DISPAL® alloys overview

DISPAL® is a range of **high-performance aluminium alloys**, with high Silicon content manufactured through spray-forming. Thanks to the rapid solidification, the materials present fine grains and homogeneous microstructure without inclusions and oxides.

DISPAL® has properties comparable to those of steel but at only a third of its weight. The DISPAL® material offers customized thermal expansion rates, optimal wear and tear properties, high stability, and rigidity as well as excellent heat dissipation.

We produce high-quality powders for different industries in our vacuum-inert gas atomization facility in France

- Spherical powders for Additive Manufacturing
- Atomization of Aluminium based custom alloys
- High melting point aluminium alloys
- Custom PSD available

Two of our low CTE alloys are qualified for AM (L-PBF) and can be printed at our partners in Europe and in the US.

Material	Composition	Applications	Extruded*	Hip Block**	3D printed	Powder
DISPAL® S220	AlSi35	Optical sensors, housings	x	x	x	x
DISPAL® S221	AlSi40	Optical sensors, satellite parts	x	x	(x)	x
DISPAL® S225	AlSi35Fe2Ni	Housings for optical industry, measurement technology	x	x		x
DISPAL® S232	AlSi17Fe4Cu3Mg	Oil pumps gear, transmission parts	x	x		x
DISPAL® S250	AlSi20Fe5Ni2	Supporting plates, construction elements, stiffeners	x	x		x
DISPAL® S260	AlSi25Cu4Mg	Cylinder liners, pump housings, bushings	x	x	x	x
DISPAL® S270	AlSi25Fe4Ni3CuMgMnCrTi	Pistons, inlet valves	x	x		x

*Available as a block, rod, tube, or near net shape; ** Available also as a cylinder

Gränges Powder Metallurgy (GPM) is a global supplier of sprayformed aluminium products and aluminium powders for additive manufacturing, specialized in high performance aluminium alloys. Our products can be found in automotive, aerospace, industrial robotics industries and more. GPM has atomization capacity in France and it is a wholly owned subsidiary of the global aluminium technology Gränges.

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Revision 11.2023