



Alloy59/No6059

1. Brief introduction:

Alloy 59 overcomes the shortcomings of [alloy C-22](#) and [alloy C-276](#), with extremely low carbon and silicon content, making it difficult to generate grain boundary precipitation during hot forming or welding processes, and excellent thermal stability.

Alloy 59 is one of the alloys with the highest nickel content in the C alloy family, with the highest chromium and molybdenum content, the lowest iron content, usually less than 1%, and no other elements such as tungsten, copper, titanium, or tantalum added. It is the most "pure" Ni Cr Mo alloy.

Alloy59 (No6059) alloy has a wide range of applications in the fields of chemistry, petrochemicals, energy manufacturing, and pollution control.

2. Main specifications:

Trademark	BG	ASTM	UNS	Werkstoff Nr.
NiCr23Mo16Al	NS3311	Alloy 59	No6059	2.4605

3. Chemical composition under B574-10 standard:

Mo	Cr	Fe	Co	C	Si	Mn	P	S	Ni	Al	Cu
15.0-16.5	22.0-24.0	< 1.5	< 0.3	< 0.010	< 0.1	< 0.5	0.015	0.01	Bal	0.1-0.4	< 0.50

Remarks: If require adjustments for some chemical compositions, pls consult with us.



4. Mechanical Property Requirements for As Cold Finished Rods:

Alloy	Grade	Tensile Strength, min, psi	Yield Strength (0.2 % Offset), min, psi	Elongation in 2 in.
		(MPa)	(MPa)	(50.8 mm) or 4D A min, %
No6059	1	120 (827)	85 (586)	20
	2	135 (931)	125 (862)	20
	3	160 (1103)	150 (1034)	15

5. Main product types:

wire,rod, bar,strip, plate/sheet,tube,capillary tube, ring,forging.

6. Alloy59 Source URL:

<https://www.hitealloy.com/product/alloy59.html>