

GTP's Tungsten Munitions Components Pack a Punch

Article Courtesy of Global Tungsten & Powders

Whether it's for a warhead or a laptop, refractory metals are needed to take the heat. Making the powders and parts that become those metals is Global Tungsten & Powders.

Global Tungsten & Powders Corporation is the largest tungsten smelter in the western world. Nestled in the rolling hills of northeastern Pennsylvania, in a town with a population under 3,000 and many third-generation employees, GTP has a proud manufacturing history of 102 years. With the specialization in the fabrication of tungsten, GTP built the foundation for today's success. Because of its unique properties such as high abrasion and high wear resistance, outstanding heat resistance, good thermal and electrical conductivity, tungsten is a sought-after metal. Many high-tech industries such as automotive, aerospace and defense, semi-conductor and medical, rely on tungsten for crucial components. Additionally, GTP's product portfolio includes gold-plated wire for satellites, advanced ammunition components to support our Armed Services, and parts used in solid oxide fuel cells that generate clean energy.



GTP's history in the Defense business dates back to the early 1940's, when, as Sylvania Electric Products, GTP produced fine filament tungsten wire used in proximity fuses for the Navy. The radio proximity fuses helped stop the Enemy at the Battle of the Bulge, defeat the V-1 bomb in the Second Battle of Britain, and destroy Japanese Airpower including suicide bombers. For over 50 years, GTP has performed research in the area of tungsten heavy alloy products and specialized in the manufacture of kinetic energy penetrators. Many R&D projects resulted in industrial scale production of various tungsten-based cores and penetrators for small, medium, and large caliber munitions.

GTP has manufactured armor piercing penetrators used in SLAP, SLAP-T, Phalanx, EL-Phalanx, 25mm, 30mm, 40mm, 75mm, 90mm, 105mm and larger calibers. We have also invested in technologies to produce tungsten heavy alloy small projectiles for the United States Government's use in airburst munitions. These include spheres, cubes, and other small shapes used in canister rounds, missiles and other munitions to accommodate the U.S. Military's need for more lethality, flexibility and strategic/smart munitions. We have demonstrated our capability and reliability in this area by successfully delivering on many production and R&D contracts. GTP's tungsten penetrators pack a punch.

Global Tungsten & Powders' supply chain is independent from Chinese raw materials and GTP is certified as a conflict-free smelter. In addition to sourcing from Western mines, over 50 percent of GTP's raw material needs are met by recycling. At its headquarters in Towanda, Pennsylvania and with two additional manufacturing facilities in Europe, GTP provides a one stop shop to their customers.

The R&D staff holds hundreds of patents and has developed defense related technology in collaboration with ARDEC, ARL, AFRL, NAVSEA and DOE.

The onsite Materials Analysis center is equipped with the latest testing technologies, analyzing material down to the atomic level. GTP's capabilities in the manufacture of tungsten and passion for innovation push the boundaries in many high-tech applications. For more information on GTP's products and capabilities, be sure to visit online at www.globaltungsten.com.