



++44 (0) 114 243 1206

## A286 / 660 Grades A - D

Alloy 286 is a precipitation hardened austenitic iron based steel, suitable for applications requiring high strength, good corrosion resistance at temperatures up to 700°C, and a high degree of uniformity in developing full strength.

AI Materials supply Air Melt material to ASTM A453 GR 660, which conforms to the 660 grade D specification (with a guaranteed yield strength minimum of 105,000 PSI), but with stress rupture tests carried out to also conform to 660 grade B.

Alloy 286 can be used in a wide range of high temperature applications – jet engines, turbines, frames, castings and fasteners.

**AI Materials stock the following Specifications:** ASTM A453, UNS S66286

**In the following Sizes:**

12.7 mm	15.87 mm	19.05 mm	20.31 mm	22.23 mm
25.4 mm	28.575 mm	31.75 mm	32.79 mm	34.93 mm
38.1 mm	41.275 mm	44.45 mm	47.625 mm	48 mm
50.8 mm	57.15 mm	63.5 mm	69.85 mm	73 mm
76.2 mm	88.9 mm	101.6 mm	127 mm	135 mm

**We also hold stock of 90 mm Square billet for sale or for use in conversion to specific sizes.**

### Technical data – nominal percentages

	C	Mn	Si	P	S	Cr	Ni	Mo	Ti	Al	V	B	
Min	-	-	-	-	-	13.5	24.0	1.00	1.90	-	0.001	-	%
Max	0.08	2.00	1.00	0.040	0.030	16.0	27.0	1.50	2.385	0.35	0.50	0.010	%
Var	+ 0.01	+/-0.04	+/-0.05	+ 0.005	+ 0.005	+/-0.20	+/-0.20	+/-0.05	+/-0.05	+ 0.05	+/-0.03	-0.0004 +0.001	%

### Mechanical data

Gr 660 Class	Tensile Strength, min		Yield Strength (0.2% offset) min		Elongation in 4X Dia min %	Reduction in Area Min %	Brinell Hardness Number	Approx Rockwell Hardness	
	Ksi	Mpa	Ksi	Mpa				Min	Max
A,B,C	130	895	85	585	15	18	248-341	24 HRC	37 HRC
D	130	895	105	725	15	18	248-321	24 HRC	37 HRC

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