

MIMETE'S PLANT HAS BEEN SPECIFICALLY DESIGNED TO SERVE THE ADDITIVE MARKET

Product range

Gas atomized powders of iron, nickel and cobalt base alloys.

Product quality

- spherical powders
- optimal flowability
- particle size distribution tailored for additive applications or other processes

Added Value Service for Customers

- alloy design, development and production in deep partnership with customers
- technical support on new applications and critical topics
- advanced laboratory testing

State of the art technology

- vacuum induction melting and inert gas atomization ensuring the highest purity and sphericity of the powder
- complete inerted post processing
- fully equipped in-house Laboratory

HSE

Highest standard protection to ensure health, safety & environment

Sales & distribution

Based in northern Italy, we also have a worldwide presence thanks to our FOMAS Group network

POWDERS FOR TOMORROW DELIVERED TODAY



MARS



VENUS



NEPTUNE



HISTORY FOMAS GROUP LEGACY

A journey started in 1956 brings us today to produce the ultimate state of metals: powders.

Since the beginning, FOMAS Group has been widely recognized as one of the finest forge-masters in the world. From forging the solid metal, to melting it through the Electro Slag Remelting plant, we are now managing metal powders, conquering the final step: metal in all its states.

The deep and thorough metallurgical know-how is the legacy on which Mimete begins its new journey, where metal powders are the essence.

By reaching the core of metallurgy, we really are at the hearth of the process, where nothing further is beyond.

Research & Development - over 60 years of experience in managing metal from every perspective has brought our people to be at the centre of each step of our evolution.

The knowledge acquired in this field has laid the grounds for the creation of MIMETE S.R.L..

POWDER SIZE RANGES

PSD ACCORDING TO ANY SPECIFIC APPLICATION AND EQUIPMENT REQUIREMENTS.



IRON BASE ALLOYS

MIMETE Grade	Al	С	Со	Cr	Си	Fe	Mn	Мо	Ni	Si	Ti	٧	Nb+Ta	Reference Standard
MARS 15-5 PH		< 0,07		14,75	3,50	bal	<1,00		4,50	< 1,00			0,30	ASTM A564
MARS 17-4 PH		< 0,07		16,25	4,00	bal	<1,00		4,00	< 1,00			0,30	ASTM A564
MARS 316L		< 0,03		17,00		bal	< 2,00	2,50	12,00	< 1,00				ASTM F3184
MARS C300	0,10	< 0,03	8,00			bal	< 0,10	4,90	18,00	< 0,10	0,50			ASTM A579
MARS H13		0,40		5,10		bal	0,40	1,45		1,00		1,00		ASTM A681



NICKEL BASE ALLOYS

MIMETE Grade	Al	С	Со	Cr	Fe	Мо	Nb	Ni	Ti	W	Nb+Ta	Ti+Al	Reference Standard
VENUS 718	0,50	< 0,08	< 1,00	19,00	19,00	3,05		bal	0,90		5,15		ASTM F3055
VENUS 625	< 0,40	< 0,10	< 1,00	21,50	< 5,00	9,00	3,65	bal	< 0,40				ASTM F3056
VENUS X		0,10	1,50	21,80	18,50	9,00		bal		0,60			ASTM B435



COBALT BASE ALLOYS

MIMETE Grade	С	Со	Cr	Fe	Мо	Ni	Si	W	Reference Standard
NEPTUNE 75	< 0.35	bal	28,50	< 0,75	6,00	< 0,50	< 1,00	< 0,20	ASTM F75
NEPTUNE *06	1,15	bal	29,00	< 3,00	< 1,50	< 3,00	1,25	4,50	AMS 5788

The reported values are only given for reference

OUR OFFER ENSURES THE SUPPLY OF POWDERS WITH THE HIGHEST QUALITY STANDARDS, GUARANTEED BY OUR FULLY EQUIPPED **IN-HOUSE LABORATORY**



WELDING

COATING

TANGIBLE OFFER

LABORATORY

Our in-house laboratory can offer a wide range of services on standard and custom powders or directly on final products.

Our dedicated technicians carry out all the required tests ensuring that metal powder complies with specifications.











TYPE OF ANALYSIS	TEST	reference standard	EQUIPMENT			
	XRF	ASTM E572 ASTM E2465	Wavelength Dispersive X-ray Spectrometer			
	ICP-OES	ASTM E2594	Inductively Coupled Plasma Optical Emission Spectrometer			
Chemical	NOH	ASTM E1019	Oxygen, Nitrogen and Hydrogen Analyzer			
	CS	ASTM E1019	Carbon and Sulfur Analyzer			
	PMI	ASTM 1476	Handheld XRF			
AA 1.1 · 1	PSD	ASTM B822	Particle size analyzer			
Morphological	SEM	_	Scanning Electron Microscope			
	FLOWABILITY	ASTM B213	Hall Flowmeter Funnel			
Physical	APPARENT DENSITY	ASTM B212	Apparent density kit			
	TAP DENSITY	ASTM B527	Tapping Apparatus			
Metallography	ОМ	ASTM E3 ASTM E407	Optical Microscope			
	TENSION AT ROOM TEMPERATURE	ASTM A370 ASTM E8/8M	Tensile test machine			
	TENSION AT ELEVATED TEMPERATURE	ASTM A370 ASTM E21	Tensile test machine and furnace			
Mechanical	IMPACT	ASTM A370 ASTM E23	Charpy impact machine			
	HARDNESS	ASTM A370 ASTM E10 ASTM E92 ASTM E18	Brinell, Vickers, Rockwell hardness tes machines (also portable)			
	STRESS-RUPTURE	ASTM E139 ASTM E292	Creep test machine			



CUSTOMIZED OFFER FOR YOUR SPECIAL APPLICATION

- Development of new grades
- Fine tuning (chemical and/or granulometric) of commercial grades

COMMERCIAL GRADES

On request, we can also provide Customized Powders as we are problem solvers at heart and will not rest until your product is outstanding. This makes us the first choice for trials & development orders.

The isolation of each process from the others and the strict clean-down regimes ensure that we maintain the integrity of every customers' material, every time.

DELIVERY

We can offer short delivery time on "commercial grades" powders.

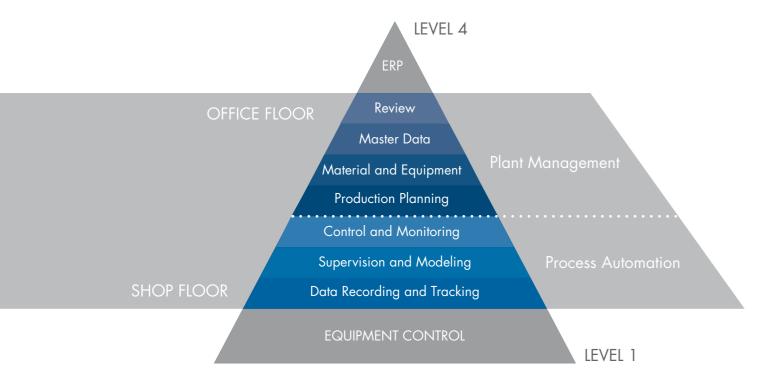
All powders are packaged in sealed polimeric containers, chosen for robustness and protection from moisture absorption, and stored in highly controlled areas.

Upon request powders can be delivered directly in customer's drums.

Likewise, customized size batches can be delivered.

TRACEABILITY

Every step of the process is fully monitored and traced through the latest software application, able to record, model, supervise and control.



TECHNOLOGY

In accordance with Industry 4.0 all machines are controlled by PLC panels for powder process route integration and maximum control for traceability.

ATOMIZING EQUIPMENT

- Design based on decades of experience on VIM plants and atomizing process and equipment
- Able to operate at higher temperatures than standard gas atomizers, suitable for highmelting point and refractory alloys
- High-vacuum pumps for minimum content of oxygen and residuals
- Special nozzles dedicated to specific alloys and particle sizes
- Developed for maximum FLEXIBILITY



QUALITY

Activities ongoing to obtain ISO 9001, EN/AS 9100, ISO/IEC 17025 certificates.

POST PROCESSING

Handling facilities

Flexible semi-automatic handling device, able to manage different storage units and perform a variety of movements.

Packaging facilities

High capacity semi-automatic dosing machine: its parameters can be set to fill different bottle types. Process control thanks to high precision scales. Operating parameters monitored and recorded for each product.

Sieving facilities

State of the art multi-frequency sieving devices with extended screening area and high volume sieving capacity. Different working meshes down to a few microns, the latest in terms of cutting-edge technology.

All machines have internal stainless steel mirror polished surfaces and work under inert gas, preventing any risk of contamination.



WHY MIMETE

We are not just a simple supplier: with over 60 years of experience, we know that the real aim is to achieve a solid partnership with our customers.

Through co-design solutions we stand out from the others: by working in close relationship with customers, we achieve a level of understanding of the final application. This process enables us to develop the perfect combination of properties and therefore produce the most performing metal powder available on the market.

MIMETE: THE NAME

MIMETE - the name Mimete stems from the novel "Order on the Cheap" written by PRIMO LEVI in 1966. The equivalent name in English is Mimer. The Mimer is a machine able to duplicate anything.

Abstracts from the novel: "It's the Mimer: the duplicator we've all dreamt about." "A few months ago, Mr. Simpson rang my doorbell unannounced. He was radiant and in his arms, with the fondness of a nanny, he carried a box of corrugated cardboard.

He wasted no time on conventionalities: "here it is", he said triumphantly, "it's the Mimer: the duplicator we've all dreamt about." Meanwhile Mr. Simpson continued his pitch: "This is not an improvement on a previous model: the very principle on which the Mimer

is based is revolutionary, extremely interesting not only from a practical point of view but also conceptually. It does not imitate, it does not simulate, but rather it reproduces the model, re-creates it identically, so to speak, from nothing..."

"This is the fuel tank. It contains a rather complex blend, the so-called pabulum, whose nature for the time being is under wraps".

Contrary to all normal business procedures, I was unable to disguise my admiration.

This was truly a revolutionary technique: organic synthesis, at low temperature and pressure, order from disorder silently, rapidly, and inexpensively - the dream of four generations of chemists.

Primo Levi had envisioned the Future!

Metal Powders to envision the Next Dimension

