

DM 625

DM 625 is a nickel based superalloy qualified for metal AM in Digital Metal's binder jetting system.

625 alloys are weldable grade superalloys suited for a wide variety of applications, such as high temperature aerospace, power generation, oil/gas, marine, chemical processing and many more.

The material exhibits high strength, toughness and excellent corrosion resistance in both oxidizing and reducing environments, even at elevated temperatures.

COMPOSITION - TYPICAL VALUES [WEIGHT%]

Al	Co	Cr	Fe	Mn	Мо	Nb	Ni	Si	Ti
0.30	0.15	21	0.75	0.04	9.0	3.8	Bal	0.02	0.30

Related denominations: UNS N06625, 2.4856 and NCF625



PHYSICAL PROPERTIES - TYPICAL VALUES

Property	As sintered		
Ultimate tensile strength [MPa]	725		
Yield strength [MPa]	325		
Elongation [%]	45		
Hardness [HRB]	82		
Relative density [%]	98		

800 600 400 200 200 0 10 20 30 40 50 60 Strain [%]

FEATURES

- Excellent corrosion resistance
- High strength and toughness without heat treatments
- Very good weldability
- Wide service temperature range from cryogenic up to almost 1000 $^{\circ}\text{C}$



As sintered microstructure