

PRECIPART + HYDRAULICS

A PASSION FOR PRECISION



Repeatability and reliability are critical elements in the performance of a hydraulic valve. In a cartridge valve application, Precipart worked with a market leader in hydraulic solutions to refine a critical part used to guide a poppet. Because of the complexity and working parameters of the valve, all of the internal parts: poppets, spools, plungers and guides, have to be precise with tolerances well below 0.0005" (10 times less than the size of a human hair).

Given our integrated manufacturing capability, we already have a vertical process that internally controls all aspects of production typical of valve parts: machining, heat treating, grinding, honing and surface processing.

For this part, we were able to adopt an important honing step to consistently hold a tolerance less than 0.0001" (.0025 mm). This eliminated any residual valve leakage, and significantly improved the valve's performance.