



3D PRINTED CHEMICAL METERING PUMP

BLUE-WHITE INDUSTRIES DECREASE COSTS BY 86% WITH AMT POSTPRO SYSTEMS

Blue-White Industries is a leading manufacturer of chemical metering pumps, flowmeters, and water treatment accessories. The company began exploring 3D printing as an alternative to building molds for their products due to the high capital investments. It could take up to 2 years for their new products to gain traction. This led to the development of their additive manufacturing department, however a challenge they were facing was the production time it took to clean and finish their 3D printed components.

“We were printing CD1 pump head mounts and it would take approximately 30 minutes to blast each part. It also had an undesirable surface finish and would fail

over a time when run under maximum conditions. We needed to find a solution to increase our production throughput, while at the same time achieving a durable and aesthetically pleasing surface finish. That is when we found AMT.”

“We decided to adopt AMT’s PostPro Depowdering and Chemical Vapor Smoothing technology which enabled us to reduce bead blasting time, increase throughput, and overcome early part failure for running under maximum load conditions. All through a process that was repeatable and reliable.” - Patrick Murphy, Director of Engineering at Blue-White Industries.

	BEFORE POSTPRO®	AFTER POSTPRO®	
APPROX. FINISHING TIME PER PART / BATCH	1 PART PER 30 MINUTES	18 PARTS PER 30 MINUTES	96% FINISHING TIME DECREASE
APPROX. FINISHING LABOR COST	\$12 PER PART	\$1.60 PER PART	86 % COST REDUCTION
NUMBER OF PARTS PRINTED PER WEEK	30 – 80 PARTS PER WEEK	150 – 500 PARTS PER WEEK	400 - 525 % THROUGHPUT INCREASE

The CD1 Pump delivers smooth, continuous chemical feed even when injecting chemicals that off-gas like Peracetic Acid and Sodium Hypochlorite. The cutting-edge Hyperdrive Technology allows for alternating pumping action between two diaphragms: when one diaphragm is in the suction phase, the other is in the discharge, resulting in a smooth chemical feed profile and eliminating the chance of vapor lock. The CD1’s exclusive DiaFlex® Diaphragms will last the life of the pump, eliminating the need for expensive rebuild kits.

CHEM-FEED®
Multi-Diaphragm
Metering Pump