

Expanded powder development with Vacuum Atomizing

As part of our on-going commitment of innovations that benefit our customers, Oerlikon Metco is pleased to announce state-of-the-art, pilot-lot vacuum atomizing capabilities.

Using the latest atomizing technology, we can develop and produce a wide variety of high purity metals and alloys with very low oxygen content and fine particle size distributions. We offer ideally controlled conditions that produce exceptionally high quality, spheroidal powders for R&D requirements and low quantity production needs.

Key capabilities

- Production of high purity, low oxygen containing metals and metal alloy powders using vacuum induction melting, inert gas atomization and a highly sensitive oxygen monitoring system
- Ability to size and package powder under inert gas protection to prevent contamination
- Types of alloys include nickel, cobalt, iron, copper, silver, gold and aluminum base alloys with melting temperatures up to 1750° C (3180 °F). We may add titanium capabilities depending on customer demand.
- Standard powder particle size distributions of 10 to 40 µm, with custom distributions available on request
- Typical batch size of 5 to 20 kg (11 to 44 lb) per run, depending on material density and chemistry

Applications

- Thermal spray powders for LPPS™, HVOF, Cold Gas and other thermal spray processes
- Braze filler metals for aerospace, IGT and automotive applications
- Alloys for HIP, dental, medical and other specialty applications
- Powder metallurgy



Vacuum Atomizing facility

Who might benefit

- Customers that require small to medium quantities of spheroidal metal and metal alloys with very low oxygen content such as those needed for cold gas applications
- University and research organizations seeking small test lots of powders with new and/or proprietary chemistries
- Leading technological research, development or industrial organizations interested in a materials development partner for emerging applications and markets