



FOR METAL POWDER  
PRODUCTION IN SMALL BATCHES.

# THE BLUE POWER ATOMISERS.



Developed for small amounts of test material in R&D  
e.g. for development of new, innovative and specialty alloy powders not available on the market

...for precious metal powder applications

where only small batch sizes are usually required and where any metal loss must be avoided

...for SLM and MIM applications

with the need for special metal powders and special properties

...for any small powder batch production

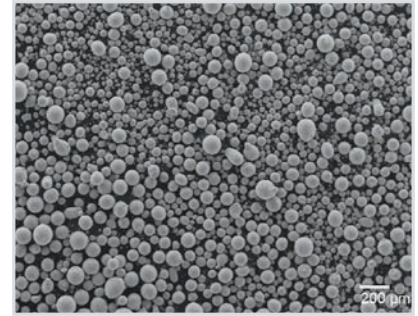
which is economically not possible on traditional large-scale production plants and where cross-contamination between alloys must be prevented

  
**BLUE POWER**  
Casting Systems

# Powder Atomisation Plants Blue Power AU series

For fast and economic production of small batches of metal powder

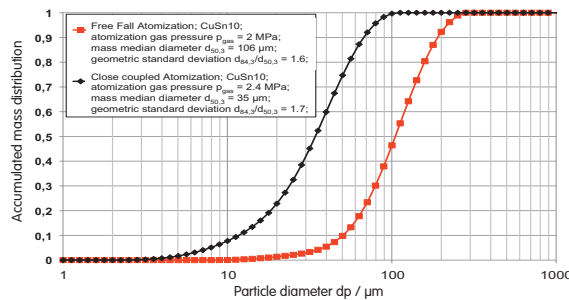
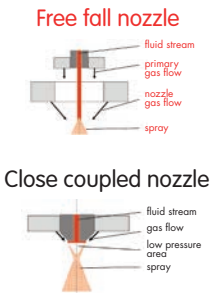
The BluePower atomisation plants have been particularly designed for the flexible and economic production of small-scale metal powder batches. Traditional large-scale production plants cannot provide this economic advantage. Frequently changing alloys in production require high cleaning efforts to avoid cross contamination. Particularly in R&D or precious metal powder applications small amounts of various kinds of powder are frequently required, often also new types of alloy powder not available on the market. Especially fast developing applications like SLM and MIM require more and more specialised metal powder.



Ag-based solder alloy powder with an average particle size of ~60 µm

## Powder characteristics and particle sizes for every request

To obtain specific metal powder characteristics and particle sizes, the AU machines work with different easy-to-change nozzle systems: free fall and close coupled atomisation nozzles. Flow optimisation in the spray chamber ensures an increased powder quality (avoidance of satellites).



Melting chamber and nozzle plate can be lifted and swiveled to the side independently. Turnable nozzle plate.

## Easy-to-clean concept

Polished stainless steel surfaces prevent powder adhesions in spray chamber, cyclone and collector – all parts are easy to clean without any residues. This way the risk of metal loss and cross-contamination is reduced to minimum.

## A wide spectrum of alloys

The BluePower Atomiser is generally suitable for gas atomisation of a wide spectrum of alloys; such as for example those based on Cu, Au, Ag or Sn (standard versions) as well as Fe, Co, Ni, Pd (high temperature versions). The inductive heating takes place in graphite crucibles (up to 1.600° C) or in ceramic crucibles (up to 1.750°C, up to 2.000°C in development). The crucible volumes reach from 245 ccm to 12,000 ccm.

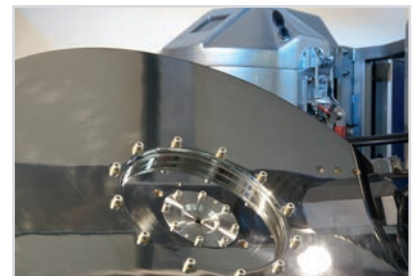
## Oxidation-free processing

The AU machines offer the possibility of oxidation-free processing in the closed-chamber machine by means of de-gassing, vacuum and protective gas features.

## Four different versions

	AU 500	AU 1000	AU 3000	AU 12000
crucible volume in ccm	245 - 386	1,500	3,400	12,000
volume in kg bronze	2.1 - 3.3	9	22	80
volume in kg steel*	1.6 - 2.5	6	16	60
generator kw (400 V)	10	22	30	40

\* volume reduction with ceramic crucible inserts for the high-temperature versions



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