

Success Story

MELD Revolutionizes Metal Additive Manufacturing

Kollmorgen Delivers Power and Precision

MELD Manufacturing achieved major breakthroughs in materials additive manufacturing with MELD technology – a solid-state process that requires no melting used to manufacture and repair parts. Throughout the development process, Kollmorgen engineers and MELD Manufacturing worked together to achieve optimum precision and power.

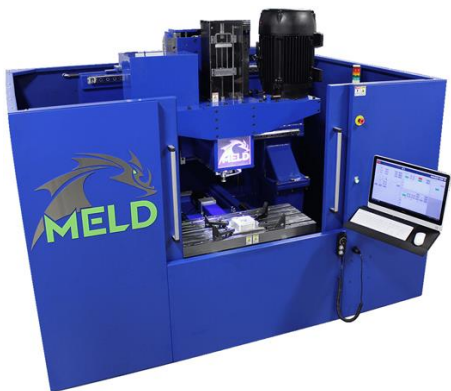
Challenge and Results

From the beginning, it was clear to the MELD team that their technology could revolutionize the manufacturing industry. However, they needed a motion control solution with a built-in G-code interpreter. Carroll Wontrop, Senior Systems Engineer at Kollmorgen, explains, “The existing Kollmorgen platform already had linear and circular interpolation motion function blocks. The prototype G code interpreter became the nucleus to create a fuller featured interpreter needed for the machine’s X and Y motion. Also, code was added to support additional Z-axis and A-axis motion, as well as the ability to synchronize them.” The end result is a solution that MELD provides to get machinists up and running in a matter of hours.

Solutions

The partnership between Kollmorgen and MELD Manufacturing engineers led to the successful launch of a revolutionary technology that has captured the attention of the manufacturing industry.

- Kollmorgen Automation Suite™ (KAS) was instrumental to success due to the machine control application templates within the software
- Co-engineering between Kollmorgen and MELD engineers led to a custom G-code interpreter that made the required precision motion possible
- Kollmorgen AKD® servo drives, AKM® servo motors and EC series actuators achieved the optimum precision and power necessary to power MELD Manufacturing’s ground-breaking technology



The B8 model MELD machine

Nanci Hardwick, MELD Manufacturing CEO had this to say about the value of saving time and energy in MELD training, “Kollmorgen’s products and the expertise around automation and the interface made a huge difference because this could have been made very complicated, and instead it’s something that you can step up, master and operate in very short order.”

KOLLMORGEN®

Because Motion Matters™

FAST FACTS

Application:

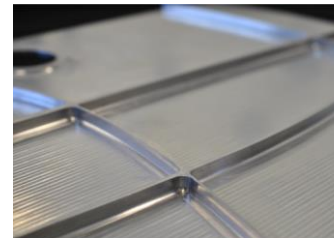
Metal Additive Manufacturing

Solutions Implemented:

AKD® servo drives, AKM® servo motors, EC series actuators

Client Since:

2017



The MELD process has applications in the automotive, aerospace, defense, and machinery industries.

Contact Information

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About Kollmorgen

Since its founding in 1916, Kollmorgen’s innovative solutions have brought big ideas to life, kept the world safer, and improved peoples’ lives. Today, its world-class knowledge of motion systems and components, industry-leading quality, and deep expertise in linking and integrating standard and custom products continually delivers breakthrough motion solutions that are unmatched in performance, reliability, and ease-of-use. This gives machine builders around the world an irrefutable marketplace advantage and provides their customers with ultimate peace-of-mind.