TECHNICAL DATASHEET

300M/S155

300M/S155

Alloy 300M/S155 is a vacuum-melted steel with outstanding strength. A through hardening alloy combining toughness, fatigue strength and good ductility.

PRODUCT FORMS

PRODUCT FORM	SIZE RANGE FROM	SIZE RANGE TO
300M/S155 Round bar	22.23 mm	127 mm

Can't find the size you need? ***Please contact us at*** ***onlinesales@neonickel.com***

CHEMICAL ANALYSIS

	C	CR	FE	MN	MO	NI	P	SI	S	V
Min	0.38	0.7	Balance	0.6	0.3	1.65	0.01	1.45	0.01	0.05
Max	0.46	0.95	Balance	0.9	0.65	2	-	1.8	-	-

APPLICATIONS

- Undercarriage components
- Gears
- Shafts
- Aircraft landing gear
- High strength bolts

TECHNICAL DATASHEET

ABOUT 300M/S155

300M/S155 is a high performance alloy steel which is a vacuum melted grade, supplied in the normalised and tempered/softened condition to enhance machinability prior to final heat treatment. It has a combination of ultra high strength, good fatigue resistance and excellent transverse properties, and as such finds many applications in the aerospace industry, such as undercarriage components, gears and shafts. Alloy steels are any kind of steel to which one or more elements have been added to produce a desired characteristic or physical property. Common elements that are added to make alloy steels are molybdenum, manganese, nickel, silicon, boron, chromium, and vanadium. For more information on alloy steel contact us, or fill in our online quote form and we'll get right back to you!

PROPERTIES

Density:	7.85 g/cm^3
Specific Heat Capacity:	448 J/kg*K
Coefficient of Thermal Expansion from -17.8-93°C:	11.34 µm/mm/°C

MECHANICAL & PHYSICAL PROPERTIES (NORMALISED AT 927 °C FOR 1 HOUR+AIR COOL/AUSTENITISED AT 871°C FOR 1 HOUR + OIL QUENCH/TEMPERED AT 302°C FOR 1 HOUR+AIR COOL)

MECHANICAL & PHYSICAL PROPERTIES (NORMALISED AT 927 °C FOR 1 HOUR+AIR COOL/AUSTENITISED AT 871°C FOR 1 HOUR + OIL QUENCH/TEMPERED AT 302°C FOR 1 HOUR+AIR COOL)	21 °C
Ultimate Tensile Strength /MPa	1981
0.2% Yield Strength /MPa	1672
Reduction of area %	35
Elongation %	10
Room Temperature Hardness/ Rockwell C	58

HARDNESS AT VARIOUS TEMPERING TEMPERATURE (AUSTENITISED AT 871°C FOR 1 HOUR + OIL QUENCH/TEMPERED FOR 2+2 HOUR+AIR COOL)

HARDNESS AT VARIOUS TEMPERING TEMPERATURE (AUSTENITISED AT 871°C FOR 1 HOUR + OIL QUENCH/TEMPERED FOR 2+2 HOUR+AIR COOL)	204°C	316°C	427°C	538°C	649°C
Hardness / Rockwell C	53	52.5	50	47	35

SPECIFICATIONS

Standards: AMS 6417, ASTM A579