Alloys International, Inc.

The name you can trust for specialty metals & forgings

Product Catalog

www.alloysintl.com

Our Expertise

For nearly three decades, Alloys International Inc. has been a proud worldwide supplier of all forms of metals and alloys including aluminum, stainless steel, alloy steel, titanium, magnesium, nickel, cobalt, and exotic alloys. Most importantly, we do it on-time and within budget. We have the resources and engineering expertise to source or custom produce whatever the job calls for.

Often mill minimums are too large or lead times too long. With Alloy's International's large billet inventory, we can custom convert smaller quantities with substantially reduced deliveries. Through extensive research, Alloys International has also developed a sophisticated, comprehensive database of global mills with substantial capabilities. We have selected those that meet or exceed the high standards required by American regulations and specifications. We cross-reference your company's requirements to properly match them with mills and suppliers located throughout the world.

Together we circumnavigate the globe to service consumers within the Aerospace, Defense, Petrochemical, Nuclear, Power Generation, and Medical industries. This has positioned Alloys International, Inc. as a key provider to both large manufacturers and small machine shops globally.

We provide all tempers, and grades of alloys...

- Aluminum
- Inert Surgical Steels

Hard Facing Alloys

Stainless/Duplex

Alloy/Tool Steels

- Hafnium
- Titanium
- Tantalum
- Nickel/Cobalt
 - It Niobium
- Inconel®*/Incoloy
 Zirconium
- Hastelloy®* Alloys
 Shape Memory Alloys
- Magnesium
- Molybdenum
- Magnetic Alloys
- Tungsten

Tubing/Pipe

- ...and in all forms
- Rod/Bar
- Shapes/Angles
- Forgings/Castings Sheet
- Parts/Spares
- Strip/Coil
- Plate

Wire

*Inconel/Incoloy™ INCO ALLOYS INTERNATIONAL, INC. *Hastelloy™ HAYNES INTERNATIONAL, INC.

Quality Under Control...

Quality control procedures conform to all FAA standards. Quality management system certified to AS9100D and ISO 9001:2015.

Non-Destructive

Alloys International provides complete non-destructive testing services - including surface inspection by visual and fluorescent penetrant dye testing. For magnetic material, magnetic particle inspection is used. Examination and inspection for internal defects by ultrasonic testing completes the range of techniques offered.

Traceability

Quality assurance means traceability. At Alloys International, incoming material is documented at every possible step through to final inspection and shipment. All documents are maintained for 50 years to facilitate immediate recall.



Alloys International, Inc. is a Proud Aerospace Approved Provider:

PACE





• СЕРТИФИКАТ • СЕRTIFICADO • СЕRTIFICAT

認證證書

ZERTIFIKAT - CERTIFICATE -

JCB.F. 12.03

CERTI

The Certification Body of TÜV SÜD AMERICA INC.

hereby certifies that Alloys International, Inc. / Torsion Technologies 150 Remington Blvd. Ronkonkoma, NY 11779 USA ented a Quality Mana in accordance with

AS9100D and ISO 9001:2015

Certificate Expiry Date: February 7, 2021 ficate Registri

> Date: February 8, 2018 e Date: N/A

TÜV SÜD AMERICA INC + 10 Centennial Drive + Peabedy. MA 01960 USA + www.TUVamerica.com TDV®

scope of this Quality Management System includes. Distributor and Custom Conversion Specialist of Istributor and custom conversion opecialist Metals and Forgings for Aerospace, Defense and Industrial Applications

on No: 951 17 7395

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AgustaWestland A Finmeccanica Company



Product Line

Stainless Steel	Specification	Aircraft Alloys	Specification
301A	AMS 5515, MIL-S-5059	4130	AMS 6348, 6350, 6351, 6360, 631, 6373
301 1/4H	AMS 5517, MIL-S-5059	4140	AMS 6349, 6379, 6381, 6382, 6395, 6452
301 1/2H	AMS 5518, MIL-S-5059	4142 H MOD	AMS 6378
301 F.H.	AMS 5519, MIL-S-5059	4330 MOD	AMS 6411, 6427
302, 302"B"	AMS 5516, 5688, QQA-763, MIL-S-7720	4340	AMS 6359, 6409, 6414,6415, 6454
303, 303"B"	AMS 5640, QQS-764	4620	AMS 6294
	AMS 5513, 5560, 5563, 5564, 5565, 5566,	4640	AMS 6312, 6317
304, 304"B"	5567, 5639, 5697, QQA-763, 766	6150	AMS 6448, 6450,6455
304L	AMS 5551, 5647, QQS-763, AMS 5566, 5572, 5651, 5694, QQA-763	8620	AMS 6274, 6276, 6277
040 04000	AMS 5524, 5573, 5648, 5690, 5692, QQS-	8740	AMS 6322, 6323,6324, 6325, 6327, 6358
316, 316"B"	763, AMS 5776, QQS-763	9310	AMS 6265, 6260, 6267
316L	AMS 5507, 5653, QQS-763	CBS 600	AMS 6255
317, 317L	ASTM-A-240, 580, QQS-763	17-22	AMS 6302, 6303, 6304, 6305
321	AMS 5510, 5645, 5570, 5576 5689	300M	AMS 6417, 6419
330	AMS 5592, 5716	HY-TUF	AMS 6418
347	AMS 5512, 5646, 5570, 5571, 5674	D6AC	AMS 6341
409	ASTM-A-240, 580	50100	AMS 6442
410	AMS 5504, 5613, 5591, 5591, 5612, 5613,	51100	AMS 6443, 6445, 6446, 6449
416, 416 H.T.	AMS 5776, QQS-763 AMS 5610, ASTM-A-581, 581 COND-T	52100	AMS 6440, 6444, 6447
418 (Greek Ascoloy)	AMS 5508, 5616, 5817	135 MOD	AMS 6470, 6471, 6472
420	AMS 5621, QQS-763	H-11	AMS 6437, 6485, 6487,6488
430, 430-F	AMS 5503, 5627, QQS-763	M-50	AMS 6490, 6491
		Maraging 250	AMS 6512
440-A, 440-C	AMS 5631, 5618, 5630, 5880, ASTM-A-580	Maraging 300	AMS 6414
440-F	AMS 5632	D6AC	AMS 6438, 6439
446	ASTM-A-580, QQS-763	HP 9-4-20/25	AMS 6523, 6524, 6525, 6526, 6546
Alloy 20	ASTM-B-463, ASTM-B-473	111 0 4 20/20	, who 0020, 0024, 0020, 0020, 0040
Nitronic 40, 50, 60	AMS 5656, 5764, ASTM-A-276, A-479	Aluminum	Specification
PH 1 3-8M0	AMS 5629, 5864	1100-0, H14	AMS 4001, 4003, QQA-250/1
15-5PH	AMS 5862, 5869	2011-T3	QQA-225/3
15-7PH	ASTM-A-564	2014-0, T3, T6	AMS 4028, 4029, 4121, QQA-250/3 QQA-
15-7MO	AMS 5520	2014-0, 10, 10	225/4, QQA-200/4, ASTM-B-209
17-4PH	AMS 5604, 5643, 5826	2024-0, T3, T351, T81	AMS 4035, 4036, 4037, 4041, 4194, 4195 4119, 4120, 4112, QQA-250/3, 250/4 250/5 225/6, QQA-200/3
17-7PH	AMS 5528, 5529, 5568, 5644, 5678, MIL-		
19-9DL	S25043 AMS 5526, 5527	2219-0, T31, 7351, T81	AMS 4031, 4094, 4095, 4096, QQA-250/30
AM350	AMS 5546, 5548, 5554, 5745, 5775	5052-0, H32, H34	QQA-367 AMS 4015, 4016, 4017, QQA-250/8
AM355	AMS 5547, 5549, 5743, 5780	<u> </u>	AMS 4015, 4010, 4017, QQA-250/8 AMS 4056, QQA-250/6, 200/4, MIL-A-4602
Custom 450	AMS 5773, 5763	5083-0, H32	(Armor Plate)
Custom 455	AMS 5617	5086	QQA-250/7, QQA-200/5
	ANO JUT	6061-0,T4,T451,T6,T651	AMS 4021, 4022, 4023, 4026, 4027, 4115
Refractory Metals	Specification	6061-T6511	AMS 4116, 4117, 4218, QQA-250/1, QQA-
Molybdenum	AMS 7817, 7819	6063	225/8, QQA-200/8 QQA-200/9
Tantalum	AMS 7846, 7847, 7848, 7849, ASTM-B-708	7049-T7351	AMS 4200A
Niobium	AMS 7850, 7851,7852, 7855, 7857	7050-T7451, T7651	AMS 4200A AMS 4050, 4201
			AMS 4050, 4201 AMS 4044, 4045, 4046, 4048, QQA-250/1
Tungsten	AMS 7878, 7879, 7880, 7897, 7898	7075-0, T6, T651, T7351	250/13, 225/9, 200/11
Beryllium	AMS 7904, 7905, 7906, 7907, 7908, 7910	7178-0, T6, T6511	QQA-250/14, 250/15, 200/13

Special Property	Specification	High Temp Alloys	Specification
Hy Mu 80	AMS 7701, MIL-N-14411	A286	AMS 5525, 5735, 5731, 5732, 5137, AMS 5726, B50T1181, B50T12A, C
Mu Metal-Ann.	AMS 7701	L-605	AMS 5537, 5759, 5796
Mu Metal - 1/2 Hard	AMS 7702	N155	AMS 5532, 5585, 5769, 5794
Mu Metal - Bar	AMS 7705	Haynes® 188	AMS 5608, 5772, 5807
R30100	AMS7724	Inconel® 600	AMS 5540, 5580, 5665, 5687
Invar 36	MIL-S-16598A	Inconel® 601	AMS 5870, 5715
Super Invar	Applicable Company Specs.	Inconel® 617	AMS 5887, 5888, 5889
Kovar	AMS 7726, 7727, 7728, MIL-I-23011,C1-1	Inconel® 625	AMS 5599, 5666, 5581, PWA 1066, 1072
Dumet	AMS 7734, MIL-STD-1276, Type D	Inconel® 706	AMS 5701, 5702, 5703
Nitinol Wire & Tubing	Applicable Company Specs.		AMS 5761, 5762, 5765 AMS 5589, 5590, 5596, 5662, PWA 1065,
Depleted Uranium 99U	AMS 7730	Inconel® 718	5663, 5664, 5832, B50TF14, 15A
M-36	AMS 7711	Inconel® 722	AMS 5684
M-27	AMS 7712	Inconel® X-750	AMS 5542, 5598, 5582, 5583, MIL-N-7786, 5667,5668, 5671, 5698, 5699
M-4, M-5, M-6	AMS 7716	Incoloy® 800	AMS 5871
Magnets	AMS 7510A, 7510/1A, 7510/2	Incoloy® 901	AMS 5660, 5661, 5830
	and the state of t	Incoloy® 909	AMS 5884, 5892, 5893
Titanium Comm. Pure 55 KSI	Specification AMS 4900, MIL-T-9046, Type I, C	Hastelloy® X-750	AMS 5536, 5587, 5588, 5754, 5798, PWA 1038, B50TF24, 25
		Hastelloy® C,C276	AMS 5530, 5750
Comm. Pure 70 KSI	AMS 4901, 4921, 4951,MIL-T-9046, Type I, B	Hastelloy® W,S,N	AMS 5755, 5711, 5607
Comm. Pure 40 KSI	AMS 4902, MIL-T-9046, TYPE 1,A	Nickel 200	ASTM-B-160
6AI-4V Ann & *H.T.	AMS 4911, 4928, 4934, 4935, 4954, 4965 MIL- T-9047, TYPE III, C	Nickel 400 (Monel)	AMS 4574, 4544, 4675, 4730, QQN-281,A
6AI-4V ELI	AMS 4907, MIL-T-9046, Type III, D, AMS 4930, 4956, MIL-T-9047, ELI	Nickel 405 (Monel) Nicklel K500 (Monel)	AMS 4674, QQ-N-281,B AMS 4676, QQ-N-286,A
6AI-4V ELI Duplex Ann.	AMS 4931, MIL-T-9047		AMS 5545, 5712, 5713, 5800, B50T59,
8AI-1V-1	AMS 4972, 4973, 4955, MIL-T-9047	Rene 41	N60T69, B50TF67
8-1-1 Single Ann.	AMS 4915, MIL-T-9046, Type II-F	Waspaloy	AMS 5544, 5706-07-08-09, 5828
8-1-1 Duplex Ann.	AMS 4916, MIL-T-9046, Type II-F	Jethete M-152	AMS 5718, 5719
	AMS 4918, 4936, 4937, MIL-T-9046,	Nimonic 263	AMS 5872, 5886
6AI-6V-2SN	4978,4979, MIL-T-9047	Stellite 6B	AMS 5788, 5894
6Al-2Sn-4Zr-2Mo	AMS 4919, 4975, 4976 MIL-T-9046, TYPE III, G MIL-T-9047	MP35N	AMS 5758, 5844, 5845, SPS M-646
6Al-2Sn-4Zr-6Mo	AMS 4981, MIL-T-9047	Magnesium	Specification
	AMS 4910, 4926, 4966, MIL-T-9046, MIL-T- 9047, Comp. 2, MIL-F-83142, TYPE II, Comp. 2	AZ61A-F	AMS 4350, QQ-M-31
5AI-2.5 SN Ann.		AZ80A-T5	AMS 4360
5AI-2.5 SN ELI	AMS 4909, 4924, MIL-T-9046, Type II, Comp.	AZ60A-T5	AMS 4362, QQ-M-40
	D, MIL-T-9047, Comp. 3	AZ31B-0	AMS 4375, 4382, QQ-M-44
3AI-2.5V	AMS 4943, 4944	AZ31, B-26, H24	AMS 4376, 4377, QQ-M-44
15V-4AI-3Cr-3SN	AMS 4914	ZK21A-F	AMS 4387, MIL-M-46039
11sn 5.0zr 2.3al 1.0mo	AMS 4974	HM21A-T81	AMS 4383, MIL-M-8917
10V-2Fe-3AI	AMS 4983, 4984, 4986, 4987	HM21A-T8	AMS 4390, MIL-M-8917
	ANAC 4000		
8MN	AMS 4908	HM31A-F	AMS 4388, MIL-M-8916

HK31A-0

HK31A-H24

ALLOYS INTERNATIONAL, INC. 150 Remington Blvd. Ronkonkoma, NY 11779 631-342-0043

AMS 4384, MIL-M-26075

AMS 4385, MIL-M-26075

The Industries We Serve...



AEROSPACE, TRANPORTATION, & DEFENSE



NUCLEAR, ELECTRICAL & PETROCHEMICAL



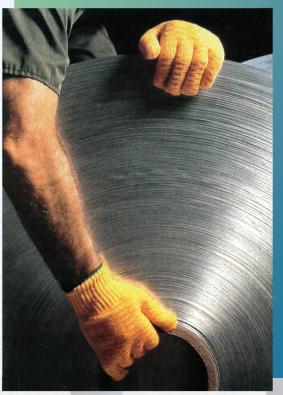
MEDICAL & SURGICAL



SPORTS & LEISURE

Each of these industries share similar requirements— utilizing metal alloys which exhibit unique characteristics such as high strength to weight ratios, heat and corrosion resistance, high purity, electrical conductivity, radiation shielding and more.

Alloys International Inc. specialty alloys are fully certified to meet the most demanding of standards, and they are fully traceable to the original melt source.



Through extensive research, Alloys International Inc., has developed a sophisticated, comprehensive base of global mill capabilities. We have selected those mills which meet or exceed the high standards expected by American specifications. We cross-reference your specifications & requirements with mills located throughout the world.

Export Services

Alloys International, Inc. is an industry leader when it comes to exporting to every corner of the globe. We can offer metric conversion, translation services, global mill selection, AOG quick response shipment, JIT delivery programs, documentation control and more.

We custom crate every order to ensure that no shifting of material, content damage, or water penetration occurs. We have a certified ISPM-15 KDHT wood packaging program that complies with the import requirements of every single country in the world. We can also offer waterproofing, oiling, or other methods to mitigate corrosion. Furthermore, we are expertly trained at implementing customs requirements, declaration, and documentation, as well as export licensing. Alloys International, Inc. ensures complete worry-free imports to your location, no matter where on the globe you may be!

Our Expertise

- Cross Referencing
- Metric Conversion
- Translation Services
- Global Mill Selection
- AOG Quick Response
- Documentation Control
- Protective Export Boxing



Lowering Costs

A world market at your front door results in lower raw material costs. With Aii's technical expertise in interpretation of raw material specifications such as AMS, ASM, ASTM, SAE, MIL, QQA, DIN and most in house specs, your quality is assured.

Special Services

When non-standard requirements present a problem, Alloys International draws upon its resources to locate your items or, if not available, produce to your specifications utilizing the following services:

Forging	Grinding	Heat Treating
Slitting	Re-Rolling	Chemical Milling
Masking	Sawing & Shearing	Trepanning/Gun Drilling

Ultrasonic Testing Plasma & EDM Cutting Laser & Water-Jet Cutting

FORGINGS

custom shapes · bars · sleeves · discs · rings · blocks

Forging is a manufacturing process where metal is pressed, pounded or squeezed under great pressure into high strength parts. The process is normally (but not always) performed hot by preheating the metal to a desired temperature before it is worked. Forged parts can vary in size, shape, and sophistication - from the hammer and

wrench in your toolbox to close tolerance precision components in the Boeing 777 and NASA space program. In fact, over 18,000 forgings are contained in a 777. For small engines with a thrust of 1,000 lbs. through to large engines with a thrust of over 98,000 lbs; Alloys International, Inc. is your source for forgings used in the Aerospace industry.



Some of our largest customer markets include aerospace, national defense, automotive, construction, mining, oil tool, and general industrial equipment. We welcome your inquiry and will show you first hand how we make a difference. Whether it be near-net forgings that save you machining time or lower tooling costs to help you buy "just what you need",

Alloys International, Inc. is your partner on the ground!

Alloys International, Inc.

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