

# PSI Phoenix Scientific Industries



High performance process solutions

## HERMIGA 100/10 VI ATOMISER

The HERMIGA 100/10 VI 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<sup>-1</sup> being possible.

As a result of a continuous development program the HERMIGA 100/10 benefits from PSI's unique geometry die design allowing the 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 supply rack system available to enable processing using various gases such as;
  - Argon
  - Helium
  - Nitrogen
- Melting capacity is 10 kg of steel or equivalent volumes of other alloys.
- Control system includes sophisticated data logging facility
- Options available include;
  - Oxygen monitoring
  - Optical Pyrometry
  - Mechanical Booster vacuum pump upgrade
  - Melt charging / sampling
  - Gas superheat, gas cooling
  - Particle injection system
  - Additional transfer hoppers



### HERMIGA 100/10 VI

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

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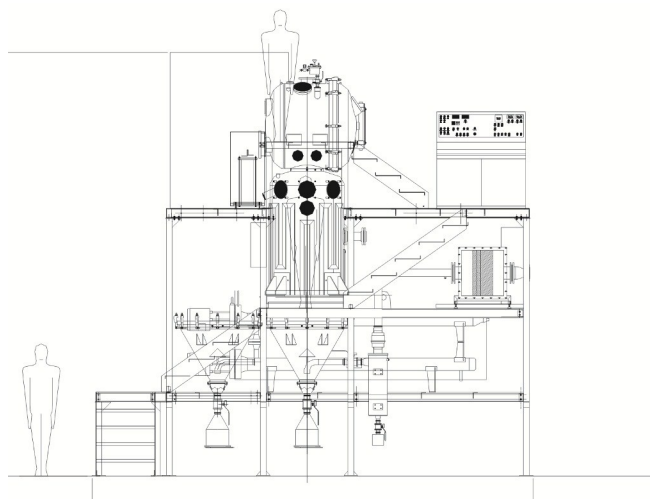
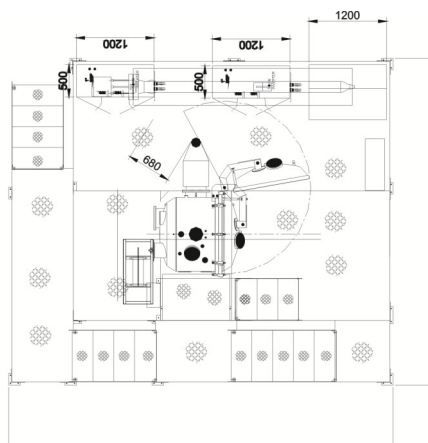
# Industries

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## HERMIGA 100/10 VI ATOMISER

### Typical system data

Crucible Type:	Induction heated crucible
Crucible Capacity:	1.5 litre (approximately 10 kg steel)
Atomisation Die Type:	Supersonic invariable type 'close-coupled' die
Atomisation Rate:	Typically 2—4 kg/minute of steel
Typical Median ( $d_{50}$ ):	In range 10 to 100 $\mu\text{m}$
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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