

# MRECOMMS

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The Customer's Newsletter













October 5 – 7, 2016. Rosemont, IL, USA



Superbly branded stand packing a punch at the show as customers start to arrive



 $The \ impressive \ main \ entrance \ of \ the \ centre$ 



Customer engagement on the stand

AWI was very well positioned at this year's CASMI Spring World Show, with many spring makers and engineers stopping to talk with Michelle, Stephen and Angus about high performance nickel alloy wire for their spring designs.

Visiting customers were all smiles, complimenting AWI on great performing wire and their reliable delivery. The importance of this was emphasised repeatedly, adding significant value to AWI as a supplier. So, ALL positive at Spring World 2016 for AWI!





Hall 03

STAND C30 November 29th – December 1st, 2016

valveworldexpo.com



#### **HOUSTON, USA**

February 28th – March 2nd, 2017

houstexonline.com









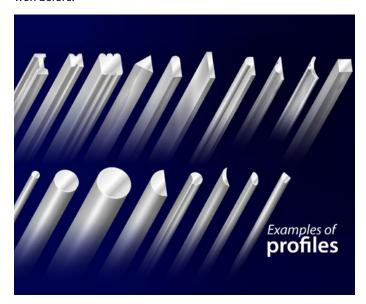
# BIGGER in profile wire

Significant investment by AWI in new machinery has given it the capacity to increase the size of the flat and shaped profiles it can now manufacture in more than 60 different alloys.

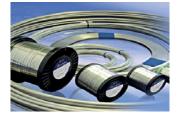
The installation of a custom-built production line makes it possible for the company to offer its customers access to wider and thinner or bigger cross-section profile (up to 100mm<sup>2</sup>), as well as offering them the chance to purchase in quantities ranging from as small as 10 metres to as large as 1000kg. Better still, this can be delivered within 4 weeks to any client, in any country.

"We are continually talking to our customers and finding out what would make their life easier," explained Angus Hogarth, Sales Director at AWI.

"One of the main points they kept coming back on was being able to buy flat and shaped profiles in a wider variety of sizes, especially in bigger profiles. We listened and decided to commission a bespoke machine that could deliver just that and we're already seeing significant orders placed that we perhaps would not have won before."



He added: "This new profile equipment means we can also give customers larger and heavier reels/spools - up to 250kg. We can even switch from spools/reels to the alternative packaging form of 'Pancake' coils for flat profiles."



The dimensions achievable on the new finished profile range are dependent on the alloy and the width to thickness ratio of the flat or shaped profile. (right) Some example sizes, include:



AWI's range of materials is growing by the month and it currently has more than 60 available to choose from.

If it's a flat or shaped profile that needs to survive very corrosive conditions there is the Hastelloy alloy range, the cobalt alloys 'Phynox' and 'MP35N'. On the other hand, if your wire is going to be used in a high temperature component, the Inconel range, Incoloy or Nimonic alloys might be the preferred choice.

For less severe environments, but equally critical applications, other materials like AWI's range of 18 stainless steel grades are available and all governed by AMS, ASTM and ISO 9001 standards.

Angus concluded: "Quality is crucial to everything we do and our technical and inspection departments ensure our clients receive the very best product. In order to keep up with enquiries from the aerospace and defence sector, we have also secured the AS9100 accreditation.

"Our profiles are used for aircraft engine retaining rings to architectural grills, whilst some of our spring making customers use our wider flat wire for stamping out parts."

16 x 0.7mm

6 x 0.2mm

13 x 1.6mm 18 x 0.5mm

0.400 x 0.250"

10 x 0.35mm

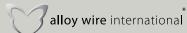
9.0 x 5.08mm

15 x 0.4mm









# Stainless steel wire is special to AWI

AWI is receiving record demand for high quality stainless steel



#### AWI is receiving record demand for high quality stainless steel that is of European origin and/or DFARS compliant.

The company offers a selection of 18 different grades and these are all available in special diameter tolerances, special tensile strength ranges, special surface finishes and special packaging.

Interest has come from customers in a range of sectors; including aerospace, nuclear, marine and petrochemical, with many citing the firm's AS9100 accreditation and its on-time delivery record as key reasons for the enquiry.





Aerospace & Defence

**Quality Managem** 





**Health & Safety** 



Natalie Baker - Sales Executive

"Manufacturing quality, delivering reliability is one of our founding principles and one that still rings true today with our global customer base," commented Natalie Baker, Sales Executive.

"We have an extensive range of stainless steel grades and our stock levels mean we can provide it in any quantity from ¼ kg to 50kg in just two weeks. Our manufacturing capability is equally as impressive and we are more than happy to produce wire as small as 0.025mm (that's 2 times smaller than a human hair) and as large as 21mm. Applications can be as diverse as 'Locking' wire for aircraft engines to stainless steel wire for cutting honeycomb from a beehive.

"In addition, if you are manufacturing machined components and don't want your wire on spools or in coils, we can provide your stainless steel in straight bars."

Stainless steel in straight bars

## **Stainless steel wire** story continued...



#### **A QUALITY SERVICE**

The below Stainless steel grades are manufactured in round wire, flat wire and profile/shaped wire and delivered via express air courier all over the world. AWI's service is so special that, for example, material can be in a customer's factory **anywhere in North America within 2 days of shipping!** 

#### Other grades include:

Stainless 420 / Stainless 314 / Stainless 321 / Stainless 303 / Stainless 310 / Stainless 304V

Spring makers are also using AWI's expertise when it comes to stainless steel, praising the consistency of temper throughout the wire, the good cast and the soap coating for contributing to consistently great springs.

Stainless Grade	W. Nr	UNS	AWS	AMS	ASTM	BS	ISO	OTHER
302	1.4310	S30200	160	5688	A313 A493 A580	970 2056 EN 10088-3	15156-3*	DIN EN 10270-3 DIN EN 10151
304	1.4301 1.4307	\$30400	161	7245	A313 A493 A580	970 2056	-	DIN EN 10270-3 DIN EN 10151
316	1.4401 1.4404	S31600	162	ı	A313 A493 A580	970 2056	15156-3*	DIN EN 10270-3 DIN EN 10151
316 LVM	1.4441	S31673	163	-	F138 F1350	7252 pt1+	5832-1	-
316 Ti	1.4571	S31635	168	-	A240	EN 10088-3	15156-3*	-
DTD 189A	-	-	164	5689	-	-	-	DTD 189A
Duplex	1.4462	S31803	167	-	A479	-	15156-3*	DIN EN 10270-3
Super Duplex	1.4410	S32750	169	-	-	-	15156-3*	-
Nitronic 50	1.3964	S20910	165	5764	A580	-	15156-3*	-
Nitronic 60	-	S21800	166	5848	A580	-	-	-
A286	1.4944 1.4980	S66286	023	5731 5734 5737 5853	A453	HR 52 HR 650	15156-3*	DIN EN 2399
20 CB 3	2.4660	N08020	130	-	B473	-	15156-3*	-

<sup>\*</sup> NACE MR 0175 + Composition D









# ALLOY SPOTLIGHT



#### **INCONEL X-750**

Size range 0.025mm - 21mm

#### **KEY FEATURES**

- Good creep rupture strength at high temperatures.
- Very good at cryogenic temperatures.
- Age hardenable.
- High temperature dynamic applications

#### TYPICAL APPLICATIONS

- Nuclear reactors
- Gas turbines
- Rocket engines
- Pressure vessels
- Aircraft structures
- □ Dynamic applications = active/lively/changing

#### **SUPER DUPLEX**

Size range 0.025mm - 6.50mm

#### **KEY FEATURES**

- Excellent resistance to stress corrosion cracking in chloride-bearing environments.
- Excellent resistance to pitting and crevice corrosion.
- High resistance to general corrosion.

#### TYPICAL APPLICATIONS

- Oil and gas exploration
- Marine application

For further technical information on INCONEL X-750 & SUPER DUPLEX, please visit our alloy wire range page on our new website www.alloywire.com/#range

### **NOW AVAILABLE Pure grades of Titanium** Titanium Grade 1 & 2

#### **TITANIUM GRADE ONE**

This commercially pure grade of titanium has a density of 4.5 g/cm³, making it ideal where lightweight properties are required. It is a soft alloy which can be easily formed and is commonly used for general engineering components, fixtures and fittings.

#### Diameter range, available now:

- Annealed 0.7mm 5.5mm
- Hard drawn 0.7mm 4.0mm

#### **TITANIUM GRADE TWO**

Essentially grade 1 but slight chemical compositional differences.

#### Diameter range, available now:

- Annealed 0.7 mm 5.5mm
- Hard drawn 0.7 mm 4.0mm

PLEASE NOTE: all grades of titanium can only be supplied with an oxide layer!

### NIMONIC C-263

Alloy C-263 is an age hardenable alloy. It has high strength and corrosion resistance along with good formability, high-temperature ductility and is commonly used in gas turbines for rings.

#### Diameter range available from Dec 2016:

- Annealed 0.025mm 11.0mm
- Spring Temper 0.025mm 7.0mm













### **LASER MICROMETER**

AWI is continually investing in future technology and have recently purchased two Zumbach Laser Micrometers, which have been fitted onto the flat wire rolling lines.

These will give a more accurate "in-line" measurement of flat wire widths, allowing us to input nominal size and tolerances. An alarm will be triggered should there be any deviation from dimensional tolerances giving us the guaranteed confidence of supplying a 100% dimensionally correct flat wire throughout the full production run.

## **CHINA, JAPAN and TAIWAN TOUR**

Mark Venables, Managing Director, had an excellent two-week tour of Shanghai, Tokyo and Taipei meeting Alloy Wire sales agents, attending the Wire China exhibition and visiting existing and new customers.

Mark met with Candy and the team at Epad in Shanghai, sharing all the latest things happening at Alloy Wire, presenting the new Technical brochure, sample box and company presentation. Candy accompanied Mark to the Wire China exhibition, which was extremely busy, particularly in the International Hall and AWI has already expressed an interest in exhibiting in 2018. Customers were very interested in Alloy Wire's extremely high quality standards and our very fast three-week lead time.

In Tokyo, Mark met with Osamu, Hisashi, Kuniaki and the Tomoe **Engineering team.** Information was shared and market opportunities identified, with both parties agreeing that a better understanding of Alloy Wire products that customers could be targeted to increase sales. Clients were very interested in Alloy Wire's ongoing technical advice and support, asking lots of questions about our exotic nickel alloys. Japanese customers have exceptionally high quality standards, in very demanding industries, and AWI were pleased to reaffirm its ability to surpassing these exacting requirements.

In Taipei, Mark met with Chompoonuut (Nuut) and visited customers in different market sectors interested in our small order quantities. Engineers, designers and teams from the R&D departments were all interested in the sixty different nickel and stainless alloys renowned for working in high temperature and corrosive environments.

Mark would like to thank Candy, Osamu and Nuut for an extremely well organised tour in each of the three countries.



Osamu and Kuniaki visiting customers in Tokyo

Mark meets the Fnad team

#### **ALLOY WIRE CHRISTMAS HOLIDAY CLOSURE DATES**

**CLOSED** 12:30pm **Friday** 23rd December **OPEN** 8:00am **Tuesday** 3rd January



"We would like to take this opportunity to thank all our customers for their business through the year and wish you season's greetings, good health and success in 2017."

