

PSI Phoenix Scientific Industries



High performance process solutions

HERMIGA 100/25 V2I ATOMISER

The HERMIGA 100/25 V2I atomiser uses PSI's close-coupled production scale die technology; enabling fine powder production down to 10 microns median with rapid solidification rates in the region of 10^5 to 10^6 Ksec⁻¹ being possible.

As a result of the continuous development program the HERMIGA 100/25 benefits from PSI's unique geometry die design allowing consistent and reproducible production of high quality spherical metal powders.

A wide range of options is available in order to produce the system that best suits your requirements.

- Gas rack system available to enable processing using various gases such as;
 - Argon
 - Helium
 - Nitrogen
 - Compressed air
- Melting capacity is 25 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



HERMIGA 100/25 V2I

A capable, sophisticated and user friendly production scale Atomiser for the production of spherical metal powders.

See overleaf

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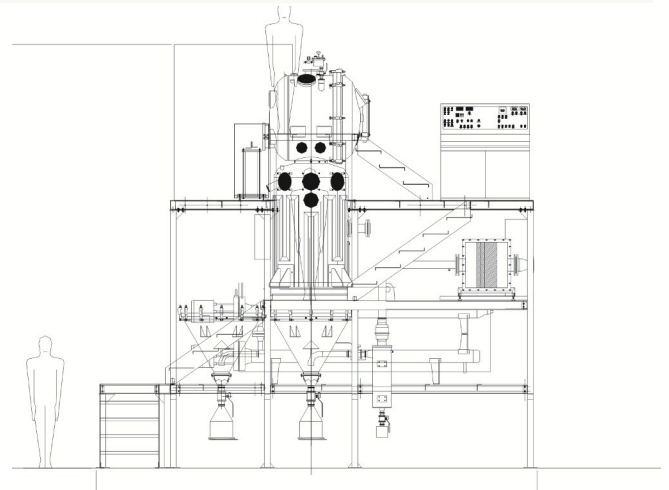
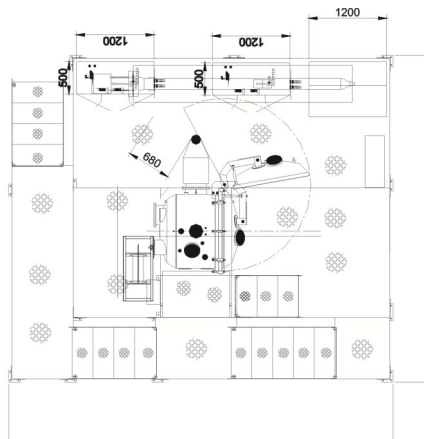
Industries

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HERMIGA 100/25 V2I ATOMISER

Typical system data

Furnace Type:	Induction heated tilt and pour furnace
Crucible Type:	Induction heated crucible
Crucible Capacity:	4 litre (approximately 25 kg steel)
Atomisation Die Type:	Unique supersonic 'close-coupled' die
Atomisation Rate:	Typically 2-4 kg/minute of steel
Typical Median (d_{50}):	In range 10 to 100 μm
Melt Chamber:	Side opening, water cooled, 304L stainless steel
Atomisation Chamber:	Water cooled, 304L stainless steel
Powder Handling:	High efficiency cyclone, partial and HEPA filters
Power Requirement:	100kVA, 3 phase, 50—60 Hz
Water Requirement:	Approx. 70 litres/min, 5 bar
Gas Requirement:	Argon/Nitrogen/Helium max 6kg/min. Min pressure 20 bar.
Systems Size (L x D x H):	Dimensions of 6.0 m x 5.1 m x 5.7 m
System Weight:	5 Tonnes



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