Polymet was founded in 1967 as a small consulting firm servicing the aerospace industry and quickly grew into a pioneer of the gas turbine hardfacing and welding world. Through a proprietary hot extrusion process, we are able to manufacture very hard alloys with little ductility in small diameter wire form. Applications in the aerospace industry require this small diameter, high performance wire for critical assembly and repair processes. A number of our thermal spray products are also used in this industry for wear and corrosion resistance coatings, abrasion resistance, and high temperature resistance.

Due to the extreme environment of a gas turbine engine, deterioration will occur over time. Some of the factors contributing to this deterioration are high temperatures, metal to metal wear, and corrosion. The engine components exposed to these wear factors necessitate products that are unsurpassed in quality, efficiency, and dependability for the assembly and repair processes. The majority of Polymet's wire is used in low pressure and high pressure turbine blades.
Typical gas turbine engine applications

- Blades and vanes
- Nozzle frames and casings
- Structural components
- Hot section components
- Vane brazing
- Engine casings
- Combustors

Quality

We are a company certified to ISO 9001:2008-AS 9100:2009 Rev. C and hold quality approvals and certifications from industry leaders such as General Electric, Pratt & Whitney, Rolls Royce, and Honeywell. Our commitment to quality along every step of the manufacturing process, from raw materials to finished goods, is unparalleled.

Through our dedication to quality, we are able to manufacture high performance wire that will extend product life, increase product efficiency, and decrease operating costs by providing the most superior product on the market.

Product forms

Polymet offers both nickel and cobalt hot extruded based alloys to supply the industry with the quality wire they need. Our wire ranges from 0.012” – 0.093” in diameter and
High performance wire for hardfacing, welding and thermal spraying may be spooled or cut to specific lengths. These products are suitable for laser welding, GTAW, plasma welding, hot wire TIG, and GMAW.

Thermal spray products include aluminum, nickel, zinc, and molybdenum based alloys. They are available in 0.062” and 0.125” diameter forms.