Inventor of the Plasma Atomization Process

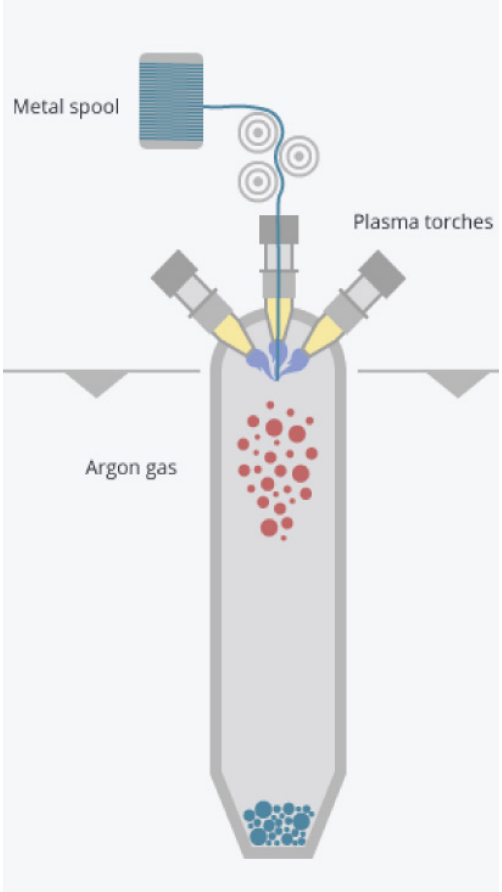
PLASMA ATOMIZED SPHERICAL METAL POWDERS

Size cuts for Ti-6Al-4V Grade 5 & 23:

- - 25 µm/+ 5 µm
- - 45 µm/+ 15 µm
- - 53 µm/+ 20 µm
- - 106 µm/+ 45 µm
- - 250 µm/+ 106 µm

Custom materials & size cuts available upon request.

Plasma Atomization Process:



HIGHLY SPHERICAL/FLOWABLE

LITTLE TO NO SATELLITES

FULLY DENSE

EXCELLENT PACKING DENSITY

BATCH TO BATCH CONSISTENCY

IDEAL PSD FOR ADDITIVE MANUFACTURING

CUSTOM SIZE DISTRIBUTION

HIGH TRACEABILITY

INDUSTRIAL CAPACITY

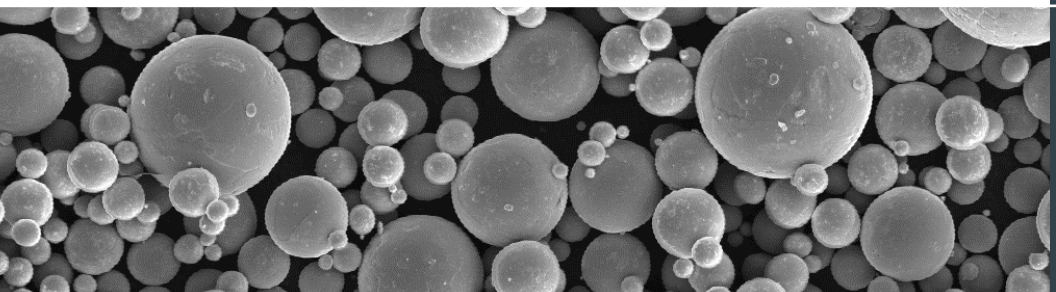
Applications:

- Additive Manufacturing
- Metal Injection Molding
- Thermal Spray

Industries:

- Biomedical
- Aerospace

TSX: PYR • NASDAQ: PYR • FRA: 8PY



For more information, please contact:

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The Plasma Atomization Process in 4 steps

1.

Wire feed offers optimal traceability

Plasma atomization uses wire as a feedstock, which is ideal for traceability from the ingot to the final powder product. Tight quality control of the wire chemistry ensures batch-to-batch consistency.

2.

The best atomization method, period

As opposed to conventional gas atomization, plasma atomization uses three plasma torches to instantaneously melt and atomize the wire in a single step. The intense heat of the plasma maintains the droplets well above their melting point throughout multiple phases of breakup, which increases the yield of very fine particles.

3.

A smooth cool-down: spherical powders

Once droplets are formed, they require some time to assume the most stable shape: a sphere. The cooling tower provides a low velocity and low turbulence environment that allows the particle to spheroidize perfectly.

4.

Purity

A chemically pure powder is collected at the bottom of the reactor. The powder is sieved and then undergoes multiple analyses before being blended and packaged.

PyroGenesis Additive, a division of PyroGenesis Canada Inc., specializes in providing plasma atomized spherical metallic powders for the Additive Manufacturing industry.
PyroGenesis Canada Inc. is a world-renowned high-tech company operating in the field of high temperature processing of materials and waste, which counts the US Navy and the US Air Force amongst its discerning client base.