

The UPM Market Informer

Monthly Market Intelligence for Customers of United Performance Metals

Materials Suitable for the Auto Racing Industry

High performance metals don't just fly...they also drive. High performance metals including nickel alloys, titanium and specialty stainless are no longer just for the aerospace industry. Resistance to heat, durable strength and light weight are all characteristics that make these metals attractive to the auto racing industry. High performance metals are being utilized in the sport's top series including NASCAR, Indy Car and Formula One, but are also quickly trickling down to the weekend racer.

Certain grades of stainless steel within the 300 series are extremely well suited for the auto racing industry due to their excellent high temperature fatigue resistance. These alloys not only have increased corrosion resistance, but they are tough enough to be used for fasteners and far surpass aluminized steel used in factory exhaust systems. High performance exhaust systems are more often utilizing aircraft-quality austenitic stainless steel for high performance and increased longevity of parts. Stainless steel braided hoses

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resist cracking, reduce emissions, and offer high pressure capabilities ideal for fuel, oil and water lines, yielding greater reliability at higher speeds. Additional applications are emerging that utilize nickel alloys such as 625, which has been used in both Formula One and Champ Car exhaust systems and for ultra-light and highly durable exhaust headers designed for Winston Cup racing teams.

Titanium is very widely used in high performance racing for both professionals and weekend racers because it offers both high strength and very little weight, ideal for critical engine applications. Titanium also has great memory properties making it an excellent choice for suspension springs. Drag racers utilize clutch components, flywheel, bell housing, pressure plate and cover and drive shafts with titanium enclosures to ensure they are light weight but also strong enough to bear stress and rotation. For a closer look at our stainless and nickel material offerings, please visit *www.upmet.com*; For more information on titanium materials, visit *www.vulcanium.com*.



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Japan Steel Exports Dip to 4-Year Low in 2015, Dented by China

Japan's steel exports last year fell to their lowest since 2011, dented by a surge in shipments from China. Steelmakers around the world are grappling with the fallout of massive exports of cheap steel from China with producers turning overseas as local appetite wavers due to the country's slowing economy. Steel exports by Japan, the world's secondbiggest steel producer, dropped 1 percent to 41.27 million tons last year, making a second annual decline and hitting lowest since 2011, when output was disrupted after parts of the country were devastated by an earthquake and tsunami. Exports from Japan may fall further in 2016 as steel prices remain at multi-year lows, crimping export margins, while the recent surge in yen against the U.S. dollar makes Japanese goods more expensive in foreign markets. *Source: Reuters*



EU Stainless Raw materials Index jumps \$49 After Nickel Price Rebound

Steel First's weekly raw material index for Europe-origin grade 304 stainless steel rose by \$49.45 per ton on Monday, January 25 after a rise in nickel prices. *Source SteelFirst*

Tata Steel to Cut 1,050 Jobs at Port Talbot and Other UK Locations

Tata Steel UK has started a consultation process with employee representatives regarding 1,050 proposed job cuts amid persistently difficult market conditions, it said on Monday, January 18. *Source: SteelFirst*

New Report Released—Global Steel Industry Outlook 2015-2019

According to a December, 2015 Research and Markets report, analysts predict the global steel industry to grow steadily at a compound annual growth rate of around 2%, in terms of consumption volume, during the forecast period. The growth of end-user industries such as automotive, mechanical machinery, and infrastructure and construction is fueling the demand for steel. The infrastructure and construction sector, which accounts for more than 52% of the world's steel consumption, is expected to grow at a rate of around 85 by the end of 2020.

The rapid growth of developing economies such as India is also expected to contribute to the market growth during the forecast period. Around 63% of the demand in India is catered by the coal-intensive blast furnaces. The Indian government has banned iron ore, to fight against illegal mining, which is expected to reduce the domestic supply. *Source: Research and Markets*

Expected Mill Times

Stainless Cold Rolled - 6-8 weeks Stainless Plate - 7-9 weeks Nickel Cold Rolled - 20 weeks Nickel Plate - 14-16 weeks





Stainless Steel & Cobalt Alloy Surcharge Totals November 2015—February 2016 High Temp Surcharge Totals November 2015—April 2016

Grades	Nov	Dec	Jan	Feb	Mar	Apr
15-5	0.3173	0.2976	0.2667	0.2690	*	*
15-7	0.3864	0.3538	0.3142	0.3230	*	*
17-4	0.3145	0.2950	0.2657	0.2683	*	*
17-7	0.3793	0.3554	0.3066	0.3046	*	*
18SR	0.1589	0.1476	0.1415	0.1465	*	*
201	0.2940	0.2760	0.2433	0.2436	*	*
301 7.0%	0.4017	0.3566	0.3077	0.3042	*	*
302/304/304L	0.4148	0.3893	0.3352	0.3321	*	*
304-8.5%	0.4303	0.3965	0.3468	0.3432	*	*
305	0.5428	0.5102	0.4320	0.4244	*	*
309	0.5717	0.5386	0.4592	0.4510	*	*
310	0.8048	0.7593	0.6373	0.6208	*	*
316/316L	0.5113	0.4723	0.4112	0.4155	*	*
317L	0.5843	0.5382	0.4724	0.4801	*	*
321	0.4374	0.4103	0.3506	0.3465	*	*
347	0.7054	0.6783	0.6186	0.6145	*	*
409/409 Mod	0.1072	0.0967	0.0930	0.1002	*	*
410/410S	0.1135	0.1029	0.0989	0.1059	*	*
430	0.1508	0.1394	0.1339	0.1402	*	*
434	0.1699	0.1547	0.1508	0.1605	*	*
439	0.1589	0.1474	0.1415	0.1477	*	*
440A	0.1508	0.1394	0.1339	0.1402	*	*
2205	0.4412	0.4044	0.3715	0.3850	*	*
2507	0.4794	0.4407	0.4028	*	*	*
20	1.5524	1.3543	1.2687	1.3089	1.0928	0.9979
263	3.8512	3.4848	3.2055	3.2415	2.6725	2.0237
276	3.5258	3.1597	2.9592	2.9126	2.5444	2.4467
A286	1.0202	0.8778	0.8137	0.8417	0.6878	0.6185
330	1.3285	1.1283	1.0404	1.1074	0.8920	0.7853
400	2.4079	1.9937	1.8595	2.0140	1.5694	1.3570
600	2.6439	2.2342	2.0577	2.2246	1.7855	1.5694
601	2.3116	1.9751	1.8284	1.9590	1.5967	1.4165
617	2.9921	2.6180	2.3857	2.4193	1.9205	1.5108
625	4.2216	3.8891	3.7330	3.7687	3.4028	3.2682
718	4.3148	4.0277	3.8984	3.9717	3.6600	3.5229
X-750	3.1900	2.7915	2.6196	2.7812	2.3541	2.1437
800H/HT	1.2385	1.0634	0.9858	1.0398	0.8506	0.7564
825	1.7198	1.4967	1.3968	1.4383	1.1947	1.0914
НХ	2.3048	2.0347	1.9009	1.9047	1.6040	1.4911
188	5.2600	4.3100	3.7200	*	*	*
L-605	6.0500	5.0200	4.3300	*	*	*
*Surcharge currently not available						

United Performance Metals



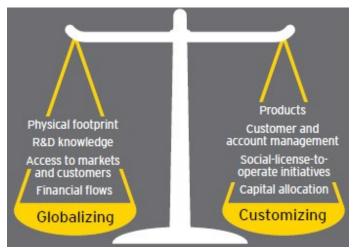
Rig Count Overview & Summary Count Source: Baker Hughes

Area	Last Count	Count	Change	Prior Count	Change from Last Year	Date of Last Year's Count
U.S	January 22, 2016	637	-13	January 15, 2016	-996	January 23, 2015
Canada	January 22, 2016	250	+23	January 15, 2016	-182	January 23, 2015
International	December, 2015	1095	-14	November, 2015	-218	December, 2014

Steel Sector Transformation

"Several megatrends at the macroeconomic as well as sector level are driving the globalization of the steel business. The industry must embrace the challenge and transform itself for success." - Anjani Agrawal, Global Steel Leader

To survive and thrive, in a sector in constant transition, steelmakers need to transform themselves. Globalization is no longer a matter of choice; steel businesses' longterm success depends on it. The businesses that ride the next wave of growth will be those that understand the trends and refine their strategies, business models and portfolios according to a truly global mindset. The steel



producers must find the right balance between globalization and customization. Source: Ernst & Young Global Limited

Titanium Surcharge Update Source: ATI Specialty Metals

	Standard Surcharge Q1, 2016				
Titanium Alloy	Bar	Billet	Flat		
ATI 6-2-4-2 Alloy	\$5.80	\$5.28	\$5.80		
ATI 6-4 Alloy	\$4.76	\$4.34	\$4.76		
ATI 6-4 ELI Alloy	\$4.76	\$4.34	\$4.76		
ATI CP Grade 1	\$4.94	\$4.50	\$4.94		
ATI CP Grade 2	\$3.70	\$3.37	\$3.70		
ATI CP Grade 4	\$3.70	\$3.37	\$3.70		



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