# **TECHNICAL DATA SHEET**

ET\_Ti23 20-53 µm



## NUMANOVA ET\_Ti23 20-53 µm

NUMANOVA ET\_Ti23 20-53 µm is a spherical powder produced by with a Ceramic Free Gas Atomization process, which guarantees high purity in terms of chemistry and inclusion content. The raw material, hot rolled bars of Ti6Al4V ELI, is examined and checked in order to assure the highest quality of the powders obtained.

The gas used for the inertization and the atomization process is the argon, which is completely insoluble in the metal.

The Ti6Al4V ELI alloy has excellent corrosion resistance, low specific weight and high purity, combined with high mechanical characteristics. Due to these properties, it is applied in mainly in the aerospace and biomedical sectors but also in the racing and in the chemical industry.

The NUMANOVA ET-Ti23 20-53 µm cut is suitable for the 3D printing based on laser technology, like SLM, HIP (Hot Isostatic Pressing), sintering process, MIM (Metal Injection Molding).

### **PHISYCAL PROPERTIES of the POWDER**

#### 1) CHEMICAL COMPOSITION

ELEMENT	Min (% wt)	Max (% wt)
AI	5,5	6,5
V	3,5	4,5
0		0,09
Ν		0,03
С		0,07
н		0,01
Fe		0,25
Y		0,005
Other Elements Each		0,1
Other Elements Total		0,4
Ti	Balance	Balance

NUMANOVA S.p.A. Strada dello Stabilimento, n.1 05035 Nera Montoro – Narni (TR) C.F. e P.I.: 01565550553 Tel.: +39 0744 7581 Fax: + 39 0744 758205

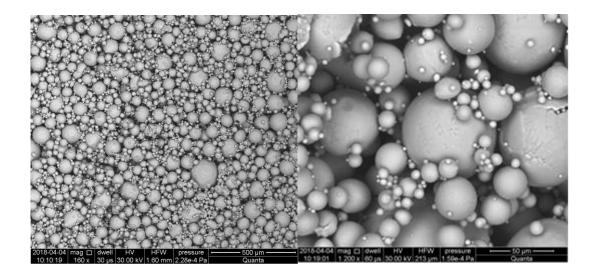
# **TECHNICAL DATA SHEET**

ET\_Ti23 20-53 µm



### 2) GRAIN SIZE and POWDER MORPHOLOGY

ET_Ti23 20-53 μm			
d <sub>10</sub>	d <sub>50</sub>	d <sub>90</sub>	
19-23	34-38	53-58	



NUMANOVA S.p.A. Strada dello Stabilimento, n.1 05035 Nera Montoro – Nami (TR) C.F. e P.I.: 01565550553 Tel.: +39 0744 7581 Fax: + 39 0744 758205