

Pump Parts Cycle Time Reduced by 85%

Increasing Production and Improving Safety with the Hyundai WIA CNC at MWI Pumps



Since its foundation, [MWI Pumps](#) has been at the forefront of pump technology. Its custom designed pumping systems economically help customers throughout the world move large volumes of water for flood control, irrigation, storm water, agriculture, aquaculture, industrial applications and construction.

Family owned and operated with all products made in the USA, [MWI Pumps](#) is an extension of a business started by the Eller family in 1926 in Deerfield Beach Florida. Originally founded as a company engaged in the manufacture of iron and steel equipment, MWI recognized the need for a reliable manufacturer of large-volume water pumps for irrigation, dewatering, water management, bypass and flood control applications. Today, MWI continues to make pumps for these markets, as well as portable diesel-driven pumps (with GPM from 200 to 120,000), stainless-steel submersible electric propeller pumps (with motors from 15 to 800 HP), and solar powered pedal operated pumps for rural communities throughout Africa.



Recently MWI was facing a manufacturing challenge with a part for one of its larger pumps. Daren Eller, VP of Engineering explained, “Our bearing housing was taking too long to manufacture; it was taking us 2 and a half days, running 8-hour shifts. We ran the parts in multiple operations on a manual lathe and a mill. Additionally, many of the pumps we manufacture are machined from stainless steel, so we needed to find a solution that had the appropriate horsepower and rigidity to handle the material. Therefore, it was imperative that we find a faster and tougher way to manufacture these parts and increase our production.”

At about this same time, Charlie Espinal from U-Tech CNC visited MWI and sent in his service technician Kent to repair their CNC machine. During this visit, Charlie and Kent learned about MWI Pumps and some of their larger projects. “MWI had a bearing housing that took them about 20 machining hours to create by hand. They indicated that they’d like to improve the lead time on this part, so I talked to our engineers and we looked closely at their application,” said Charlie. He continued, “After looking at their application and the stainless-steel materials, we recommended the Hyundai WIA L300MC. The CNC it is a high performing turning center, designed with advanced technology and has shown extraordinary rigidity and precision for parts of this size and durability.”

“The service and support we’ve received from U-Tech made them our first choice. After U-Tech presented their recommendation, our [Christmas](#) present to ourselves was this brand-new Hyundai WIA CNC Machine. It has reduced multiple part operations from 6 steps down to two. Since the machine has live tooling technology on the turret, we were able to machine it completely in one step for each side, thereby reducing cycle times, increasing production and improving safety with the Hyundai WIA. I want to say thank you to [U-Tech](#) CNC for the new machine, we will take good care of it.” — Daren Eller, VP of Engineering, MWI Pumps.

An MWI bearing housing, was previously machined in a multi-step operation over the course of 20 hours. It is now machined in a two-step operation on the Hyundai WIA L300MC in 3 hours — an 85% cycle time savings.

