

Additive Manufacturing





Dura-Metal offer unique expertise in high-tech powder materials tailored to a wide range of high-end manufacturing industrial applications. Through years of research, development and field testing, Dura-Metal have developed a complete range of high quality metal powdered alloys to support Additive Manufacturing or 3D printing process.

In the manufacturing of Dura-Metal metal powder alloys, a carefully controlled atomization process is used, and quality assurance begins with the very first procedure. Each powdered metal alloy is a specialized compound which has been formulated to achieve specific performance levels. Our sieving know-how & capabilities resulted in controlled particle size distribution of each alloy and its chemistry. Powder particles are specially treated and are ultra clean to improve powder flow, reduce formation oxides and deposit contamination.

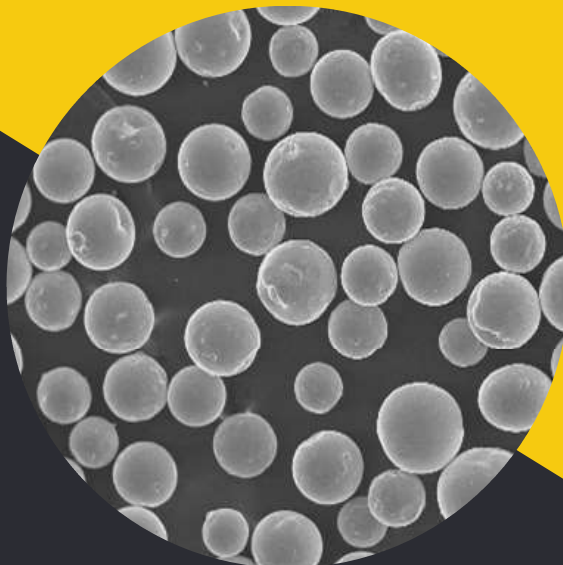
In addition, we offer customised alloys in trial quantities to facilitate our client development projects.

Our Product Feature:

Spherical, satellite free to improve powder flow

Consistent powder properties

Customised particle size distribution to fit different AM technologies



The following tabulated information exhibit various alloy groups and data related to Dura-Metal Additive manufacturing or 3D Printing powder range. Other custom-made products are also available upon request.

BASE MATERIAL	DM GRADE	POWDER COMPOSITION
Iron	3D-316 L	Fe-17Cr-12Ni-2.5Mo
	3D-304 L	Fe-19Cr-10Ni-1.8Mn
	3D-410 L	Fe-12.5Cr-0.1Mn
	3D-420	Fe-13Cr-0.5Si
	3D-431 L	Fe-17Cr-4Ni-1.8Mo
	3D-15-5 PH	Fe-15Cr-4.5Ni-3.5Cu-0.3Nb
	3D-17-4 PH	Fe-16Cr-4Ni-4Cu
	3D-M300 LA	Fe-18Ni-9Co-5Mo-0.7Ti-0.1Al
	3D-M250	Fe-18Ni-8Co-4.8Mo-0.4Ti-0.1Al
	3D-4340	Fe-1.8Ni-0.8Cr-0.2Si-0.25Mo-0.7Mn
	3D-H13	Fe-5.2Ni-1.4Mo-1.0Si-1.0V-0.35Mn
Nickel	3D-625 Ni	Ni-22Cr-9Mo-3.7Nb
	3D-718 Ni	Ni-19Cr-18Fe-5Nb-3Mo-1Ti-0.1Al
	3D-Hast.X	Ni-22Cr-18Fe-9Mo-1.5Co-0.1W
	3D-B50 M	Ni-11Cr-4.4Fe
Cobalt	3D-ST 6	Co-29.5Cr-1.5Ni-4.4W
	3D-ST 21	Co-27Cr-2.8Ni-5.5Mo
	3D-CoCr	Co-26Cr-9Ni-5Mo-2W
Titanium	3D-Ti	Ti99.9
Aluminum	3D-Ti64	Ti-6Al-4V
	3D-ALSi10Mg	Al-10Si-0.3Mg

**Grain Size (µm): -45+15,
-53+20, -90+45, -125+45,**

*Other particle size are available upon request .