

CHALLENGES

HMS Industries, Inc. needed a faster, more affordable way, versus aluminum, to build functional jigs and fixtures to hold parts in machines during CMM quality inspections.

SUMMARY

Using their existing staff in their tool shop, HMS prints work holding with part numbers and instructions, as well as complex parts to assist in the quoting process before machining.

RESULTS

- Saves \$1,000 and 2 days per part
- Eliminates need for employee to be taken off another job
- Uses ink marking to identify where part should be placed and part numbers
- HMS team trained and up in running in less than 20 minutes

Dedicated to surpassing their customers' expectations, HMS Industries, Inc., manufacturer of custom metal stamping and industrial tooling, provides high-quality manufacturing services, including product and prototype development, EDM, tool design, tool and die manufacturing, as well as high-volume stampings and CNC machining, to manufacturers across all industries.

Priding themselves on their strict quality control standards, HMS sought a faster and more affordable way than using aluminum to produce strong jigs and fixtures that would effectively secure parts during production to ensure the parts they manufacture are consistent. And, they needed to accomplish this in their tool shop with their existing team and facilities.

Rize One's Inclusive User Experience Set it Apart

After consulting with Cimquest Inc., a Rize Authorized Reseller, about the best 3D printer to meet their unique needs, HMS selected Rize™ One, their first 3D printer, to produce functional jigs and fixtures for holding parts in machines during CMM quality inspections.

Rize One was purpose built with an appliance-like user experience to bring simplicity, safety and speed to additive

manufacturing. So, it's not surprising that HMS cited Rize's unique minimal post-processing, best-in-class Z-strength part strength, ease of use and low cost for the purchase of their first 3D printer.

Saving Thousands of Dollars Per Part; **Cutting Production Time in Half**

HMS Industries is leveraging Rize's unique user experience to rapidly transform their production process and redefine how they engage with their customers.

Previously, HMS built jigs and fixtures from aluminum, costing as much as \$1,000 each. This required a specially trained team member to be taken off another job to produce the part.



With their Rize One 3D printer, HMS employees design and print parts on demand in one day, freeing up a team member and saving up to two days per fixture vs. producing aluminum fixtures, and only costing approximately \$40.00 per part.

Moreover, Rize's safe and sustainable biocompatible materials and process, without any VOCs or postprocessing, enables the HMS team to operate Rize One at the point of consumption in their tool shop without the need for any special ventilation, storage or disposal equipment.

Said Barry Aikins, Vice President at HMS Industries, Inc. "Our first 3D printer, my team was able to learn how to

use Rize One and be up and running in less than twenty

minutes."



HMS also uses Rize One's breakthrough 3D printed marking capability, made possible with Rize's voxel-level Augmented Deposition process, to indicate, right on the part, the location where the part should be placed and part numbers for identification.

Noting that a digital model cannot tell the whole story, the HMS team also prints complex parts to assist in the quoting process before machining the parts. This avoids the additional time and high cost of potentially having to re-machine the parts and increases customer satisfaction.

Barry added,

Our mission is to exceed our customers' expectations and the Rize One 3D printer has certainly exceeded ours.