

STAINLESS STEEL
AWM404GP®

The New Generation Stainless Steel



Now the competitive edge is in your hands

AW Austral
Wright Metals

The Premium General Purpose Stainless Steel without the Premium Price tag

Grade **AWM404GP**® can be used instead of grade 304 stainless steel for most jobs. The corrosion resistance of grade **AWM404GP**® is at least as good as grade 304, usually better. It is not affected by stress corrosion cracking in hot water, and is not sensitised by welding.

Grade **AWM404GP**® is a new generation ferritic stainless steel made by a premium Japanese mill with state-of-the-art new generation steelmaking technology – with Extra Low Carbon.

AWM404GP® can be worked by all the methods used with 304. It work hardens similar to carbon steel, so it doesn't cause all the hassles familiar to workers with 304, which means cost savings.

The very high chromium content – 21% - of grade **AWM404GP**® makes it much better than the common ferritic grade 430 for corrosion resistance. So don't worry that **AWM404GP**® is magnetic – so are all the duplex grades, e.g. 2205.

THE SHARPLINE STORY

ASSDA member Sharpline Holdings recently used the new generation ferritic grade AWM 404GP® in high quality hospital food trolleys used throughout South East Queensland.

It's no fun being in hospital, so patients need their food piping hot – or they need it cold and refreshing. Which isn't easy for the hospital kitchen, which is often located well away from the wards. It takes time to get the food to the ward, and more time to get around the patients.



So Sharpline Stainless have come up with a food delivery trolley that looks after the food and ensures it reaches the patients just as it leaves the kitchen. The trolley is powered, so the environment is controlled. Meals stay hot in the heated compartments; the sweets stay cold in the refrigerated side. And all this in a large trolley that's easy to manoeuvre around the small wards of a busy modern hospital.

Sharpline Managing Director Simon Lines says "We have lots of experience with stainless steel, which is robust, looks good and is easy to clean – essential qualities for hospital equipment like these trolleys. We decided to give new generation ferritic stainless steel **AWM 404GP**® a go for this job, our first time with the grade. It worked like a dream – it bends crisply, welds well, and enabled us to produce excellent trolleys with minimum fuss. Our customer is very satisfied, and we are hopeful of more orders".

EASIER TO WORK WITH, BETTER RESULTS

You can use **AWM404GP**® as a general purpose stainless steel instead of the old workhorse grade 304 in most applications. **AWM404GP**® is easier to cut, fold, bend and weld than 304. This gives a better-looking job – cleaner edges and bends, flatter panels, neater construction.

As a ferritic stainless steel, grade **AWM404GP**® has higher yield strength than 304, similar hardness, and lower tensile strength and tensile elongation. It has much lower work hardening – which is what makes it easier to work with, behaving like carbon steel in fabrication.

AVAILABILITY

AWM404GP® is available now, from stock, as coil & sheet
0.55, 0.7, 0.9, 1.2, 1.5 and 2.0 mm thickness, 914 and 1219 mm wide.

Finishes are No4 and 2B. The 2B finish on **AWM404GP**® is brighter than 304. Do not use 2B where appearance is important – the gloss may vary across the width.

AWM404GP® is weldable. You can use TIG, MIG, spot and seam welding. See Austral Wright Metals datasheet on welding new generation ferritic stainless steels for advice.

AWM404GP® is a new generation ferritic stainless steel grade from the third biggest mill in the world JFE Steel Corporation, who brand it 443CT. The grade is new, but the mill has many years of experience with similar high quality grades, and you can be confident it won't let you down.

Like all ferritic stainless steels, **AWM404GP**® should be used only between 0°C and 400°C, and should not be used in pressure vessels or structures without full qualification.

Typical Chemistry

Grade	Chromium	Copper	Carbon	Titanium	Nickel
AWM404GP®	21.0%	0.4%	0.01%	0.3%	–
304	18.2%	–	0.05%	–	8.2%
430	16.5%	–	0.06%	–	–

Typical Mechanical Properties

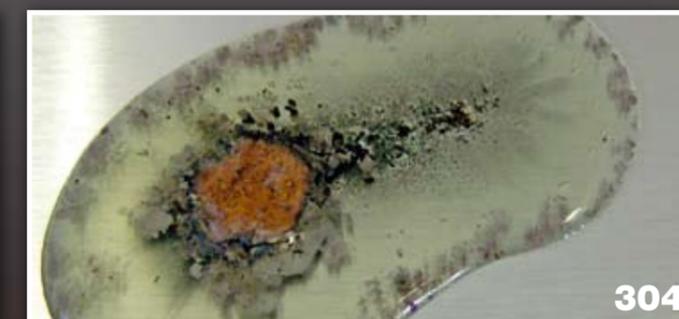
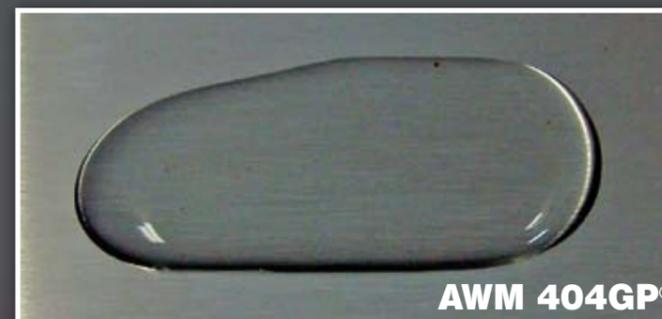
Grade	Yield Stress	Tensile Strength	Elongation
	MPa	MPa	%
AWM404GP®	310	475	30%
304	260	645	55%
430	320	490	30%

Typical Physical Properties

Grade	Density	Thermal Conductivity	Thermal Expansion Coefficient	Magnetism
	Kg / m ³	W/m.°C	/°C x 10 ⁻⁶	
AWM404GP®	7,750	22.5	10.5	Magnetic
304	8,027	16.2	17.3	Non-magnetic
430	7,750	23.9	10.4	Magnetic

CORROSION PERFORMANCE

The solution that was used was Milton Anti-Bacterial Solution with Active Ingredient: 1.00% w/w available Chlorine from 0.95% w/w Sodium Hypochlorite (stabilised and standardised) after a 23 hour period.



Contact your local branch for a free sample to test

COSTS LESS, LASTS LONGER & DOES A BETTER JOB

AWM404GP® will always cost less than 304 - guaranteed.

Then there's the three way bonus:

1. Weighs less, you get 3.5% more area for your money
 2. Works like a carbon steel - less hassles, less money spent in the workshop, and the job looks better
 3. No nickel, so the price is more stable than 304.
- Quote now, no surprises down the track.

So why not join the 500 plus fabricators getting ahead of the competition by enjoying the benefits of **AWM404GP®**

Austral Wright Branches

Wetherill Park NSW

381 Victoria Street
Wetherill Park NSW 2164
Ph: (02) 9827 0790
Fax: (02) 9757 4486

Archerfield QLD

101 Balham Road
Archerfield QLD 4108
Ph: (07) 3722 0800
Fax: (07) 3277 6799

Epping VIC

67 Gateway Boulevard
Epping VIC 3076
Ph: (03) 9409 8500
Fax: (03) 9408 3946

Gladstone QLD

4 Chapple St
Gladstone Qld 4680
Ph: (07) 4972 8110
Fax: (07) 4972 8120

Dandenong VIC

55-57 Ordish Road
Dandenong Vic 3175
Ph: (03) 9706 7547
Fax: (03) 9793 0121

Bundaberg QLD

6 Kendall St
Bundaberg Qld 4670
Ph: (07) 4153 1292
Fax: (07) 4153 1293

Regency Park SA

23 Taminga Street
Regency Park SA 5010
Ph: (08) 8345 1033
Fax: (08)8345 1044

Welshpool WA

120 Radium Street
Welshpool WA 6106
Ph: (08) 9258 2600
Fax: (08)9358 6206



www.australwright.com.au