

ATO NOBLE



PRECIOUS
METALS
POWDER
ATOMIZER

NECESSITY IS THE MOTHER
OF INVENTION

ATO NOBLE



ATO NOBLE - A NEW DIMENSION OF NOBLE METAL POWDER ATOMIZATION

Based on our extensive experience, we have created a breakthrough solution – ATO NOBLE for noble metal pulverization.

ATO NOBLE responds to customer needs concerning the economic atomization of expensive and rare metal alloys. As there are no limitations concerning the minimum load and it is easy to prepare the system for another material, the cost-efficiency and freedom of the atomization process are ensured.

Due to the application of a precisely calibrated ultrasonic system, we can process such materials as gold, silver, platinum, etc., not worrying about the high loss of the precious raw material.

MAXIMUM MATERIAL RECOVERY

We are aware that each gram of the material is at a premium. Therefore, when creating ATO Noble, we were aiming at obtaining an as good powder flow ratio as possible. We have succeeded, and it has directly influenced the efficiency of the whole process. In conjunction with a dedicated filtration system, we minimize the material loss of the most precious alloys below 1% and we facilitate their later recovery for reuse.

TARGET MARKETS:

- Jewellery
- Healthcare
- Electronic industry
- Aerospace
- Metal processing industry

SPECIFICATION

GENERAL INFORMATION

process	metal powders production
technology	ultrasonic atomization
melting method	TIG
sonotrode type	nanoalloy sonotrode
cooling method	liquid
processable materials	Ag, Au, Pt, and more
powder quality	high flowability, narrow particle size distribution
powder collecting system	cyclone
material form	wire / rod

PARAMETERS

ultrasonic frequency	35 kHz (+ upgrade to higher frequency)
ultrasonic power	up to 800W
O ₂ level (delta)	< 150 ppm
plasma current	up to 220A
system throughput	up to 0,25l/h
machine weight	700 kg.
size[HxWxDx]	1997 x 1553 x 813 [mm]

REQUIREMENTS

air supply	compressed air station
inert gas	Argon
power supply	400V, 10 KVA / 3 phase
powder recycling system	sieving unit
water cooling	external chiller

KEY FEATURES OF ATONOBLE:

- **Dedicated solution for processing noble metals, e. g. gold, silver, platinum**
- **Processing high density alloys and rare earth metals - density up to 21,500 kg/m³**
- **Increased process yield losses below 1% material processed**
- **Dedicated filtration system to minimize material loss and to facilitate its recovery for reprocessing – Maximum Material Recovery**
- **Precise process control thanks to the application of dedicated, precise oxygen sensors**
- **Compact dimensions of the device**
- **High quality powders – exceptional flowability, perfect sphericity, and narrow particle size distribution**

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