



ALLOY-SEARCH

ALLOY-SEARCH DATASHEET

3.2315 – EN-AW-6082 T6

DESCRIPTION

3.2315 – EN-AW-6082 is a relatively new structural aluminium alloy and due to its excellent mechanical properties and corrosion resistance it has replaced AA6061 in various applications across several industries. It is available in several tempers, most commonly used grades are T6 & T651 per AMS 2772.

APPLICABLE STANDARDS

UNS A96082
EN-ISO AISi1MgMn
AA6082
AFNOR A-SGM0,7
AMS 4156
ASTM B-221
BS 1474:HE30
Other standards available upon request

CHEMICAL COMPOSITION*

Element	Si	Fe	Cu	Mn	Cr	Zn	Ti	Other	Al
Min %	0.70	-	-	0.40	-	-	-	-	-
Max %	1.30	0.50	0.10	1.00	0.25	0.20	0.10	0.15	Balance

*Per ASTM B-221 - T6

MECHANICAL PROPERTIES*

Property	Minimum
UTS	310 Mpa
Rp0.2	262 Mpa
Elongation % in 4D	8%
Reduction of Area %	19%
Elastic Module	70 Gpa
Hardness	90 HB
Charpy V-Notch Impact	-

*Per ASTM B-221 - T6

TYPICAL PRODUCTS & USAGE

Bars
Rods
Wire
Plate & Sheet
Cryogenics
Aviation
Machining
High-Stress Applications

MATERIAL APPLICATION

3.2315 – EN-AW-6082 is an aluminium alloy with relatively high yield strength. In fact, it is one of the highest strength alloys from the 6XXX series due to the addition of the element manganese.

AA6082, also known as UNS A96082, SAE-AMS4156 or ASTM B-221 is commonly used for trusses, bridges, cranes, transport applications and is suitable for aviation & marine usage and other high-stress applications.

It is commonly available in T6, T651, T8, T851. Other tempers possible upon request, can also be anodized.

Your alloy, our search.

Alloy Search
www.alloy-search.com

CONTACT ALLOY-SEARCH