BEFORE SINTERING

Setback Pin

AFTER SINTERING

PROBLEM

PTI Tech was contacted by Action Manufacturing Corp. to assist with a production issue they were experiencing with a vendor of tungsten components. The vendor, employing press and sinter tungsten manufacturing, was significantly disrupting the Action Manufacturing's production lines by missing shipments, as well as delivering high levels of non-conforming parts that required laborious visual inspection, sorting, and rejection. Tungsten is a high-value material that is very difficult to work with via conventional manufacturing methods (such as subtractive machining methods) and impossible via other methods like investment casting.

SOLUTION

PTI Tech utilized MIM technology and advanced multi-cavity mold tooling to manufacture the tungsten setback pin net-shape, hold tight tolerances, and provide high throughput. With MIM, tungsten and other refractory metals are molded net-shape, then de-bound and sintered. Because the MIM process does not melt the metal itself (only the polymer binder), the extreme amount of energy normally required to work tungsten is not necessary. To date, PTI Tech is under contract for over one million parts, has never missed a ship date, and is able to accelerate shipments at no additional cost to the customer.

PTI TECH | Molding the Future™

10 CLIFTON BLVD., CLIFTON, NJ 07011
P 973 778 9100 pti.tech sales@pti.tech

PTI Tech (formerly Polymer Technologies Inc.) is an integrated precision injection molder of advanced polymers, metals (MIM), and ceramics (CIM) supporting the Aerospace, Medical, Defense, and Industrial sectors for over 30 years.