

PSI Phoenix Scientific Industries



High performance process solutions

HERMIGA 2 X 250 AIR MELT ATOMISER

The HERMIGA 2 x 250 is a high performance production scale air melt atomiser using PSI's close-coupled die technology; accordingly fine powder production down to 10 microns median with rapid solidification rates in the region of 10^5 to 10^6 Ksec⁻¹ are possible.

As a result of the continuous development program the HERMIGA 2 x 250 benefits from PSI's unique geometry die design allowing consistent and reproducible production of high quality spherical metal powders.

A wide range of options are available to tailor the system to suit your particular requirements.

- Gas rack system available to enable processing using various gases such as;
 - Argon
 - Helium
 - Nitrogen
- Melting capacity is 2 x 250 kg of steel or equivalent volumes of other alloys.
- Control system includes sophisticated data logging facility.
- Options available include;
 - Oxygen monitoring
 - Optical Pyrometry
 - Vacuum pump upgrades
 - Melt charging / sampling
 - Gas superheat, gas cooling
 - Particle injection system
 - Additional transfer hoppers
 - Anti-satellite system

See overleaf



HERMIGA 2 X 250

A capable, sophisticated and user friendly large scale air melt atomiser for the production of significant quantities of metal powders.

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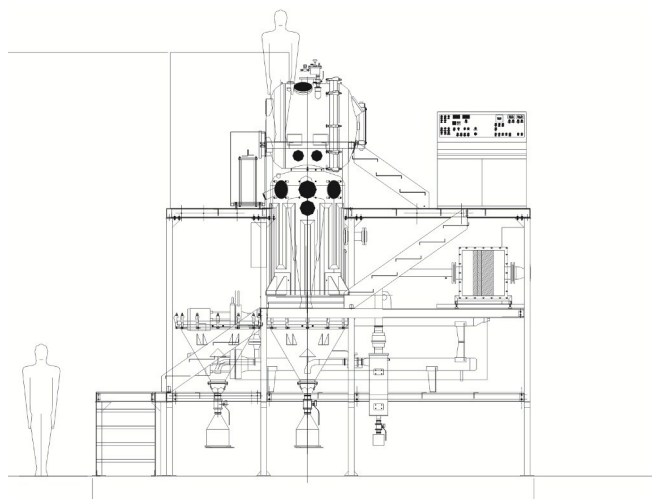
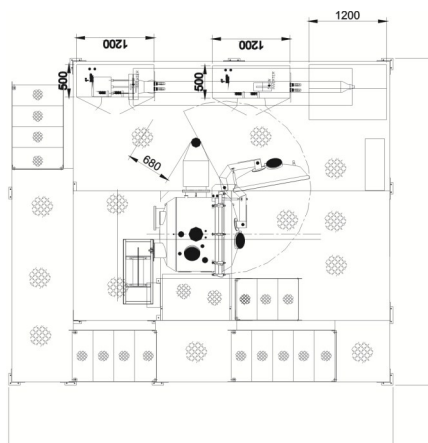
Industries

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HERMIGA 2 X 250 AIR MELT ATOMISER

Typical system data

Furnace Type:	Two induction heated air melt tilt and pour furnaces
Tundish Type:	Induction heated tundish to ensure good temperature control
Melt Capacity:	2 x 250 kg steel or equivalent volume of other alloys
Atomisation Die Type:	Supersonic invariable type 'close-coupled' die
Atomisation Rate:	Typically 6—10 kg/minute of steel
Typical Median (d_{50}):	In range 10 to 100 μm
Atomisation Chamber:	Water cooled, dual section 304L stainless steel
Powder Handling:	High efficiency cyclone, partial and HEPA filters
Gas Requirement:	Argon/Nitrogen/Helium max 6kg/min. Min pressure 30 bar.
Systems Size (L x D x H):	Dimensions of 10.0 m x 6.5 m x 7.5 m
System Weight:	Approx. 25 Tonnes



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