

HAYNES International



Haynes International is a comprehensive manufacturer specializing in high-performance nickel and cobalt alloy wire, small bars, and powder products. Regardless of the size of your order, our well-trained sales team and technicians are committed to offering technical support for end-use applications and exceptional customer service.



Haynes Wire Products
Toll Free: 1-800-354-0806
or 765-456-6012
Fax: 765-456-6079
158 N. Egerton Road
Hendersonville, NC 2875

Corrosion-resistant Alloys*

Specifications

Alloy	UNS	AWS/ASME Classification	AMS	Other
HASTELLOY® B-3®	N10675	SFA / A 5.14 (ERNiMo-10)		
HASTELLOY® C-4	N06455	SFA / A 5.14 (ERNiCrMo-7)		
HASTELLOY® C-22®/622	N06022	SFA / A 5.14 (ERNiCrMo-10)		
HASTELLOY® C-22HS®	N07022			
HASTELLOY® C-86	N06686	SFA / A 5.14 (ERNiCrMo-14)		ASTM B574
HASTELLOY® C-276	N10276	SFA / A 5.14 (ERNiCrMo-4)		
HASTELLOY® C-2000®	N06200	SFA / A 5.14 (ERNiCrMo-17)		
HASTELLOY® G-30®	N06030	SFA / A 5.14 (ERNiCrMo-11)		
HASTELLOY® G-35®	N06035	SFA / A 5.14 (ERNiCrMo-22)		ASTM B574
HASTELLOY® HYBRID-BC1®	N10362	A 5.14 (ERNiMoCr-1)		
HAYNES® 200	N02215	SFA / A 5.15 (ERNi-CI)		
HAYNES® M400	N04400		AMS 4730	QQ-N-281
HAYNES® M413	C71580	SFA / A 5.7 (ERCuNi)		
HAYNES® M418	N04060	SFA / A 5.14 (ERNiCu-7)		
HAYNES® N61	N02061	SFA / A 5.14 (ERNi-1)		
ULTIMET®	R31233			ASTM B815

Innovative Advancements in Corrosion-Resistant Alloys:

HASTELLOY® WR-66™ is a newly developed Co-based alloy that offers excellent resistance to sliding wear and corrosion in aqueous corrosive media. This alloy possesses corrosion resistance and ductility vastly superior to commonly used CoCr (Cobalt-Chromium) alloys in the weld overlay form, while maintaining comparable resistance to sliding wear and galling. Applications include valve, pump, bearing and seal components in the oil and gas, chemical processing and power generation markets.

High-temperature Alloys*

Specifications

Alloy	UNS	AWS/ASME Classification	AMS	Other
HASTELLOY® S	N06635		AMS 5838	
HASTELLOY® W	N10004	SFA / A 5.14 (ERNiMo-3)	AMS 5786	
HASTELLOY® X	N06002	SFA / A 5.14 (ERNiCrMo-2)	AMS 5798	
HASTELLOY® X-750	N07069	SFA / A 5.14 (ERNiCrFe-8)	AMS5778	
HAYNES® 25	R30605		AMS 5796	
HAYNES® 82	N06082	SFA / A 5.14 (ERNiCr-3)	AMS 5836	
HAYNES® 188	R30188		AMS 5801	
HAYNES® 214® (Structural)	N07214			Structural Grade
HAYNES® 214-W® (Weld Grade)				Weld Grade
HAYNES® 230® (Structural)	N06230			Structural Grade
HAYNES® 230-W® (Weld Grade)	N06231	SFA / A 5.14 (ERNiCrWMo-1)	AMS 5839	Weld Grade
HAYNES® 233® (Structural)	N02233			Structural Grade
HAYNES® 233-W® (Weld Grade)				Weld Grade
HAYNES® 242®	N10242	SFA / A 5.14 (ERNiMo-12)		
HAYNES® 263	N07263		AMS 5966	
HAYNES® 282®	N07208	SFA / A 5.14 (ERNiCrCoMo-2)		
HAYNES® 556®	R30556	SFA / A 5.9 (ER3556)	AMS 5831	
HAYNES® 600	N06600		AMS 5687	ASTM B166
HAYNES® 617	N06617	SFA / A 5.14 (ERNiCrCoMo-1)		
HAYNES® 625	N06625	SFA / A 5.14 (ERNiCrMo-3)	AMS 5837	
HAYNES® 718	N07718	SFA / A 5.14 (ERNiFeCr-2)	AMS 5832	
HAYNES® HR-120®	N08120			ASTM B408
HAYNES® HR-160®	N12160	SFA / A 5.14 (ERNiCoCrSi-1)		
MULTIMET®	R30155		AMS 5794	
HAYNES® Waspaloy	N07001		AMS 5828	

Innovative Advancements in High-Temperature Alloys:

HAYNES® 292™ is a newly developed Ni-based gamma-prime strengthened superalloy for high-temperature applications such as cases and rings used in aerospace and industrial gas turbine engines. This alloy can be readily fabricated and welded and is expected to offer superior low-cycle fatigue (LCF) strength, creep strength, and oxidation resistance compared to Waspaloy and other wrought gamma-prime strengthened alloys.

*Other alloys available upon request.

ISO 9001
CERTIFIED

AS9100
CERTIFIED

Approved for
GE Aviation S-1000

Approved for
Pratt & Whitney LCS

Approved for
Rolls Royce RR9000: SABRE

Standard Sizes*

Welding Consumables

Loose Coil Diameters		Precision Layer Wound RTW™ Wire Diameters		Cut Lengths (GTAW) Diameters		Drum Packs Diameters		Coated Electrodes Diameters	
in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
0.030	0.76	0.030	0.76	0.030	0.76	0.045	1.10	0.093	2.40
0.031	0.80	0.031	0.79	0.031	0.79	0.062	1.60	0.125	3.20
0.035	0.89	0.035	0.89	0.035	0.89	0.125	3.20	0.156	4.00
0.039	1.00	0.039	1.00	0.039	1.00			0.187	4.70
0.045	1.10	0.045	1.10	0.045	1.10				
0.047	1.20	0.047	1.20	0.047	1.20				
0.062	1.60	0.062	1.60	0.062	1.60				
0.078	2.00	0.078	2.00	0.078	2.00				
0.093	2.40	0.093	2.40	0.093	2.40				
0.125	3.20	0.125	3.20	0.125	3.20				
0.156	4.00			0.156	4.00				
4.70				0.187	4.70				

Wire Rod

Wire Rod for Redraw	
in.	mm.
0.218	5.50
0.250	6.40
0.256	6.50
0.275	7.00
HRAP (Hot Rolled, Annealed & Pickled)	

Small Bar

Coil and Cut Length Diameters	
in.	mm.
0.187	4.70
0.250	6.40
0.312	7.90
0.375	9.50
0.500	12.70
0.625	15.90
0.750	19.00
(As Cold Drawn, Solution Heat-treated, or Solution Heat-treated & Ground)	

Powder Particle Sizes*

Laser Power Bed Fusion (LPBF)	Direct Energy Deposition (DED)	Plasma Transferred Arc Welding (PTAW)
Particle Size (µm)	Particle Size (µm)	Particle Size (µm)
-53µm/+15µm	-106µm/+53µm	-150µm/+53µm

*Other sizes available upon request

Powder Alloys*

Alloy	UNS
HAYNES® 230-W®	N06230
HAYNES® 233-W®	
HAYNES® 244®	N24400
HAYNES® 282®	N07208
ULTIMET®	R31233

Coated Electrodes*

Specifications

Alloy	UNS	AWS/ASME Classification	AMS
HASTELLOY® B-3®	W80675	SFA / A 5.11 (ENiMo-10)	
HASTELLOY® C-4	W86455	SFA / A 5.11 (ENiCrMo-7)	
HASTELLOY® C-22®/122	W86022	SFA / A 5.11 (ENiCrMo-10)	
HASTELLOY® C-276	W80276	SFA / A 5.11 (ENiCrMo-4)	
HASTELLOY® C-2000®	W86200	SFA / A 5.11 (ENiCrMo-17)	
HASTELLOY® G-30®	W86030	SFA / A 5.11 (ENiCrMo-11)	
HASTELLOY® G-35®	W86035	SFA / A 5.14 (ERNiCrMo-22)	
HASTELLOY® HYBRID-BC-1®	N10362	A 5.11 (ENiMoCr-1)	
HASTELLOY® X	W86002	SFA / A 5.11 (ENiCrMo-2)	
HAYNES® 112	W86112	SFA / A 5.11 (ENiCrMo-3)	
HAYNES® 117	W86117	SFA / A 5.11 (ENiCrCoMo-1)	
HAYNES® 182	W86182	SFA / A 5.11 (ENiCrFe-3)	
HAYNES® 230-W®	W86231	SFA / A 5.11 (ENiCrWMo-1)	
MULTIMET®	W73155	SFA / A 5.4 (E3155)	AMS 5795
ULTIMET®	R31233		

Small Bar Alloys*

Specifications

Alloy	UNS	ASME/ASTM	AMS
HAYNES® 25	R30605		AMS 5759
HAYNES® 188	R30188		AMS 5772
HAYNES® 214®	N07214		
HAYNES® 230®	N06230	SB 572/B 572	AMS 5891
HAYNES® 242®	N10242	SB 573/B 573	
HAYNES® 263	N07263		AMS 5886
HAYNES® 282®	N07208		AMS 5915
HAYNES® 600	N06600	SB 166/B 166	AMS 5665
HAYNES® 625	N06625	SB 446/B 446	AMS 5666
HAYNES® 718	N07718		AMS 5662 AMS 5962
HAYNES® HR-120®	N08120	SB 408/B 408	
HAYNES® HR-160®	N12160	SB 572/B 572	
HAYNES® M400	N04400	SB 164/B 164	
HAYNES® Waspaloy®	N07001	SB 637/B 637	AMS 5708
HASTELLOY® B-3®	N10675	SB 335/B 335	
HASTELLOY® C-22®/622	N06022	SB 574/B 574	
HASTELLOY® C-276	N10276	SB 574/B 574	
HASTELLOY® X	N06002	SB 572/B 752	AMS 5754

Thermal Spray Alloys*

Specifications

Alloy	UNS	AWS/ASME Classification	AMS/ASME/ASTM
HAYNES® 20CB3	N08021	SFA / A 5.9 (ER320/320LR)	
HAYNES® 72	N06072	SFA / A 5.14 (ERNiCr-4)	
HAYNES® 80/20	N06003		ASTM B344
HAYNES® 95/5	N03301		
HAYNES® 200	N02200	SFA / A 5.14 (ERNi-C1), UNS N02215	ASTM B160
HAYNES® 316L	S31603		ASTM A518
HAYNES® 420	S42000	SFA / A 5.9 (ER420)	
HAYNES® 625	N06625	SFA / A 5.14 (ERNiCrMo-3)	AMS 5837
HASTELLOY® C-276	N10276	SFA / A 5.14 (ERNiCrMo-4)	

*All product types can have additional alloys available upon request.

HAYNES

International

For your local sales office or service center, please call or visit our website.

Haynes Wire Products
Toll Free: 1-800-354-0806 or 765-456-6012
Fax: 765-456-6079