Case Study

A leading steno writing manufacturer approached Chicago White Metal with the concept of converting once-plastic parts to a metal alternative without compromising the lightweight nature of their steno writer.

Court reporters use this machine at an accelerated pace to record critical information in a court of law. It is imperative for the sake of each case that the reporters provide accurate court transcripts for legal depositions, trials, hearings, and any other recorded events that take place in the court setting; therefore, their machine must be reliable and able to withstand their rigorous use.

This manufacturer required that each model of steno writing machines was optimally designed for both functionality and cosmetic appearance.

The CWM team provided a solution that included the use of magnesium, which supplied the stability of metal that was needed (in comparison to plastic), but at a lighter weight than aluminum, zinc, and many other metals. The highly cosmetic finishing on the “screen frame” provided a flawless appearance that retained the high durability of metal while creating a sleek, professional look.

Chicago White Metal also cast a magnesium structural part where all the internal circuits and keyboard components are attached. This provided a way to manufacture a steno writing machine with lighter weight for improved portability.

Both parts won the prestigious Design for Excellence Award from the International Magnesium Association (IMA), in the Commercial Casting category. This award recognizes the optimal utilization of alloy materials and manufacturing processes, highlighting creative and innovative use of technology as it pertains to the design and engineering of magnesium parts. After a tedious selection process by an internal committee, both the screen frame and internal chassis parts were ultimately chosen for the benefits to the customer as well as the key uses of features specific to the die casting alloy.