

ALLOY STEEL**DSM 1.8.1****Definition:**

Alloy 600 is a nickel-chromium alloy used for applications that require resistance to a wide range of corrosive elements and service temperatures from cryogenic to high temperature (1000°C).

Features:

It is non-magnetic, with very good mechanical properties combining high strength with good workability and is suitable for welding.

These values are representative and should not be considered as definitive. For critical applications, refer to material data-sheet.

TYPICAL MECHANICAL PROPERTIES @25°C	
DENSITY:	8470 Kg/m³
YOUNGS MODULUS:	201 GPa
POISSONS RATIO:	0.29
YIELD STRENGTH	170- 345 MPa
TENSILE STRENGTH	550 - 690 MPa

These sizes are given in good faith and should not be considered as definitive

Rounds (mm)

1.2	1.6	2	3	3.5	4	5	5.3	6	7.1
8	8.95	10	12	13	16	18	19	20	22
24	25	28	30	32	35	36	38	40	42
45	50	55	60	65	70	75	80	85	90
95	100	110	115	120	125	130	135	140	145
150	160	165	170	180	190	200	210	220	230
250	280	300							

Hexagons (mm)

10	13	14	17	19	21	22	24	26	27
30	32	36							

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CHEMICAL ANALYSIS		BENEFIT
Carbon	0.15 max	Low % content: Good for machining & welding.
Nickel	72.0 min	Provides good corrosion resistance.
Chrome	14.0/17.0	Combines with Ni to improve corrosion resistance.
Silicon	0.5	Increases strength & wear resistance
Mang	1.0 max	Improves strength, forging & welding.
Sulphur	0.015	Good for machining.

CURRENT INTERNATIONAL SPECIFICATION COMPARISON	
BRITISH: BS	BS 3076: 1989: NA14
GERMAN: DIN	2.4640
AMERICAN: ASTM	N06600
EUROPEAN STEEL No.	NW6600
JAPANESE GRADE	JIS NCF600
CHINESE GRADE	----

Alternatives:

Alternative materials are allowed only with the express written permission of ASMPT. Please email details of your request to engineering_enquiries@asmpt.com

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