MIMETE® V X

FOMAS Group's metal powder plant has been specifically designed to serve the additive manufacturing market. A VIGA, Vacuum Induction melting Inert Gas (argon or nitrogen) Atomization, ensures high purity and spherical powders.

FOMAS Group's guarantees the properties of the standard powder "V X" set forth in the datasheet included in this page, which is available on stock.

PRODUCT	MIMETE® V X	*According to UNS N06002 and EN 2.4665*
Nickel alloy characterized by great oxidation, corrosion resistance and high temperature strength. After heat treatment, it shows good ductility.		
Production process	*Vacuum Inert Gas Atomization*	
Packaging	*10 kg plastic sealed bottle or 100 kg steel drum, with silica bags*	

CHEMICAL PROPERTIES [1,2]										
MIMETE® V X	Al	C	Co	Cr	Fe	Mn	Mo	Ni	Si	W
MIN	*0*	*0,06*	*0,6*	*20,6*	*17,0*	*0*	*8,0*	*bal*	*0*	*0,20*
MAX	*0,60*	*0,15*	*2,5*	*23,0*	*20,0*	*1,00*	*10,0*		*1,00*	*1,00*

[1] *Minor element ranges, even if not explicitly listed in the table, comply with both UNS and EN standards.*
[2] *MIMETE® powders are supplied to a tighter specification to minimise batch-to-batch variations.*

PHYSICAL PROPERTIES [3]		Sampling / Analysis Methods
Nominal particle range	*20-53 (max 5% over and under size)*	*ASTM B215 / ASTM B822*

[3] *Other standard particle ranges (i.e. 0-20, 50-100 and 50-150 µm) available on request.*

The production plant has also a testing laboratory accredited by ACCREDIA in compliance with the requirements of the ISO/IEC 17025 international standard.

Unless provided otherwise hereto, terms and conditions ruling the offer of MIMETE® apply.

Contact:
Alessandro Pavia
Sales Director
e-mail: alessandro.pavia@fomasgroup.com
mob: +39 3473795673

Contact:
Emanuel Fierimonte
Technical Development Manager
e-mail: emanuel.fierimonte@fomasgroup.com
mob: +39 3482247899

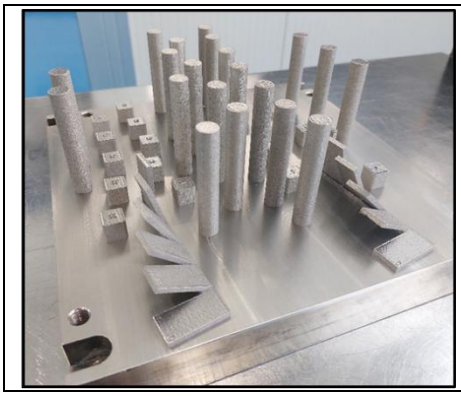
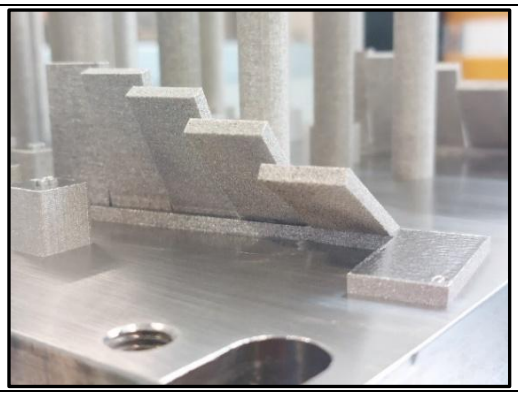
MIMETE® V X

LEGAL DISCLAIMER

All data included in following pages are for reference purposes only. They are not sufficient for designing or certifying components and no warranties or guarantees are expressed against these results. However, psd and chemical composition of the powder lot 1250286C001 are compliant to allowable limits reported on page 1.

INSPECTION CERTIFICATE TYPE 3.1 ACCORDING TO EN10204.

POWDER LOT	*1250286C001*
PRINTER - SOFTWARE	*EOS M290 – EOSPrint 2.13 (HX_040_Performance_M291_2.15)*
INERT GAS	*Argon*
RECOATER BLADE	*HSS*
LAYER THICKNESS	*40 µm*
VOLUME RATE	*4.2 mm^3/s (15.2 cm^3/h)*


PROPERTIES (as built, AVG)	*Test Standard*	ASTM B435-2016*	**N X**
Hardness HRB	*UNI EN ISO 6508-1*	NA	100
Hardness HBW	*UNI EN ISO 6506-1*	NA	275
Yield strength (vertical) [MPa]	*ASTM E8-2024*	NA	602
Tensile strength (vertical) [MPa]		NA	839
Elongation at break (vertical) [%]		NA	33,4
Reduction of area (vertical) [%]		NA	52,6

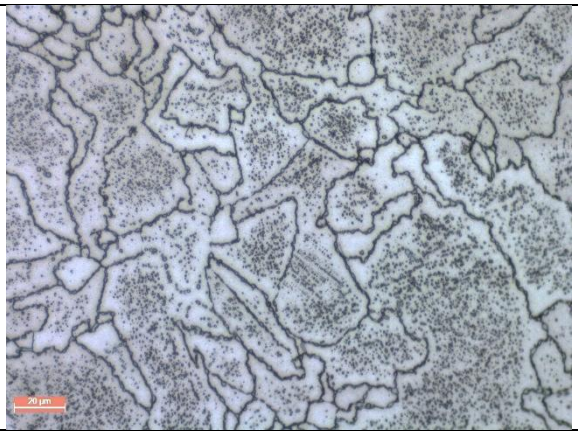
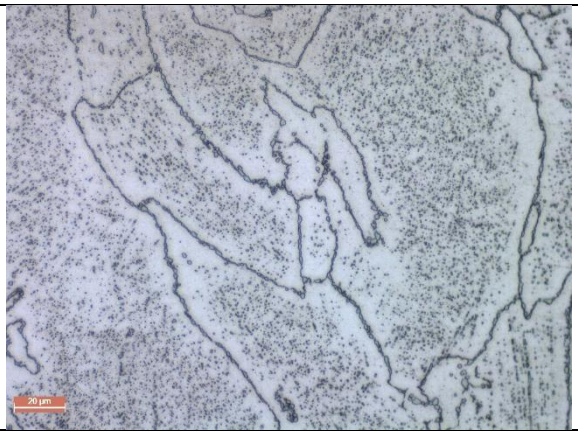
HEAT TREATMENT	According to AMS 2774H
Solution annealing at 1177°C (±14°C) for 1h – rapid air cooling (AC).	

PROPERTIES (heat treated, AVG)	*Test Standard*	ASTM B435-2016*	**N X**
Hardness HRB	*UNI EN ISO 6508-1*	NA	96
Hardness HBW	*UNI EN ISO 6506-1*	NA	231
Yield strength (vertical) [MPa]	*ASTM E8-2024*	240	431
Tensile strength (vertical) [MPa]		655	753
Elongation at break (vertical) [%]		35	39,3
Reduction of area (vertical) [%]		NA	53,9

ASTM B435-2016: Standard Specification for UNS N06002, UNS N06230, UNS N12160, and UNS R30556 Plate, Sheet, and Strip1

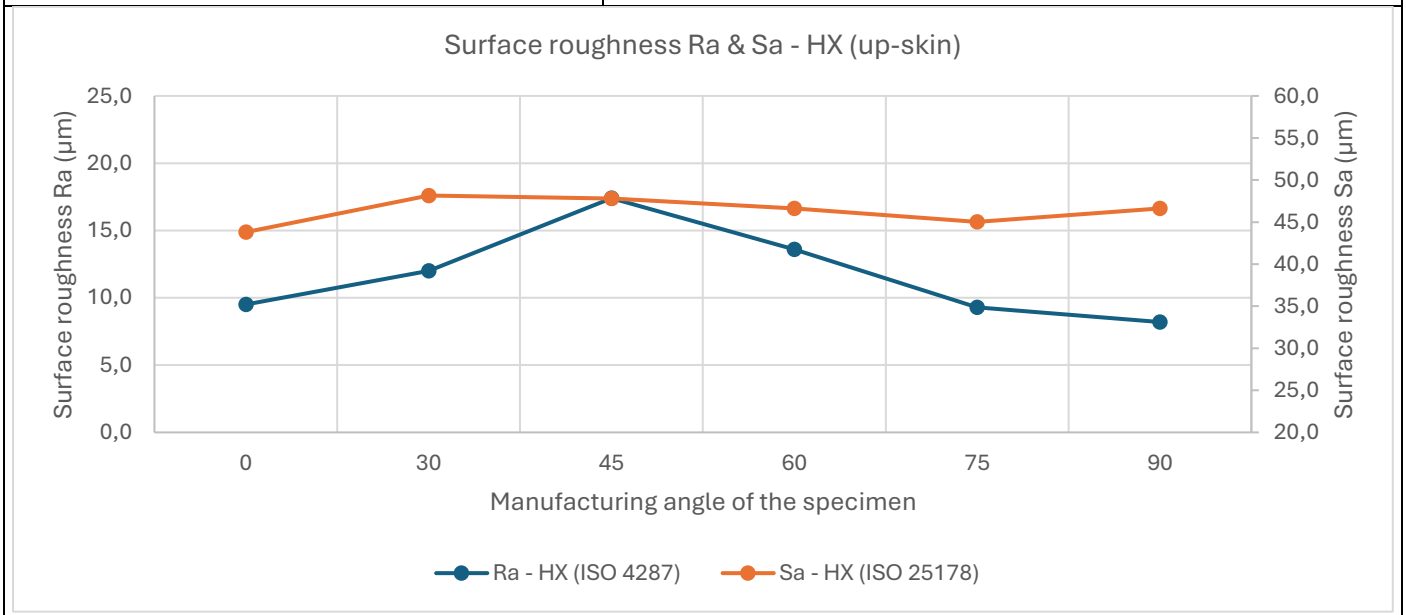
**For reference only.*

MIMETE® V X

HEAT TREATED MICROSTRUCTURE	*Etched according to ASTM E407-23 with Kalling's 2 reagent.*
	
Section_XY_500x	*Section_YZ_500x*

PROPERTIES	*Test Standard*	**N X**
Density [g/cm^3]	*UNI EN ISO 3369-2010*	8,22
Avg. Defects [%]	*ASTM E3-11(2025)*	0,06

SURFACE ROUGHNESS	*Ra according to ISO 4287. Sa according to ISO 25178*



Manufacturing angle: 0° is the horizontal printing plane.