travelling up to 150 meters along its X-axis, 9 meters along its Y-axis, and over 4 meters vertically along the Z-axis. It can rotate 270 degrees and swivel its tip 190 degrees (an impressive feat as swiveling tips go). In addition, its carbon fiber and aluminum construction make the Modal exceedingly light, which means the machine, despite its size, only consumes 5 to 7 kW per hour.

BY ANDREW TARANTOLA

JUN 15, 2012 11:30 AM

Share



Like



GET OUR TOP STORIES
FOLLOW GIZMODO



Like

The HSM-Modal is quite versatile, too, depending on which tool it is using. It's capable of milling, sawing, grinding, polishing, digitizing, and extruding, as well as water jet, plasma jet, laser, and ultrasonic cutting—all with sub-millimeter precision.

The impressive list of capabilities enables the HSM-Modal to make sand castings for part molds, a process still primarily done by hand. It can produce highly accurate castings in a quarter of the time that a human could. It can also carve unibody boat hull negative molds, then switch tools and extrude epoxy back onto the negatives, then switch tools *again* and grind the hull into shape. It's even finding use in the auto industry where it is employed in making [1:1 scale model mock-ups](#). [EEW Maschinenbau - Wikipedia - UEM Fab - Images: UEM Fab]



Contact Andrew Tarantola:

[✉ EMAIL THE AUTHOR](#)

[💬 COMMENT](#)

[📘 FACEBOOK](#)

[🐦 TWITTER](#)

<http://gizmodo.com/5918270/this-cnc-machine-is-longer-than-a-football-field>