

BÖHLER N700 AMPO



DATA SHEET Gas Atomized Powder for Additive Manufacturing

Additive manufacturing is **the revolution in manufacturing technology!** Especially in this promising segment, we as **BÖHLER Edelstahl** can build on our extensive materials experience and expertise in the field of powder metallurgy.

Why to buy at BÖHLER?

Customized alloys depending on your requirements.
We atomize **BÖHLER standard grades**, theoretical selection of 250 grades.

BÖHLER Edelstahl leverages the metallurgical knowledge and manufacturing options of a special steel producer **for this new technology.**

Powder is produced on latest atomization techniques and tested in-house. **Vacuum induction melting** and atomization under inert gas **ensure highest product quality.**

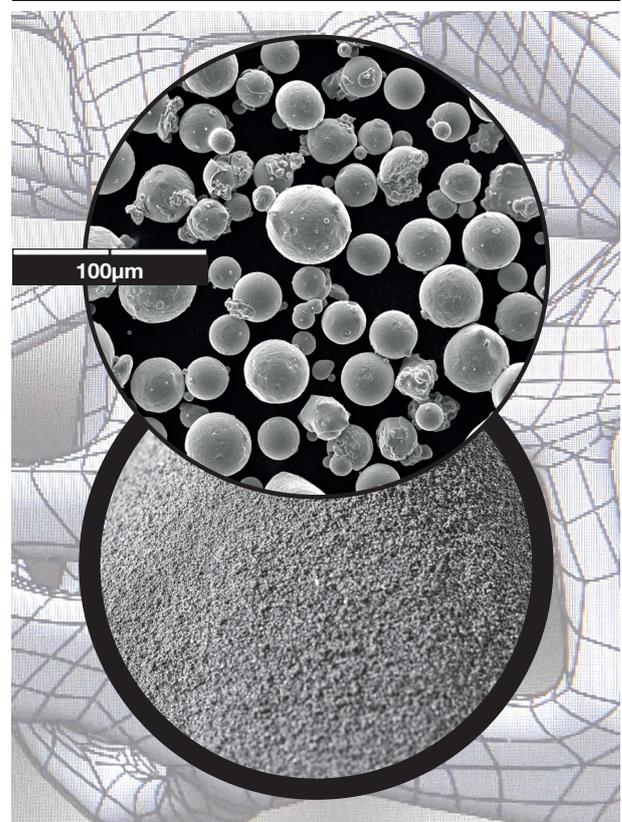
Depending on the steel grade and customer requirements, rawmaterials **molten** under **vacuum or remolten** can be used. This ensures the highest **quality standards** and **minimizes undesired impurities.**

Depending on the requirements of the specific AM process used, **we can provide the appropriate particle fraction in a range from 15-150µm.**

Safety Recommendations

See the SDS (Safety Data Sheet) in the version localized for the country where the material will be used. SDS are available from the **BÖHLER Edelstahl** web site at www.bohler-edelstahl.com (AMPO - Safety Data Sheets).

BÖHLER N700 AMPO Gas Atomized Powder - Morphology



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DIN 1.4542 / 17-4PH (capable to meet chemistry of AMS)

Chemical Composition [wt. %]

Element	C	Ni	Cr	Mn	P	S	Si	Mo	Cu	Nb
min	-	3	15	-	-	-	-	-	3	5xC
max	0.07	5	17	1.5	0.04	0.015	0.7	0.6	5	0.45

Particle size distribution* [µm]	Flowability* [s]	Apparent density* [g/cm ³]
15 - 45 (e.g. laser powder bed fusion)	< 19	3,96
45 - 150 (e.g. direct laser deposition)	< 21,5	3,40

* Measurement of particle size distribution is based on ISO 13322-2 (Dynamic image analysis methods); Flowability and apparent density are based on DIN EN ISO 4490 resp. DIN EN ISO 3923-1.