

OVERVIEW

Transport to Italy may come under pressure

The movement of metal and alloys into Italy could come under threat after some traders reported difficulty in securing trucks to cross the border, although no major disruptions have yet been confirmed.

Some truck drivers are increasingly reluctant to enter northern Italy since the region saw a surge in the number of people affected by the coronavirus, market participants said today. The World Health Organisation said the number of confirmed cases in Italy – the main hotspot in Europe for the outbreak – had surpassed 300 as of 26 February.

In addition to concerns about deliveries being completed, the potential for a truck driver shortage is also raising questions about whether freight costs will go up, traders said.

But despite the growing health scare, raw material suppliers and steelmakers in Italy continue to produce and purchase raw material on the spot market for consumption. A silicon metal trader reported a sale of 5-5-3 grade silicon metal for spot delivery to an Italian aluminium producer in the north of the country, adding that the customer was planning to run its production facility as normal.

Italian steelmaker Arvedi yesterday confirmed to *Argus* that its production and deliveries are **unaffected** and there are no official restrictions on entry to the Cremona area where its facilities are located.

One trader said that most alloys produced or already at Italian ports from outside Europe are still being delivered to customers as normal. And some said that business meetings were now being postponed because of quarantine measures and precautions.

The bigger concern for now remains the virus' impact on tourism and economic growth in Italy, with one financial analyst commenting that the situation makes another recession in Italy "more likely than not".

By Anuradha Ramanathan and Thomas Kavanagh

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Incorporating *Metalprices.com*, *Argus Minor Metals*, *Argus Ferro Alloys* and *Argus Rare Earths*

MARKETS

Key prices					
Market	Unit	Date	Low	High	±
Battery Materials					
Minor Metals					
Lithium					
Carbonate min 99.5% ex-works China	Yn/t	27 Feb	48,000	51,000	nc
Carbonate min 99.5% ex-works China excl. VAT	\$/kg	27 Feb	6.06	6.44	+0.01
Carbonate min 99.5% cif China	\$/kg	25 Feb	8.50	10.00	0.25
Hydroxide min 56.5% ex-works China	Yn/t	27 Feb	53,000	57,000	nc
Hydroxide min 56.5% ex-works China excl. VAT	\$/kg	27 Feb	6.69	7.20	+0.01
Hydroxide min 56.5% fob China	\$/kg	25 Feb	10.00	11.50	0.25
Graphite					
Flake 94% min ex-works China	Yn/t	25 Feb	3,500.00	4,000.00	nc
Flake 94% min fob China	\$/t	25 Feb	520.00	580.00	nc
Flake 94% min ex-works China excl. VAT	\$/t	25 Feb	451.69	501.87	nc
Manganese					
Sulphate min 32% Mn battery grade ex works China	Yn/t	27 Feb	6,200.00	6,400.00	nc
Dioxide min 91% carbon battery grade ex works China	Yn/t	27 Feb	9,600.00	10,600.00	nc
Dioxide min 91% alkaline battery grade ex works China	Yn/t	27 Feb	10,500.00	11,500.00	nc
Cobalt					
Min 99.8% alloy grade du Rotterdam	\$/lb	27 Feb	17.75	18.75	nc
Min 99.8% chemical grade du Rotterdam	\$/lb	27 Feb	16.90	17.50	nc
Sulphate min 20% ex-works China	Yn/t	27 Feb	54,000	59,000	nc
Sulphate min 20% ex-works China excl. VAT	\$/lb	27 Feb	3.09	3.38	+0.01
Vanadium					
Pentoxide V2O5 ex-works China	\$/lb	27 Feb	6.70	6.80	nc
Base Metals					
Nickel					
Briquettes min 99.8% in-warehouse Rotterdam	\$/t	27 Feb	60	100	nc
Sulphate min 22% ex-works China	Yn/t	27 Feb	24,000	30,000	500
Lead					
Lead Ingot primary 99.97% premium del US	\$/lb	25 Feb	0.0850	0.1000	nc
Rare Earths					
Dysprosium					
Oxide min 99.5% fob China	\$/kg	27 Feb	256.00	261.00	+1.00
Praseodymium-Neodymium					
Oxide min 99% fob China	\$/t	27 Feb	39,800	40,300	-300.00
Ferro alloys					
Ferro-vanadium					
78-82% V dp Rotterdam (per kg V)	\$/kg	27 Feb	27.00	28.00	nc

MINOR METALS: EUROPE MARKET COMMENTARY

Europe: Higher Indian demand lifts Cd

Cadmium prices rose on higher demand from India with restocking likely to restart next month. Germanium metal prices edged up as consumers secured material ahead of a potential supply tightness in China.

Cadmium

Higher demand from India pushed up prices. Restocking is expected to start in India in March. A trader sold 24t of 99.99pc metal at \$27.50/lb. Prices for 99.99pc metal rose by 2¢/lb from 25 February to \$1.22-1.27/lb and prices for 99.95pc metal rose by 2¢/lb to \$1.18-1.22/lb. Indian prices for both grades were unchanged at Rs215-225/kg cif India.

Chromium

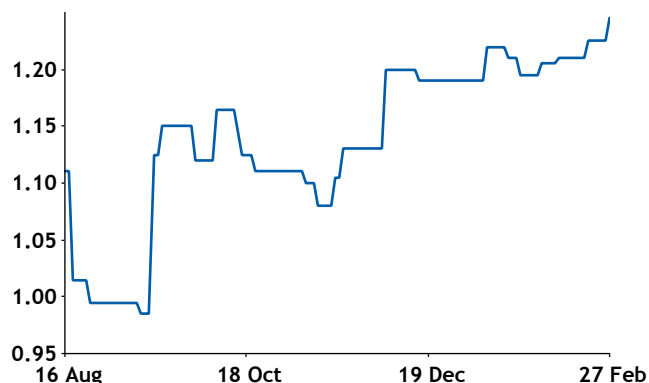
Prices were assessed \$50/t higher at the bottom of the previous range at \$6,250-6,600/t duty paid in warehouse Rotterdam on tighter supply. The market has seen stable demand since the start of the year but supply has tightened after cutbacks at major producers. Some sellers were already sold out of material for delivery in March.

Cobalt

The market has stabilised this week and there was limited spot trading activity as buyers mulled over the impact of the global spread of coronavirus on downstream users. Prices for chemical grade metal were stable at \$16.90-17.50/lb and alloy grade metal was \$17.75-18.75/lb.

Despite a slowdown in buying interest, sellers did not reduce offer prices because the market for metal is in tight supply. Chinese metal producers were eager to sell material to raise cash after a month of lost revenue. There were

Cadmium 99.99pc du Rotterdam \$/lb



Electronic metals price assessments

	Unit	27 Feb		±
		Low	High	
Arsenic				
Min 99% du Rotterdam	\$/lb	0.88	0.98	nc
Min 99% fob US warehouse (25 Feb)	\$/lb	1.00	1.08	nc
Bismuth				
Min 99.99% du Rotterdam	\$/lb	2.45	2.55	nc
Min 99.99% ex-works China	Yn/t	35,000	36,000	+500
Min 99.99% fob China	\$/lb	2.25	2.35	+0.025
Ingot min 99.99% fob US warehouse (25 Feb)	\$/lb	2.70	2.98	+0.140
Gallium				
Min 99.9999% ex-works China	Yn/kg	1,130	1,230	nc
Min 99.99% ex-works China	Yn/kg	970	1,000	nc
Min 99.99% fob China	\$/kg	138.00	148.00	nc
Min 99.99% cif Main Airport	\$/kg	145.00	160.00	nc
Germanium				
Dioxide min 99.999% ex-works China	Yn/kg	4,200	4,500	nc
Dioxide min 99.999% fob China	\$/kg	600	640	nc
Dioxide min 99.999% du Rotterdam	\$/kg	705	735	nc
Metal (zone refined ingot) min 99.999% ex-works China	Yn/kg	6,600	7,100	nc
Metal min 99.999% cif main airport	\$/kg	1,000	1,055	+12
Min 99.999% fob China	\$/kg	925	1,025	nc
Indium				
Min 99.99% du Rotterdam	\$/kg	140.00	148.00	nc
Min 99.99% ex-works China	Yn/kg	875	925	nc
Min 99.99% fob China	\$/kg	130	135	nc
Ingot min 99.99% fob US warehouse (25 Feb)	\$/kg	155.00	175.00	nc
Min 99% ex-works China	Yn/kg	830	870	nc
Selenium				
Dioxide min 99% ex-works China	Yn/kg	62.00	66.00	nc
Min 99.5% du Rotterdam	\$/lb	5.70	7.50	nc
Min 99.5% fob US warehouse (25 Feb)	\$/lb	6.85	7.85	nc
Powder min 99.9% ex-works China	Yn/kg	95.00	125.00	nc
Tantalum				
Pentoxide min 99.5% ex-works China (25 Feb)	Yn/kg	1290.00	1340.00	nc
Tantalite basis 25% Ta ₂ O ₅ cif main port	\$/lb	59.00	62.00	nc
Min 99.8% du Rotterdam	\$/kg	265.00	275.00	nc
Tellurium				
99.99% ex-works China (25 Feb)	Yn/kg	330.00	350.00	nc
Min 99.99% du Rotterdam	\$/kg	48.00	57.00	nc
Min 99.95% fob US warehouse (25 Feb)	\$/kg	60.00	66.00	nc
Zirconium				
Fused zirconia 98.5% ZrO ₂ ex-works China (25 Feb)	Yn/t	25,000	26,000	nc
Oxychloride 36% Zr(Hf)O ₂ ex-works China (25 Feb)	Yn/t	14,000	15,500	nc
Oxychloride 36% Zr(Hf)O ₂ fob China (25 Feb)	\$/t	2,080	2,180	nc
Silicate 65% Zr(Hf)O ₂ ex-works China (25 Feb)	Yn/t	13,000	13,500	nc
Sponge 99.4% Zr+Hf ex-works China (25 Feb)	Yn/kg	225.00	235.00	nc

MINOR METALS: EUROPE MARKET COMMENTARY

offers reported at \$16.50-16.70/lb, but no buyers in Europe, because freight is difficult to secure from China.

In the medium term, production halts at carmakers and downstream technology firms could weigh on cobalt chemical prices. A slowdown in global growth could also reduce consumption of new smartphones and electric vehicles, leading to slower demand for cobalt.

Germanium

Germanium metal prices rose on higher demand ahead of a potential supply squeeze caused by logistics problems in China. Prices for 99.999pc metal rose to \$1,000-1.055/kg on 27 February, up from \$980-1,050/kg in the previous assessment of 25 February. Prices for dioxide were unchanged at \$705-735/kg for 99.999pc material.

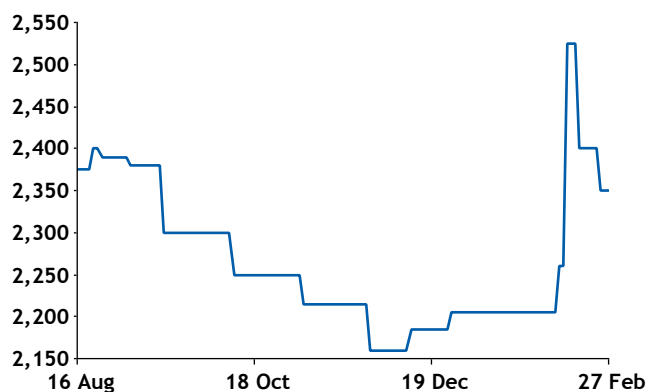
Hafnium

Prices widened to \$720-800/kg on 27 February, up \$20/kg at the top of the previous range, reflecting a widening spread between different specification of material with different level of zirconium below 1pc Zr. While supply is dominated by nuclear grade material, demand is led by the superalloy sector and particularly in the US where local supply has been lagging. The decline worsened after the introduction of import duties on Chinese metal last year. Material requirement meanwhile are tighter, generally needing crystal bar with no more than 0.5pc zirconium, supply of which has been limited.

Magnesium

The market remained stable at \$2300-2,400/t in Rotterdam after supply pressures eased. In the last week more material has been made available from Chinese suppliers, so prices

Magnesium min 99.9% du Rotterdam \$/t



Battery metals price assessments

	Unit	27 Feb		±
		Low	High	
Antimony				
Ingot min 99.65% ex-works China	Yn/t	39,500	42,500	nc
Ingot min 99.65% fob China	\$/t	6,200	6,400	nc
Min 99.85% ex-works China	Yn/t	42,000	43,000	nc
Min 99.65% cif US (25 Feb)	\$/lb	2.60	2.80	nc
Regulus grade II min 99.65% Sb du Rotterdam	\$/t	6,300	6,500	nc
Regulus Trioxide grade min 99.65% Sb du Rotterdam	\$/t	6,300	6,500	nc
Trioxide min 99.5% ex-works China	Yn/t	37,500	38,500	nc
Trioxide min 99.5% fob China	\$/t	5,400	5,500	nc
Trioxide min 99.8% ex-works China	Yn/t	39,000	40,000	nc
Trioxide min 99.8% fob China	\$/t	5,600	5,700	nc
Cadmium				
Min 99.99% du Rotterdam	\$/lb	1.22	1.27	+0.020
Min 99.99% ex-works China (25 Feb)	Yn/t	16,100	16,600	nc
Min 99.99% cif India	Rs/kg	215.00	225.00	nc
Min 99.99% fob US warehouse (25 Feb)	\$/lb	1.20	1.30	nc
Min 99.95% du Rotterdam	\$/lb	1.18	1.22	+0.020
Min 99.95% fob US warehouse (25 Feb)	\$/lb	1.14	1.23	nc
Min 99.95% cif India	Rs/kg	215.00	225.00	nc
Oxide min 99.5% ex-works China (25 Feb)	Yn/t	16,500	17,100	nc
Cobalt				
(Electrolytic metal) min 99.8% ex-works China	Yn/kg	275.00	285.00	nc
Chloride min 24% ex-works China	Yn/t	65,000	70,000	nc
Min 99.8% alloy grade du Rotterdam	\$/lb	17.75	18.75	nc
Min 99.8% fob US warehouse (25 Feb)	\$/lb	17.25	18.25	-0.400
Min 99.8% chemical grade du Rotterdam	\$/lb	16.90	17.50	nc
Hydroxide min 30% cif China (25 Feb)	\$/lb	10.00	11.20	nc
Oxide 72% ex-works China (25 Feb)	Yn/kg	195.00	205.00	5.000
Powder min 99.8% ex-works China (25 Feb)	Yn/kg	290.00	300.00	nc
Sulphate min 20% ex-works China	Yn/t	54,000	59,000	nc
Sulphate min 20% ex-works China excl. VAT	\$/lb	3.09	3.38	+0.00
Tetroxide min 73% ex-works China	Yn/kg	200.00	215.00	nc
Graphite				
Flake 94% min ex-works China (25 Feb)	Yn/t	3500.00	4000.00	nc
Flake 94% min fob China (25 Feb)	\$/t	520	580	nc
Flake 94% min ex-works China excl. VAT (25 Feb)	\$/t	452	502	nc
Lithium				
Carbonate min 99.5% ex-works China	Yn/t	48,000	51,000	nc
Carbonate min 99.5% ex-works China excl. VAT	\$/kg	6.06	6.44	+0.01
Carbonate min 99.5% cif China (25 Feb)	\$/kg	8	10	+0
Cobalt oxide min 60% Co ex-works China	Yn/kg	210.00	220.00	nc
Hydroxide min 56.5% ex-works China	Yn/t	53,000	57,000	nc
Hydroxide min 56.5% ex-works China excl. VAT	\$/kg	6.69	7.20	+0.01
Hydroxide min 56.5% fob China (25 Feb)	\$/kg	10	12	+0
Manganese				
Sulphate min 32% Mn battery grade ex works China	Yn/t	6,200	6,400	nc
Dioxide min 91% carbon battery grade ex works China	Yn/t	9,600.00	10,600.00	nc
Dioxide min 91% alkaline battery grade ex works China	Yn/t	10,500	11,500	nc

MINOR METALS: EUROPE MARKET COMMENTARY

have fallen back after a spike following anti-virus measures in January. Demand for magnesium is low in Europe, so with more metal now shipping from China, traders released some stock for sale on the spot market at reduced prices. There were offers between \$2,320-2,380/t in Rotterdam.

Manganese

Prices for 99.7pc flake were assessed unchanged at \$1,950-2,050/t in Rotterdam. Buyers waited for prices to continue falling and traders with positions built up in the last two weeks tried to get out of the market. The opening up of logistics in China has brought prices back down after a spike following anti-virus measures in the country.

Two steel mills in Europe both secured large amounts of material below \$1,900/t ddp last week, which indicates that market participants expect further price reductions in the coming weeks.

Molybdenum

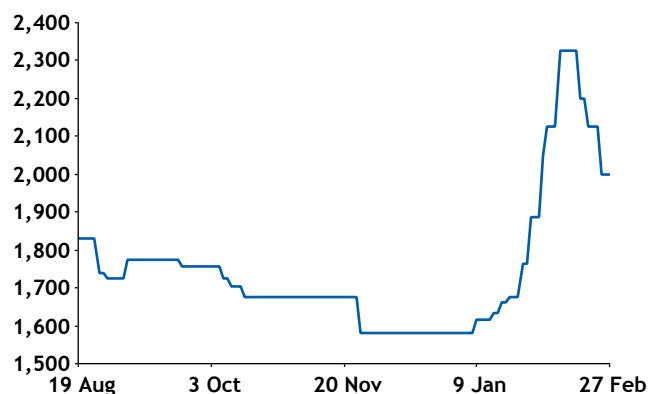
Oxide prices continued to decline towards the latter half of this week on muted demand in the spot market. Prices had briefly dipped near \$9/lb yesterday but edged higher today.

Prices for 57pc grade powder were assessed at \$9.15-9.45/lb on 27 February, down from \$9.20-9.70/lb on 25 February.

Niobium

Columbite prices were assessed in a wider range of \$8.90-9.30/lb Nb2O5 cif main port, up by 10¢/lb at the top of the range reflecting a wider and mainly geographical spread between western and eastern markets as some higher prices were achieved in Asia.

Manganese flake 99.7pc du Rotterdam \$/t



Light metals price assessments

	Unit	27 Feb		±
		Low	High	
Magnesium				
Alloy min 90% Mg AZ91 ex-works China	Yn/t	16,400	16,800	-100
Alloy min 90% Mg AZ91 fob China	\$/t	2,450	2,510	-20
Min 99.9% fob US warehouse (25 Feb)	\$/t	5,071	5,291	nc
Min 99.9% du Rotterdam	\$/t	2,300	2,400	nc
Min 99.9% ex-works China	Yn/t	14,600	15,000	-100
Min 99.9% fob China	\$/t	2,150	2,210	-20
Powder 99.9% Mg 20-80 mesh ex-works China	Yn/t	15,600	16,000	-100
Powder 99.9% Mg 20-80 mesh fob China	\$/t	2,370	2,430	-20
Manganese				
Briquette min 97% Mn ex-works China	Yn/t	12,600	12,900	-200
Briquette 97% Mn fob China	\$/t	1,830	1,880	-25
Dioxide min 91% carbon battery grade ex works China	Yn/t	9,600	10,600	nc
Dioxide min 91% alkaline battery grade ex works China	Yn/t	10,500	11,500	nc
Electrolytic metal min 99.7% fob US warehouse	\$/lb	1.05	1.09	-0.035
Flake 99.7% Mn ex-works China	Yn/t	12,300	12,600	-200
Flake min 99.7% fob China	\$/t	1,800	1,850	-25
Flake min 99.7% du Rotterdam	\$/t	1,950	2,050	nc
Lump min 95% Mn ex-works China	Yn/t	12,800	13,100	-200
Lump 95% Mn fob China	\$/t	1,850	1,920	-25
Sulphate min 32% Mn battery grade ex works China	Yn/t	6,200	6,400	nc
Silicon				
5-5-3 min 98.5% Si dat Chinese ports	Yn/t	11,700	11,800	nc
5-5-3 min 98.5% Si fob China	\$/t	1,660	1,690	nc
5-5-3 min 98.5% Si ddp Europe works	€/t	1,850	1,950	22
5-5-3 min 98.5% Si fca duty paid Rotterdam within 90 days	€/t	1,700	1,750	22
5-5-3 min 98.5% Si fob US warehouse	\$/lb	0.890	0.930	nc
5-5-3 min 98.5% Si fob US warehouse works within 90 days	\$/lb	0.880	0.920	nc
4-4-1 min 99% Si dat Chinese ports	Yn/t	12,600	12,700	nc
4-4-1 min 99% Si fob China	\$/t	1,790	1,820	nc
4-4-1 min 99% Si ddp Europe works	€/t	1,950	2,050	+40
3-3-0-3 min 99% Si fca Europe works	€/t	2,000	2,075	nc
2-2-0-2 min 99.5% Si fca Europe works	€/t	2,075	2,175	nc
Titanium				
Concentrate 50% TiO ₂ ex-works China (VAT unpaid)	Yn/t	1,500	1,600	nc
Concentrate 46% TiO ₂ ex-works China (VAT unpaid)	Yn/t	1,600	1,620	nc
Dioxide 93pc min rutile grade ex-works China	Yn/t	14,200	16,000	nc
Dioxide 93pc min rutile grade fob China	\$/t	2,150	2,200	nc
Dioxide 98pc min anatase grade ex-works China	Yn/t	11,300	13,500	nc
Ingot min 99% Ti pure TA1 ex-works China (25 Feb)	Yn/t	84,000	86,000	nc
Ingot min 99% Ti pure TA2 ex-works China (25 Feb)	Yn/t	82,000	84,000	nc
Ingot min 99% Ti pure TA3 ex-works China (25 Feb)	Yn/t	85,000	88,000	nc
6Al 4V ingot fob US producer (31 Jan)	\$/lb	10.15	10.40	nc
6Al 4V ingot in-warehouse Rotterdam (03 Feb)	\$/kg	15.25	16.00	-0.500
Ingot CP Grade 1 fob Rotterdam (03 Feb)	\$/kg	10.80	11.30	-0.200
Ingot CP Grade 2 fob Rotterdam (03 Feb)	\$/kg	9.75	10.30	-0.225
Slab CP Grade 1 fob Rotterdam (03 Feb)	\$/kg	11.20	11.70	-0.150
Slab CP Grade 2 fob Rotterdam (03 Feb)	\$/kg	9.80	10.50	-0.350
Slag min 92% TiO ₂ ex-works China	Yn/t	6,550	6,850	nc
Sponge 99.7% Ti ex-works China	Yn/t	78,000	80,000	nc
Sponge 99.6% Ti ex-works China	Yn/t	77,000	79,000	nc
Sponge TG-TV 10x30mm du Rotterdam	\$/kg	6.50	6.70	nc
Tetrachloride min 99.9% TiCl ₄ ex-works China	Yn/t	8,300	8,500	nc

MINOR METALS: EUROPE MARKET COMMENTARY

But limited demand for oxide and metal, and softening prices of ferro-niobium dampened the potential for a price increase. Lower prices for concentrate were also noted within regional markets in Africa and South America on fob basis.

Silicon

Prices for 5-5-3 and 4-4-1 grade metal increased on tight supply from both European producers and international sellers. Prices for 5-5-3 grade metal were up at €1,850-1,950/t delivered duty paid (ddp) and 4-4-1 grade prices were up at €1,950-2,050/t ddp.

A 125t lot of 5-5-3 grade was sold at €1,920/t ddp and another deal was done at €1,850/t for 200t. Offers from China for 5-5-3 grade metal worked out at €2,060/t when brought into Rotterdam. There were no offers from European producers to traders before the second quarter.

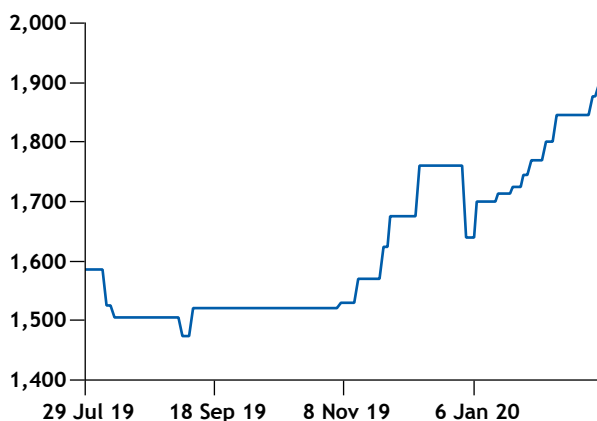
Traders and end users in Europe struggled to buy material from international producers below €2,000/t. There was a deal for 100t of 4-4-1 grade metal at €1,950/t ddp, but most traders were offering to end users above €2,000/t ddp.

Tantalum

Tantalite prices were assessed stable at \$59-62/lb Ta2O5 as spot demand remained patchy, not helped by disruption to factory operations in China this month. Surplus stock weighed on the downstream tantalum capacitor supply chain which accounts for most of the raw material demand.

Meanwhile, scrap supply tightened because of reduced production, along with new supply of sintered bar out of China, which has pushed up metal prices in Europe, but without sufficient demand to create momentum for a further price increase. Tantalum ingot and bar was assessed unchanged today at \$265-275/kg in-warehouse Rotterdam basis.

Silicon 5-5-3 min 98.5% Si ddp Europe works €/t



Scrap metal price assessments

Market	Unit	Date	Low	High	±
Molybdenum					
99.7% airmelt del US consumer	\$/lb	31 Jan	13.75	14.50	+0.88
99.7% vacuum del US consumer	\$/lb	31 Jan	15.90	16.90	+0.55
99.9% pure vacuum del US processor	\$/lb	31 Jan	14.10	14.60	+0.30
Contained in 316 stainless scrap solids del US consumer	\$/lb	18 Feb	7.75	8.00	+0.45
Niobium					
Niobium (columbium) scrap vacuum del US consumer	\$/lb	31 Jan	36.00	37.35	-0.32
Niobium (columbium) scrap vacuum del US processor	\$/lb	31 Jan	31.50	32.50	nc
Tantalum					
99.9% vacuum melted del US consumer	\$/lb	25 Feb	123.00	127.00	-0.50
Titanium					
Scrap 6Al 4V bulk weldable del US processor	\$/lb	27 Feb	2.25	2.75	nc
Scrap 6Al 4V clips del US processor	\$/lb	27 Feb	1.50	1.70	nc
Scrap grade CP1 solids del US processor	\$/lb	27 Feb	1.55	1.70	nc
Scrap grade CP2 solids del US processor	\$/lb	27 Feb	1.42	1.52	nc
Scrap grade CP3/4 solids del US processor	\$/lb	27 Feb	1.00	1.15	nc
Scrap 6Al 4V turnings aero quality del US processor	\$/lb	27 Feb	1.20	1.40	nc
Tungsten					
Carbide scrap inserts fob US processor	\$/lb	31 Jan	6.30	6.90	+0.15
Carbide scrap rounds fob US processor	\$/lb	31 Jan	6.55	7.10	+0.20
99.9% scrap solids consumer price fob US processor	\$/lb	31 Jan	16.00	17.00	+0.50
99.9% scrap del US processor	\$/lb	31 Jan	13.50	14.00	+0.50

MINOR METALS: CHINA MARKET COMMENTARY

China: Higher supply weighs on Mg, Mn

Rising spot availability following output restarts continued to weigh on the manganese market, while ample inventories and a weaker yuan against the dollar pushed down magnesium prices. The yuan fell to 7.01 against the dollar today from 6.99 a week earlier.

Bismuth prices moved up on a rise in buying interest and reduced output.

Antimony

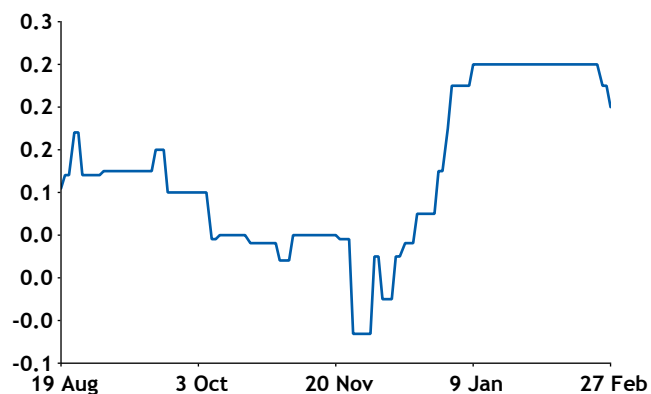
Argus today assessed prices stable at 39,500-42,500 yuan/t (\$5,620-6,050/t) ex-works for 99.65pc metal and at Yn39,000-40,000/t ex-works for 99.8pc grade trioxide. Producers held offer prices firm in view of reduced spot supplies caused by lower operating rates in the major producing region of Hunan province. Downstream consumers and trading firms opted to operate from stocks and purchased material only for immediate needs. The coronavirus outbreak has reduced antimony demand from the flame-retardant, polyester and battery alloy sectors.

Export prices remained unchanged at \$6,200-6,400/t fob for metal and \$5,600-5,700/t fob for trioxide. The coronavirus situation outside of China, especially in Japan, South Korea and some European countries, has worsened over the past week. This has led to concerns over a fall in demand from these countries, which are major buyers of Chinese antimony supplies.

Bismuth

Prices for 99.99pc grade metal rose further to Yn35,000-36,000/t ex-works today from Yn34,000-36,000/t on 25 February, in response to renewed buying interest and output reductions during the coronavirus crisis. Consumers from the chemical and low-melt alloy industries began to replenish

Bismuth min 99.99% du Rotterdam vs fob China \$/lb



	Unit	27 Feb		±
		Low	High	
Chromium				
(alumino-thermic) min 99% dp Rotterdam	\$/t	6,250	6,600	+25
Chrome aluminothermic fob US warehouse (31 Jan)	\$/lb	3.00	3.15	-
(aluminothermic) min 99% Cr ex-works China	Yn/t	49,000	52,000	nc
Hafnium				
Min 99% max 1% Zr du Rotterdam	\$/kg	720	800	+10
Molybdenum				
Ingot min 99.8% in-warehouse Rotterdam (25 Feb)	\$/kg	40.00	46.00	nc
Oxide min 57% Mo du Rotterdam	\$/lb Mo	9.15	9.45	-0.800
Oxide min 57% fob US warehouse	\$/lb	9.40	9.55	-0.875
Niobium				
Ingot min 98.8% in-warehouse Rotterdam (03 Feb)	\$/kg	62	65	nc
Pentoxide min 99.5% ex-works China (25 Feb)	Yn/kg	219	222	nc
Niobium (columbite) concentrate min 50% Nb ₂ O ₅ cif main port	\$/lb	8.90	9.30	+0.050
Rhenium				
APR min 69.2% Re (basic grade) du Rotterdam	\$/kg Re	650	850	nc
APR min 69.4% Re (catalyst grade) dp Rotterdam	\$/kg Re	1,100	1,200	nc
APR min 69.4% Re ex-works China (25 Feb)	Yn/kg	4,600	5,600	nc
APR catalyst 69.4% fob US warehouse (31 Jan)	\$/lb	525	575	-
Pellets min 99.9% Re dp Rotterdam	\$/lb	475	545	nc
99.9% fob US warehouse (31 Jan)	\$/lb	525	575	-
Tungsten				
APT du Rotterdam	\$/mtu WO ₃	235.00	245.00	nc
APT fob China	\$/mtu WO ₃	238.00	243.00	nc
APT min 88.5% ex-works China	Yn/t	143,000	145,000	+2,000
Carbide min 99.7% ex-works China	Yn/kg	220.00	222.00	+2,000
Carbide powder (3-4micron) fob China	\$/kg	31.50	32.50	nc
Ingot min 99.9% in-warehouse Rotterdam (25 Feb)	\$/kg	34.00	37.00	nc
99.9% min Chinese bar del US consumer (31 Jan)	\$/lb	16.50	17.00	-
Oxide (Yellow/Blue oxide) fob China	\$/t	24,300	24,800	nc
Oxide min 99.95% ex-works China	Yn/t	161,000	163,000	+1,000
Concentrates 55% min ex-works China	Yn/t	93,000	94,000	+3,000
Concentrates min 65% ex-works China	Yn/t	94,000	95,000	+2,000
Concentrates min 65% in-warehouse Rotterdam	\$/dmu	185	195	nc
Vanadium				
Pentoxide fused flake min 98% du Rotterdam	\$/lb V ₂ O ₅	5.75	6.25	-0.750
Pentoxide 98% V ₂ O ₅ fob China	\$/lb	6.70	6.80	nc
Pentoxide 98% V ₂ O ₅ ex-works China	Yn/t	94,500	96,000	-250

MINOR METALS: CHINA MARKET COMMENTARY

feedstock for next month but found difficult to secure supplies below Yn35,000/t. Export prices increased to \$2.25-2.35/lb fob today from \$2.20-2.35/lb fob on 25 February, in line with the higher domestic prices.

Cobalt

Argus assessed prices for 99.8pc grade metal unchanged from 25 February at Yn275-285/kg ex-works today. Consumers made enquiries at around Yn275/kg for only small volumes despite low inventories, in response to talk that Tesla would start using non-cobalt batteries. Large producers are gradually resuming production and focused on fulfilling orders. Several producers are planning to increase spot inventories on expectations of higher demand next month.

The March contract on the Wuxi stainless steel exchange closed at Yn265/kg today, down from Yn272/kg a week earlier but up from Yn264/kg on 3 February.

Prices for 24pc grade chloride held at Yn65,000-70,000/t ex-works today, with 20pc grade sulphate prices unchanged at Yn54,000-59,000/t ex-works. Producers held limited feedstock inventories because of disruptions caused by the coronavirus outbreak. A Shanghai-based trading firm offered chloride at Yn69,000-70,000/t and sulphate at Yn57,000-59,000/t.

The range for 73pc grade tetroxide was unchanged at Yn200-215/kg ex-works today. Prices for 72pc grade oxide and 99.8pc grade powder held at Yn195-205/kg ex-works and Yn290-300/kg ex-works, respectively, on limited trading activity.

Gallium

The range for 99.99pc grade metal was assessed unchanged at Yn970-1,000/kg ex-works today on low trading activity as buyers held ample stocks. Export prices remained at \$138-148/kg fob on weak seaborne demand.

Germanium

Prices for 99.999pc grade metal were stable at Yn6,600-7,100/kg ex-works today, while the range for 99.999pc grade dioxide remained at Yn4,200-4,500/kg ex-works amid minimal trading activity. Producers held prices firm in view of tight profit margins and low operating rates.

Export prices for 99.999pc grade metal and 99.999pc grade dioxide were unchanged at \$925-1,025/kg fob and \$600-640/kg fob, respectively, on limited international demand.

Mineral sands price assessments

	Unit	25 Feb		±
		Low	High	
Rutile				
Hainan min 90% TiO ₂ ex-works China (25 Feb)	Yn/t	6,700	7,500	nc
Australian min 95% TiO ₂ ex-works China (25 Feb)	Yn/t	8,600	9,300	nc
Zircon sand				
Hainan min 65% O ₂ ex-works China (25 Feb)	Yn/t	9,200	9,700	-100
Australian min 66% O ₂ cif China (25 Feb)	\$/t	1,500	1,520	nc

Indium

Prices for 99.99pc grade metal were assessed at Yn875-925/kg ex-works today, with few spot deals concluded because of weak demand and low operating rates at smelters. Export prices for 99.99pc metal were unchanged at \$130-135/kg fob on weak international demand.

Lithium

Argus assessed prices for 56.5pc grade hydroxide unchanged at Yn53,000-57,000/t ex-works today, with major producers focused on fulfilling orders and holding offers firm at Yn56,000-57,000/t. Logistics services in the major producing areas of Sichuan and Jiangxi provinces are returning to normal, but freight costs remain high and deliveries are slow.

The range for 99.5pc grade carbonate held stable at Yn48,000-51,000/t ex-works today, with consumers making enquiries for small volumes. Prices for 60pc lithium cobalt oxide were unchanged at Yn210-220/kg ex-works today as limited deals offset a rise in enquiries from the consumer electronics battery sector.

Magnesium

Prices for 99.9pc grade metal fell to Yn14,600-15,000/t ex-works today from Yn14,700-15,100/t ex-works on 25 February, with deals concluded at Yn14,600/t. Producers are expected to reduce prices further in the near term to clear stocks and generate cash.

Export prices moved down by \$20/t from 25 February to \$2,150-2,210/t fob today, in line with the lower domestic prices and weaker yuan against the dollar.

Manganese

A rise in spot supply following output restarts and low demand from stainless steelmakers pushed down prices for 99.7pc grade flake to Yn12,300-12,600/t ex-works today,

MINOR METALS: CHINA MARKET COMMENTARY

down by Yn200/t from 25 February. More producers in south China resumed operations as logistics services slowly returned to normal. Huayuan Xingyin resumed its 50-60 t/d output this week after suspending production for more than two months.

Export prices were assessed down by \$25/t from 25 February at \$1,800-1,850/t fob today, in line with the lower domestic prices.

Selenium

The range for 99pc grade dioxide remained at Yn62-66/kg ex-works today. Producers are maintaining their offer prices in anticipation of a rise in demand once downstream manganese producers in Hunan, Guangxi and Chongqing provinces resume operations.

Prices for 99.9pc grade powder were unchanged at Yn95-125/kg ex-works/warehouse on flat demand from the downstream glassmaking and fertilizer industries.

Silicon

Metal producers opted to observe the market today following a rise in prices on 25 February, driven by strong demand from aluminium alloy producers. Domestic prices for 5-5-3 grade metal held at Yn11,700-11,800/t delivered to ports today, with the range for 4-4-1 grade steady at Yn12,600-12,700/t delivered to ports.

Export prices were assessed stable at \$1,660-1,690/t fob for 5-5-3 grade metal and at \$1,790-1,820/t fob for 4-4-1 grade today, in line with the unchanged domestic prices.

Titanium

Sponge prices held at Yn78,000-80,000/t ex-works for 99.7pc grade material and Yn77,000-79,000/t ex-works for the

99.6pc grade today, as lower demand from mill products manufacturers offset higher costs for tetrachloride (TiCl₄) feedstock caused by reduced supply during the coronavirus outbreak.

Major producers focused on fulfilling orders with regular consumers and resumed deliveries to consumers outside of Hubei province after traffic restrictions were eased this week.

Tungsten

The range for 55pc wolframite concentrate moved up by Yn3,000/t from 25 February to Yn93,000-94,000/t today as suppliers withheld material from spot sale and raised their offer prices. Concentrate production remains low because of a lack of workers and protective gear. Downstream consumers were reluctant to accept higher offer prices, resulting in low trading volumes.

Limited concentrate availability offset flat demand from the cemented carbide industry to leave the range for 88.5pc ammonium paratungstate (APT) unchanged at Yn143,000-145,000/t ex-works today. Argus assessed prices for 99.7pc carbide flat at Yn220-222/kg ex-works today.

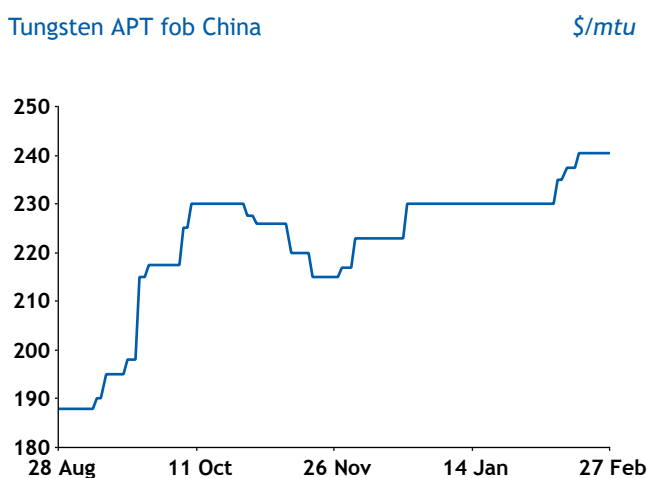
Export prices held at \$238-243/mtu fob for APT and \$31.50-32.50/kg fob for carbide, with international consumers monitoring the market after completing purchases. The worsening coronavirus situation in South Korea and Japan, the two main importers of Chinese tungsten products, has led to concerns over future demand.

Vanadium

Prices for 98pc grade pentoxide flake declined to Yn94,500-96,000/t ex-works today from Yn95,000-96,000/t ex-works on 26 February assessment and Yn96,000-97,000/t ex-works on 25 February, in response to a fall in buying interest from alloy smelters following weak demand and lower tender prices from steel mills. Flake producers have started to cut output because of limited demand from steel mills that are operating at lower rates in view of high stocks and low steel prices.

Chengde Iron and Steel Group (Chenggang) started a 40-day maintenance on 20 February, which is expected to remove 450t of flake supply from the market.

Export prices dipped to \$6.70-6.80/lb fob today from \$6.70-6.90/lb fob on 25 February, in line with the fall in the domestic market, lower bid prices and weak demand from international consumers. A Sichuan-based exporter cut its offer price to \$6.70/lb fob from \$6.90/lb fob in response to low buying interest from international buyers.



MINOR METALS: NEWS AND ANALYSIS

Li: CATL to build 45GWh/yr battery plant

Chinese major battery manufacturer Contemporary Amparex Technology (CATL) has started to construct a 45GWh/yr production facility for power and energy storage lithium batteries in Cheliwan, Ningde city in southwest China's Fujian province.

Construction will be completed in around two years and the plant, with an investment of no more than 10bn yuan(\$1.43bn), is scheduled to reach full capacity at end of 2021.

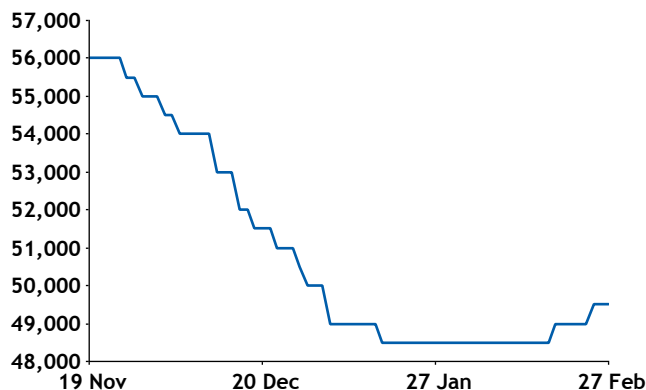
The firm will raise another Yn20bn to fund three new battery production projects, which are expected to raise its battery capacity by 52GWh/yr in 2022-2023, and to develop and research its energy storage technology.

CATL's subsidiary Ningde Huxi is planning to expand its lithium-ion battery capacity by 16GWh/yr, while its another subsidiary Jiangsu Shidai aims to build the third phase of a power battery plant with a capacity of 24GWh/yr. Its subsidiary Sichuan Shidai plans to develop the first phase of a power battery plant with 12GWh/yr.

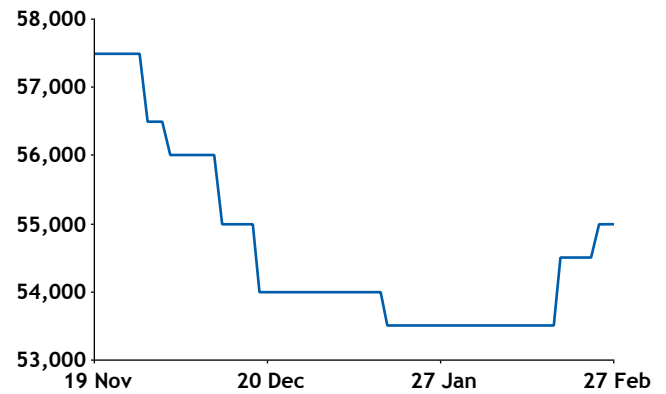
CATL, China's largest electric vehicle battery manufacturer, is working with several large carmakers, including Daimler Trucks and Buses, Toyota and Volvo. It announced in early February that it will supply lithium-ion power batteries to US electric vehicle (EV) producer Tesla for two years from 1 July.

The firm is actively exploring lithium resources in domestic and global markets. It has completed phase one of its investment in Australian lithium developer Pilbara Minerals in October.

Lithium carbonate min 99.5% ex works China Yn/t



Lithium hydroxide min 56.5% ex-works China Yn/t



China's newly installed capacity of power batteries used in new energy vehicles reached 62.2GWh in 2019, up by 9.2pc from a year earlier, showed data from China's automotive manufacturers association.

Timestamp proposal for cobalt hydroxide cif China price

Argus proposes to extend the timestamp for the weekly cobalt hydroxide cif China price assessment to better reflect trading patterns and market activity. Under the proposal, Argus will accept information until 5pm London time on the day of assessment (every Tuesday) rather than 5pm China time.

Argus will accept comments on this change to 17 March. To discuss comments on this proposal, please contact Ellie Saklatvala at ellie.saklatvala@argusmedia.com or +44 207 780 4308. Formal comments should be marked as such and may be submitted by email to ami@argusmedia.com or by post to Ellie Saklatvala, Argus Media, 84 Theobald's Road, London, WC1X 8NL, and be received by 17 March. Please note, formal comments will be published after the consultation period unless confidentiality is specifically requested.

For more news and analysis, please [click here](#)

MINOR METALS: PRICE INDEXES

Argus minor metals indexes (monthly averages)					
	Unit	Month index Feb 2020 low	Month index Feb 2020 high	Month index Jan 2020 final low	Month index Jan 2020 final high
Electronic metals					
Arsenic					
Min 99% du Rotterdam	\$/lb	0.88	0.98	0.89	0.99
Min 99% fob US warehouse	\$/lb	1.00	1.08	1.00	1.08
Bismuth					
Min 99.99% du Rotterdam	\$/lb	2.45	2.55	2.45	2.55
Min 99.99% fob China	\$/lb	2.21	2.31	2.21	2.30
Ingot min 99.99% fob US warehouse	\$/lb	2.65	2.90	2.71	3.01
Gallium					
Min 99.99% ex-works China	Yn/kg	970.00	1000.00	970.00	1000.00
Min 99.99% fob China	\$/kg	138.00	148.00	138.00	148.00
Min 99.99% cif Main Airport	\$/kg	145.00	160.00	146.78	159.78
Germanium					
Dioxide min 99.999% fob China	\$/kg	600.00	640.00	600.00	640.00
Dioxide min 99.999% du Rotterdam	\$/kg	714.38	740.63	728.33	788.33
Metal min 99.999% cif main airport	\$/kg	990.00	1069.38	1000.00	1100.00
Dioxide min 99.999% fob China	\$/kg	600.00	640.00	600.00	640.00
Min 99.999% fob China	\$/kg	925.00	1025.00	925.00	1025.00
Indium					
Min 99.99% du Rotterdam	\$/kg	135.00	145.50	132.00	144.00
Min 99.99% fob China	\$/kg	130.00	135.00	123.00	133.00
Ingot min 99.99% fob US warehouse	\$/kg	152.50	168.75	150.00	160.00
Selenium					
Min 99.5% du Rotterdam	\$/lb	5.68	7.47	5.94	7.50
Min 99.5% fob US warehouse	\$/lb	6.85	7.85	7.53	8.53
Tantalum					
Tantalite basis 25% Ta ₂ O ₅ cif main port	\$/lb	59.00	62.00	59.22	61.78
Min 99.8% du Rotterdam	\$/kg	262.50	272.50	258.89	271.67
Tellurium					
Min 99.99% du Rotterdam	\$/kg	45.75	55.50	45.00	55.00
Min 99.95% fob US warehouse	\$/kg	60.00	66.00	61.50	67.50
Zirconium					
Oxychloride 36% Zr(Hf)O ₂ fob China	\$/t	2080.00	2180.00	2080.00	2180.00
Battery metals					
Antimony					
Ingot min 99.65% fob China	\$/t	5875.00	6075.00	5561.11	5761.11
Min 99.65% cif US	\$/lb	2.59	2.79	2.50	2.65
Regulus grade II min 99.65% Sb du Rotterdam	\$/t	6093.75	6287.50	5722.22	5955.56
Regulus Trioxide grade min 99.65% Sb du Rotterdam	\$/t	6093.75	6287.50	5722.22	5955.56
Trioxide min 99.5% fob China	\$/t	5112.50	5212.50	4800.00	4900.00
Cadmium					
Min 99.95% du Rotterdam	\$/lb	1.16	1.20	1.15	1.20
Min 99.95% cif India	Rs/kg	213.13	223.13	212.22	225.00
Min 99.99% fob US warehouse	\$/lb	1.20	1.30	1.18	1.28
Min 99.99% du Rotterdam	\$/lb	1.19	1.25	1.17	1.23
Min 99.95% fob US warehouse	\$/lb	1.14	1.23	1.12	1.21
Min 99.99% cif India	Rs/kg	213.13	223.13	212.22	225.00
Cobalt					
Min 99.8% alloy grade du Rotterdam	\$/lb	17.66	18.58	16.75	17.43
Min 99.8% fob US warehouse	\$/lb	17.24	18.24	15.46	16.46
Min 99.8% chemical grade du Rotterdam	\$/lb	16.85	17.50	16.18	16.93
Oxide 72% ex-works China	Yn/kg	186.32	196.32	174.38	185.63

MINOR METALS: PRICE INDEXES

Argus minor metals indexes (monthly averages)					
	Unit	Month index Feb 2020 low	Month index Feb 2020 high	Month index Jan 2020 final low	Month index Jan 2020 final high
Light metals					
Magnesium					
Alloy min 90% Mg AZ91 fob China	\$/t	2454.21	2517.37	2385.00	2445.00
Min 99.9% fob US warehouse	\$/t	5126.00	5346.25	5539.00	5760.00
Min 99.9% du Rotterdam	\$/t	2276.25	2397.50	2170.00	2240.00
Min 99.9% fob China	\$/t	2157.37	2217.37	2085.00	2145.00
Powder 99.9% Mg 20-80 mesh fob China	\$/t	2377.37	2437.37	2305.00	2365.00
Manganese					
Briquette 97% Mn fob China	\$/t	1820.26	1870.26	1593.18	1643.18
Electrolytic metal min 99.7% fob US warehouse	\$/lb	1.08	1.12	0.93	0.97
Flake min 99.7% fob China	\$/t	1790.26	1840.26	1563.18	1613.18
Flake min 99.7% du Rotterdam	\$/t	2075.00	2212.50	1631.67	1703.89
Lump 95% Mn fob China	\$/t	1840.26	1910.26	1613.18	1683.18
Silicon					
5-5-3 min 98.5% Si fob China	\$/t	1620.00	1646.25	1583.33	1603.33
5-5-3 min 98.5% Si ddp Europe works	€/t	1799.38	1882.50	1679.44	1743.89
5-5-3 min 98.5% Si fob US warehouse	\$/lb	0.89	0.93	0.88	0.92
4-4-1 min 99% Si fob China	\$/t	1757.50	1783.75	1720.00	1740.00
4-4-1 min 99% Si ddp Europe works	€/t	1880.00	1969.38	1745.00	1800.00
3-3-0-3 min 99% Si fca Europe works	€/t	1958.75	2038.75	1810.00	1872.22
2-2-0-2 min 99.5% Si fca Europe works	€/t	2037.50	2128.13	1858.33	1908.33
Titanium					
Dioxide 93pc min rutile grade fob China	\$/t	2150.00	2200.00	2137.37	2192.11
Scrap 6Al 4V bulk weldable del US dealer/processor	\$/lb	2.25	2.75	2.25	2.75
Scrap 6Al 4V clips del US dealer/processor	\$/lb	1.50	1.70	1.50	1.70
Scrap 6Al 4V turnings aero quality del US dealer/processor	\$/lb	1.20	1.38	1.17	1.28
Scrap grade CP1 solids del US dealer/processor	\$/lb	1.55	1.70	1.57	1.72
Scrap grade CP2 solids del US dealer/processor	\$/lb	1.42	1.52	1.42	1.52
Scrap grade CP3/4 solids del US dealer/processor	\$/lb	1.00	1.15	1.00	1.15
Sponge TG-Tv 10x30mm du Rotterdam	\$/kg	6.50	6.70	6.54	6.94
High-temperature metals					
Chromium					
(alumino-thermic) min 99% dp Rotterdam	\$/t	6118.75	6500.00	5900.00	6355.56
Hafnium					
Min 99% max 1% Zr du Rotterdam	\$/kg	725.00	772.50	735.56	786.67
Molybdenum					
Oxide min 57% Mo du Rotterdam	\$/lb Mo	10.14	10.38	9.71	9.93
Oxide min 57% fob US warehouse	\$/lb	10.35	10.46	9.74	9.92
Niobium					
Niobium (columbite) concentrate min 50% Nb ₂ O ₅ cif main port	\$/lb	8.88	9.29	9.02	9.36
Rhenium					
APR min 69.2% Re (basic grade) du Rotterdam	\$/kg Re	650.00	850.00	650.00	850.00
APR min 69.4% Re (catalyst grade) dp Rotterdam	\$/kg Re	1100.00	1200.00	1100.00	1200.00
Pellets min 99.9% Re dp Rotterdam	\$/lb	475.00	545.00	480.56	550.56
Tungsten					
APT du Rotterdam	\$/mtu WO ₃	234.38	242.50	225.00	235.00
APT fob China	\$/mtu WO ₃	233.38	240.25	225.00	235.00
Carbide powder (3-4micron) fob China	\$/kg	31.06	32.06	30.00	31.00
Oxide (Yellow/Blue oxide) fob China	\$/t	23837.50	24525.00	23000.00	24000.00
Vanadium					
Pentoxide fused flake min 98% du Rotterdam	\$/lb V ₂ O ₅	6.31	6.81	6.03	6.67
Pentoxide 98% V ₂ O ₅ fob China	\$/lb	6.64	6.87	6.10	6.30

BASE METALS: MARKET COMMENTARY

US Ni: Premiums hold amid slowing spot trade

US spot market nickel premiums for refined nickel were flat in the latest week amid thin spot trading.

Nickel premiums for full truckload melting grade, 4x4inch cathodes were assessed at 34-40¢/lb and premiums for full truckload plating grade, 1x1inch cathodes at 60-70¢/lb, both unchanged from the prior week.

Inquires for spot refined nickel units were minimal as consumers were adjusting to this week's fall in LME nickel prices and the global impact of the coronavirus.

The coronavirus outbreak in China has disrupted global nickel supply and Russian metals producer Norilsk Nickel (Nornickel) said the impact will largely affect the upcoming second and third quarters of this year.

Nornickel forecast that global primary nickel consumption will rise by 3pc on the year to 2.583mn t in 2020, with primary nickel demand in China's stainless market expected to edge down by 2pc.

Nickel stocks in LME warehouses increased by 2.2pc to 229,860t, up from 224,766t a week earlier.

The official three-month LME nickel contract settled down by 3.3pc to \$12,365/t from \$13,790/t the week prior.

Metal futures: Nickel falls to near 8-month low

Base metals prices on the LME were mostly lower today amid ongoing concerns over the spread of the coronavirus and its effects on the global economy.

The three-month LME nickel contract fell by 2.1pc to \$12,365/t, its lowest close since 3 July 2019.

Overall market sentiment remains weak as the virus spreads, with fears persisting over its impact on the global economy, demand and manufacturing. China's latest manufacturing purchasing managers index is due to be released on 29 February and many investors will look to that for insight into the virus' impact on the country.

Equity markets were broadly lower. Japan's Nikkei 225 closed 2.1pc lower while the Shanghai Composite was little changed. In Europe, Germany's Dax was down by 3.2pc and the UK's FTSE 100 was off by 3.5pc. In the US, the Dow Jones Industrial Average was off by 1.5pc in early afternoon trade, marking a sixth day of losses with a cumulative decline of 9pc.

The three-month LME copper contract was little changed at \$5,640/t.

In the US, the next most active copper contract on the Comex edged down by 0.1pc to \$2.5715/lb.

Three-month LME aluminium edged down by 0.4pc to \$1,690.5/t.

Japan's imports of primary aluminium fell in January, ac-

Aluminium					
	Unit	Date of assessment	Low	High	±
Premiums					
P1020 US midwest premium	\$/lb	26 Feb	0.1350	0.1400	nc
P1020 US midwest transaction	\$/lb	27 Feb	0.8927	0.8980	-0.0025
6061 billet US premium	\$/lb	26 Feb	0.0700	0.0900	nc
6063 billet US premium	\$/lb	26 Feb	0.0600	0.0800	nc
6063 billet del US transaction	\$/lb	27 Feb	0.9527	0.9780	-0.0025
6063 extrusion premium billet del Italy	\$/t	26 Feb	280.00	310.00	nc
6063 extrusion premium billet del Germany	\$/t	26 Feb	300.00	320.00	nc
6063 extrusion duty paid premium in-warehouse Rotterdam	\$/t	26 Feb	270.00	290.00	nc
P1020 duty paid 3-month premium in-warehouse Rotterdam	\$/t	26 Feb	150.00	155.00	nc
P1020 duty paid forward quarter premium cif Japan	\$/t	26 Feb	83.00	83.00	nc
P1020 duty paid spot premium cif Japan	\$/t	26 Feb	83.00	83.00	nc
P1020 duty paid spot premium in-warehouse Rotterdam	\$/t	26 Feb	150.00	155.00	nc
P1020 duty unpaid 3-month premium in-warehouse Rotterdam	\$/t	26 Feb	100.00	110.00	nc
P1020 duty unpaid spot premium in-warehouse Rotterdam	\$/t	26 Feb	100.00	110.00	nc
Aluminium-alloy Die Castings 12 fob China	\$/t	27 Feb	1,470	1,490	nc
Aluminium-alloy Die Castings 12 cif Japan	\$/t	27 Feb	1,490	1,510	nc

Copper and brass					
	Unit	Timing	Low	High	±
Copper cathode premiums					
Cathode grade A del US midwest	\$/lb	26 Feb	0.0650	0.0700	-0.0050
Cathode grade A US midwest transaction	\$/lb	27 Feb	2.6365	2.6415	-0.0050
Cathode grade A in-warehouse Rotterdam	\$/t	25 Feb	20.00	45.00	nc
Cathode grade A premium del southern Europe	\$/t	25 Feb	50.00	70.00	nc
Brass/bronze alloys del US					
C89833	\$/lb	27 Feb	3.0500	3.1000	nc
C89836	\$/lb	27 Feb	3.1000	3.1500	nc

ording to the country's finance ministry. While the industry group Japan Aluminium Association said the country's shipments and production of aluminium products also fell on the year.

The three-month LME lead contract dropped by 0.7pc to \$1,827/t.

Three-month LME zinc decreased by 0.8pc to \$2,020/t.

The three-month LME tin contract fell by 1.5pc to

BASE METALS: MARKET COMMENTARY

\$16,375/t.

The standard aluminium alloy contract rose by 1.4pc to \$1,400/t while the North American aluminium alloy contract increased by 0.8pc to \$1,270/t.

Three-month cobalt was unchanged at \$33,500/t.

Europe Ni: Market static amid viral concern

Spot nickel premiums in Europe were unchanged over the past week amid increasing concern on the potential economic disruption on the continent as more cases of coronavirus were reported.

The coronavirus outbreak in China since December last year has now spread outside the country, with the first European cases confirmed in France. Cases have since been reported in Germany and the UK, but the latest outbreak in Northern Italy over the past few days has heightened awareness on the potential economic disruption of the virus. Italy now has the highest number of coronavirus infections outside Asia, with total cases last reported at 283.

Although manufacturing activities are not yet affected, some companies have suggested staff work from home if possible. Many are keeping a close watch on the situation and staying on the side lines amid increased market volatility.

The three-month nickel contract on the London Metal Exchange fell to a near eight-month low at \$12,365/t today, and down by 3.3pc from the previous week.

The Argus weekly assessment for the in-warehouse Rotterdam nickel full-plate cathode premium was unchanged week on week at \$80-130/t.

The 4x4 cut cathode nickel premium was flat over the

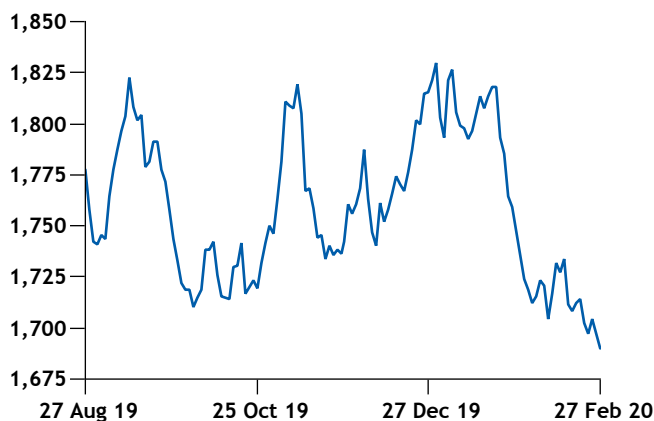
Nickel					
	Unit	Timing	Low	High	±
Europe premiums					
Briquettes in-warehouse Rotterdam	\$/t	27 Feb	60.00	100.00	nc
4x4 inch cathode in-warehouse Rotterdam	\$/t	27 Feb	220.00	250.00	nc
Full plate cathode in-warehouse Rotterdam	\$/t	27 Feb	80.00	130.00	nc
Cathode premiums del US					
4x4inch (small lots)	\$/lb	27 Feb	0.50	0.55	nc
4x4inch (truckloads)	\$/lb	27 Feb	0.34	0.40	nc
4x4inch (truckloads) transaction	\$/lb	27 Feb	1.2467	1.3067	-0.0068
1x1inch (small lots)	\$/lb	27 Feb	0.65	0.75	nc
1x1inch (truckloads)	\$/lb	27 Feb	0.60	0.70	nc
China					
Metal min 99.9% Ni ex-warehouse	yuan/t	27 Feb	100,500	103,000	-500
Sulphate min 22% ex-works China excl. VAT	\$/t	27 Feb	3,030.71	3,788.39	+67.86
Sulphate min 22% ex-works China	yuan/t	27 Feb	24,000	30,000	500

Zinc					
	Unit	Timing	Low	High	±
Special high grade premium in-warehouse Rotterdam	\$/t	24 Feb	40.00	70.00	nc
Special high grade premium del US	\$/lb	24 Feb	0.0800	0.0900	nc
Special high grade del US transaction	\$/lb	27 Feb	0.9867	0.9967	-0.0068

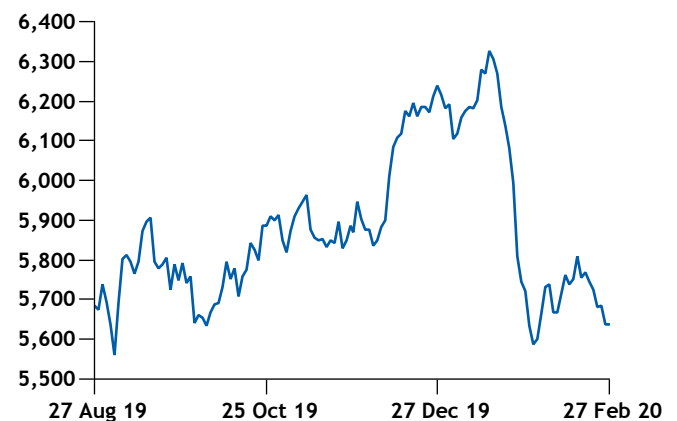
Lead					
	Unit	Timing	Low	High	±
Lead Ingot primary 99.97% premium del US	\$/lb	25 Feb	0.0850	0.1000	nc
Lead Ingot primary 99.97% del US transaction	\$/lb	27 Feb	0.9332	0.9482	nc

week at \$220-250/t and the nickel briquette premium was assessed unchanged at \$60-100/t.

Aluminium LME 3 months official



Copper LME 3 months official



BASE METALS: MARKET NEWS AND ANALYSIS

Japan's Al imports fall sharply in January

Japan's imports of primary aluminium ingots fell sharply in January from a year earlier, undermined by weaker imports from Australia, Russia and the UAE.

Japan imported a preliminary 97,845t of primary aluminium ingots in January, down by 23pc from a year earlier, according to data released today by the finance ministry. The imports hit the lowest level since March 2019. The imports were valued at ¥20bn (\$182mn), also down by 31pc.

Of the total, imports of primary aluminium from Australia fell by 8pc from a year earlier to 34,641t. Imports from Russia dropped by 82pc to 2,865t, while deliveries from the UAE also fell by 15pc to 9,339t. Imports from New Zealand rose by 40pc to 16,323t in January.

Japan's aluminium imports last year fell to the **lowest level in three years**, pressured by weaker demand from the manufacturing sector. But import demand has since further fell as Japanese fabricators reduced their **demand outlook** for the January-March quarter.

The country's **output and shipments of rolled and extruded aluminium products** both fell for a sixth straight month in January, as domestic and export demand remained sluggish. *By Rieko Suda*

Japan's Al alloy imports rebound in January

Japan's imports of aluminium alloy ingots in January rebounded from December last year but still remained sluggish against a year earlier because of weaker car export demand.

Japan imported 104,695t of aluminium alloy ingots, or ADC12, in January, down by 10pc from a year earlier but up by 17pc from a month earlier, according to data released today by the finance ministry. The January imports were valued at ¥20bn (\$182mn), down by 17pc from a year previously.

Of the January total, imports from China fell by 47pc to 20,019t, while imports from the UAE rose by 34pc to 22,661t. Imports from Russia fell by 4pc to 19,719t.

Japanese aluminium alloy imports last year **fell for the first time since 2015**. Demand for die-casting and casting products remain pressured by weaker overseas car output by Japanese manufacturers despite steady domestic car production.

The country's shipments of aluminium alloy products dropped by 4pc to 802,760t last year compared with 2018, according to industry group the Japanese aluminium alloy refiners association. Of the 2019 total, shipments to die-casting producers dropped by 7pc to 435,501t. Shipments for output of casting products edged up by 2pc to 211,543t.

Japan's trade and industry ministry (Meti) and the country's car industry last week began to examine the impact from the coronavirus outbreak on car production and supply chains, as well as possible financing and policy measures. Meti plans to co-ordinate with Japanese car and parts manufacturers to ensure a swift response mechanism in case of any supply interruption. Japanese car and parts production plants in China have mostly resumed operations but at reduced rates.

Japanese domestic car output by eight main manufacturers edged down by 0.2pc to around 9.2mn last year compared with 2018. December output fell by 8pc from a year earlier to 690,153, while exports also fell by 8pc to 382,512. *By Rieko Suda*

Nornickel warns virus could disrupt nickel through Q3

Russian metals producer Norilsk Nickel (Nornickel) yesterday warned that the disruption to global nickel demand and supply chains caused by the coronavirus outbreak in China will have a lingering impact throughout the second and third quarters of this year.

Nornickel said in its full-year 2019 results that China's restrictions on mobility, extended holidays and mandatory closures implemented from late January have disrupted nickel end user demand to the extent that industry losses incurred in the first quarter are unlikely to be fully recouped in the second and third quarters.

The company also stated that nickel supply in China will remain disrupted as many migrant workers have yet to return to mines and smelters, while the ramp-up of new nickel pig iron (NPI) capacity in Indonesia could be delayed as Chinese workers involved in the construction of new smelters and high pressure acid leaching facilities in the country have been put under quarantine.

The coronavirus is a major downside risk to Nornickel's otherwise neutral outlook of a balanced nickel market in 2020. The company said it expects Indonesian NPI output to continue growing, with an estimated 150,000t of nickel units set to come on line.

Nornickel does not expect Indonesia's ban on the export of nickel ore from January 1 this year to have any major short-term impact on the wider nickel market as China had accumulated ore inventories totalling 14mn t ahead of the ban. Chinese NPI smelters may also have access to increased supply from the Philippines.

But the Russian group does expect the ore ban to have a moderate effect in the medium term and anticipates that Chinese NPI output will fall by 75,000t in 2020.

FERRO-ALLOYS: BULK-ALLOY MARKET COMMENTARY

Europe: FeCr oversupply remains

Prices for ferro-chrome have held steady at historically low levels on oversupply and subdued demand from stainless steel producers. Ferro-silicon prices stabilised after rising in the previous assessment, while prices for manganese alloys are flat as limited demand offsets rising manganese ore prices.

Ferro-chrome

Prices for high carbon alloy remained unchanged today at 77-84€/lb ddp as producers struggled to make a profit. A European trader visiting South African smelters this week said “nobody is making any money” there and many smelters are considering output cuts. Samancor and Glencore-Merafe have already cut production.

Plenty of Kazakh material has been available on the spot market after producers there started targeting the European market following the coronavirus outbreak in China. Demand from stainless steel plants in Europe is subdued because of import pressure.

Prices for low carbon alloy were also assessed flat at \$1.55-1.65/lb ddp.

Ferro-manganese

The market remained stable at €930-980/t ddp for high carbon alloy and €1,350-1,450/t ddp with material still being traded within the range of the previous assessment on 25 February.

One trader sold a small volume of high carbon alloy to a foundry for €1,000/t, but this was at a premium because of the volume involved. A deal was done for 250t at €945/t ddp and most offers were within the range. Manganese ore prices have been rising since December, but low demand from steel mills has kept alloy prices stable since increasing earlier in the year.

Silico-manganese

Prices were flat at €920-980/t ddp with material still being traded within the range of the previous assessment.

Some traders said they are having trouble getting trucks in northern Italy as the coronavirus outbreak widens. Steel operators said they are functioning as normal in the region. There were also some delays at Ukrainian producers, un-related to the virus. A deal was concluded for 200t in Germany at €940/t ddp.

Bulk alloy and feedstock prices

Market	Unit	27 Feb		±
		Low	High	
Ferro-chrome				
Charge chrome 52% Cr ddp Europe *	\$/lb Cr	1.01	1.01	nc
HC basis 60% Cr 6-8% C ddp NWE	\$/lb Cr	0.77	0.84	nc
LC Cr min 65% 0.10% C ddp Europe works	\$/lb Cr	1.55	1.65	nc
Charge chrome fob US	\$/lb	0.73	0.77	nc
HC min 60-65% Cr 6-8% C fob US warehouse	\$/lb Cr	0.84	0.92	+0.005
LC min 60-65% Cr 0.05% C max 1.5% Si fob US warehouse	\$/lb Cr	1.93	1.98	+0.030
LC min 60-65% Cr 0.10% C max 1.5% Si fob US warehouse	\$/lb Cr	1.65	1.72	-0.015
LC 60% Cr 0.15% C fob US warehouse	\$/lb	1.62	1.64	-0.030
HC 50% Cr ex-works China	Yn/t	5,800	6,100	-100
HC min 60% Cr ex-works India	Rs/t	61,000	62,000	nc
Charge chrome 50-55% Cr 6-10% C cif China	\$/lb	0.69	0.70	nc
HC Indian 60-62% Cr 6-10% C cif China	\$/lb	0.68	0.69	nc
HC Kazakh 65-70% Cr 8-8% C cif China	\$/lb	0.75	0.76	nc
Chrome ore				
48-49.99pc (South Kaliapani mines) OMC price ex-works India	Rs/t	9,157	9,157	nc
50-52pc (Sukrangi mines) OMC price ex-works India	Rs/t	8,291	8,291	nc
South African concentrate 42-44% Cr ₂ O ₃ cif China	\$/t	148.00	152.00	nc
South African concentrate 42-44% Cr ₂ O ₃ fca China	Yn/mtu	29.00	31.00	nc
Turkish lump 40-42% cif China	\$/t	180.00	185.00	nc
Turkish lump 40-42% fca China	Yn/mtu	42.00	44.00	nc
South African UG2 concentrate 40-42% Cr ₂ O ₃ cif China main ports	\$/t	130.00	132.00	nc
South African UG2 concentrate 40-42% Cr ₂ O ₃ fca China ports	Yn/mtu	26.50	28.00	nc
Ferro-manganese				
HC Mn 78% ddp Europe works	€/t	930	980	nc
MC 78% Mn 1.5-2% C 0.15-0.20 P ddp Europe works	€/t	1,350	1,450	nc
HC min 80% Mn 6-8% C fob North America warehouse (25 Feb)	\$/t	1,080	1,150	+40
MC 80% Mn 1-2% C fob North America warehouse	\$/lb	0.85	0.90	nc
HC 65% Mn ex-works China	Yn/t	5,750	6,050	-50
HC 75% fob China (25 Feb)	\$/t	1,150	1,180	-40
HC 75% Mn ex-works China	Yn/t	6,550	6,850	-50
HC min 65-70% Mn ex-works India	Rs/t	60,000	61,000	-1,000
HC min 70-75% Mn ex-works India	Rs/t	62,000	63,000	-1,000

FERRO-ALLOYS: BULK-ALLOY MARKET COMMENTARY

Ferro-silicon

Prices held steady at €1,220-1,270/t ddp, stabilising after rising in the previous assessment on 25 February.

A trader bought 200t of material in warehouse at €1,200/t ddp. One seller offered material at €1,285/t but received bids at €1,220/t. A deal is expected to conclude between those two counterparties and within the range of the previous assessment.

Prices have risen in recent weeks because of tight supply from European and international suppliers.

US: HC FeMn lifts higher

High-carbon ferro-manganese prices rose in the past week as suppliers successfully raised offers to capitalize on tightening inventories amongst other sellers. But low-carbon ferro-chrome markets have been mixed with higher offers put forward for certain grades of alloy and lower levels for others amid uncertain consumer demand.

Ferro-chrome

The Argus assessment for 65pc grade alloys with high carbon content edged up to 84-92¢/lb today from 83-92¢/lb. Suppliers successfully hiked offers for low-chrome bearing alloy to 88¢/lb delivered.

Market participants noted flat pricing but pointed to higher replacement costs as a potential reason for upward momentum in the near-term. Some sellers are focusing on alloy bearing more than 65pc Cr content in order to capture a premium to the otherwise flat pricing market for standard grade alloy.

Prices for low-carbon alloy with a maximum of 0.05pc carbon content rose to \$1.93-1.98/lb from \$1.90-1.95/lb on 20 February. Supplier offers for alloys rose in the latest week as sellers attempt to put some upward pressure on the market. Higher offers have been met with mixed responses from consumers, but sellers have successfully raised offering ranges in recent weeks amid choppy trading activity.

Prices for low-carbon alloy with a maximum of 0.10pc carbon content declined to \$1.65-1.72/lb from \$1.68-1.72/lb on 20 February. Suppliers are willing to offer lower for low-carbon alloy to compete with sparse spot inquiries for low-carbon alloy. A few suppliers are long on inventory can offer more competitively than others, setting the low end of the market.

Prices for low-carbon alloy with a maximum of 0.15pc carbon content declined to \$1.62-1.64/lb from \$1.65-1.67/lb on 20 February, following the decline in low-carbon alloy with a maximum of 0.10pc carbon content.

Bulk alloy and feedstock prices

Market	Unit	27 Feb		±
		Low	High	
Manganese ore				
Ore 44-46% lumpy ore fca China	Yn/mtu	39.00	41.00	-1.000
Ore 36-38% Mn cif China	\$/dmu	4.05	4.20	+0.100
Ore 48-50% Mn cif China	\$/dmu	4.30	4.45	+0.200
Ore 44-46% Mn cif China	\$/dmu	4.50	4.65	+0.200
Silico-manganese				
65% Mn ddp Europe works	€/t	920	980	nc
Min 65% Mn 16% Si fob North America warehouse	\$/lb	0.51	0.53	-0.010
65% Mn 17% Si fob China (25 Feb)	\$/t	1,100	1,130	-40
65% Mn 17% Si ex-works China	Yn/t	6,100	6,300	-100
60% Mn 14% Si ex-works India	Rs/t	62,000	63,000	nc
65% Mn 15% Si fob India East Coast	\$/t	960	970	-10
60% Mn 14% Si fob India East Coast	\$/t	870	880	-10.000
Ferro-silicon				
75% Si ddp NWE	€/t	1,220	1,270	nc
Min 75% Si max 0.1% C fob US warehouse	\$/lb Si	0.79	0.83	nc
72% Si fob China	\$/t	1,130	1,150	nc
72% Si ex-works China	Yn/t	5,400	5,700	nc
75% Si fob China	\$/t	1,150	1,180	nc
75% Si ex-works China	Yn/t	5,800	6,000	nc
Low aluminium 75% Si 0.1% Al fob China	\$/t	1,260	1,280	nc
Low aluminium 75% Si 0.5% Al fob China	\$/t	1,210	1,230	nc
75% Si ex-works India	Rs/t	88,000	89,000	nc
Calcium-silicon				
Min 28% Ca 55-60% Si fob China (25 Feb)	\$/t	1,340	1,370	nc
Min 28% Ca 55-60% Si ex-works China (25 Feb)	Yn/t	9,300	9,600	nc
Min 30% Ca 55-60% Si fob China (25 Feb)	\$/t	1,370	1,400	nc
Min 30% Ca 55-60% Si ex-works China (25 Feb)	Yn/t	9,500	9,800	nc

* Quarterly benchmark price

Ferro-manganese

Prices for high-carbon alloy rose to \$1,080-1,150/gt from \$1,050-1,100/gt on 20 February. Suppliers noted tight inventories of alloy in the domestic market. Otherwise, choppy demand has left suppliers uncertain where to offer alloy in recent weeks amid a more liquid and tumultuous international market. In the latest week, suppliers successfully tested higher offers for spot inquiries ranging from \$1,150/gt on an in-warehouse basis for multiple truckloads, while other sellers were looking to lock up sales below \$1,000/gt.

Prices for medium-carbon alloy remained unchanged at 85-90¢ from 20 February. Market participants noted no spot inquiries in the latest week.

FERRO-ALLOYS: BULK-ALLOY MARKET COMMENTARY

Electrolytic manganese prices edged down to \$1.05-1.09/lb from \$1.08-1.13/lb on 20 February. Sellers shifted their offers down partially based on costs to restock metal with imported alloy. Market participants received offers for European traders between \$1,095-2,000/t, down from \$2,000-2,100/t the previous week. Meanwhile, some traders received offers from producers in China at \$1,095/t on a fob basis but expressed uncertainty regarding lead times. Some traders are skeptical of the recent downturn in electrolytic manganese in the previous two weeks after a sharp increase at the beginning of February. As a result, prices are expected to strengthen heading into March following as confidence in the amount of metal available for import may be overblown.

Silico-manganese

Prices for 65/17 grade alloy slipped to 51-53¢/lb from 52-54¢/lb on 20 February. A consumer purchased 1,500t of alloy at 52¢/lb in-warehouse after weeks of limited spot inquiries. Market participants expect the transaction to set the range for upcoming negotiations for quarterly volumes.

Ferro-silicon

The assessment for 75pc grade alloy remains unchanged at 79-83¢/lb. Some domestic suppliers are offering in the high-80¢/lb range on a delivered basis for small lots but did not mention specific transactions. Elsewhere, no spot inquiries were mentioned in the past week.

Other market participants said they expect the shortfall in available alloy in the US to last for the rest of the year. Additionally, logistical issues in China stemming from the coronavirus are hindering raw material exports to Malaysia, a typically lower-cost producer.

India: Sluggish demand weighs on FeMo

Indian domestic ferro-manganese prices have fallen in the past few days as sellers cut offer levels in an attempt to sell off material in the face of sluggish buying interest.

Ferro-chrome

Indian ferro-chrome prices were assessed unchanged today at Rs61,000-Rs62,000/t ex-works for 60pc alloy.

Producers previously ramped up output in anticipation of increased demand after China's lunar new year holiday but measures to combat the spread of the coronavirus - notably a drop in exports to China - have now resulted in Indian suppliers sitting on higher inventory levels, while domestic demand remains fairly muted.

Several market participants said they see potential for prices to come down further in the near-term, as sellers attempt to reduce stocks and generate cash flow. Many are waiting for mining company OMC to declare its prices for March shipment - a further rise in domestic ore prices would lead to higher costs and make it harder for small firms to maintain their margins.

OMC has increased the base price for its January tender by 1.63pc from January's tender on limited demand for ferro-chrome. In its January tender, the firm slightly increased the base price after limited demand forced it to roll over the base price for its December chrome ore tender.

The firm has increased the base price for 48.00-49.99pc ore from its South Kaliapani mines to 6,919 rupees/t (\$96.09/t), up from Rs6,808/t. It is offering 48.00-49.99pc material from its Sukrangi mines at Rs6,919/t, up from Rs6,808/t. Alloy producers are expected to bid aggressively for future chrome ore tenders as they anticipate possible supply disruptions from April.

Ferro-manganese

Suppliers lowered their prices by Rs1,000/t on limited demand for alloy in the domestic market. Prices were assessed today at Rs62,000-63,000/t ex-works for 70-75pc grade alloys, down from Rs63,000-64,000/t ex-works on 25 February. Domestic prices for 65-70pc grade alloy were assessed at Rs60,000-61,000/t ex-works today, down from Rs61,000-62,000/t ex-works.

Suppliers are facing a cash crunch have lowered prices to reduce inventory levels, while others kept their prices stable as they wait for March restocking.

Indian state-controlled producer Manganese Ore India (Moil) has revised up its manganese ore prices by up to 15pc for January-March from December prices leading to higher input cost for alloy producers.

Silico-manganese

Silico-manganese prices were assessed flat today at Rs62,000-63,000/t ex-works, unchanged from 25 February.

Demand from steelmakers remains limited due to muted demand from steel-consuming sectors, with finished steel inventories now piling up and market participants discussing the potential for steel output cuts in March. Some sources are hopeful that increased spending on infrastructure from April could boost demand for steel products and therefore alloys used in steelmaking. But until then, the manganese alloy market is expected to remain under pressure.

Exporters have cut prices on low overseas demand and

FERRO-ALLOYS: BULK-ALLOY MARKET COMMENTARY

exchange rate movements. Prices for 60/40 grade were assessed at \$870-880/t fob east coast India today, down from \$880-890/t on 25 February. Prices for 65/15 grade were assessed at \$960-970/t fob east coast, down from \$970-980/t fob.

Ferro-silicon

Lower demand has curbed any price gains although domestic supply remains tight. Suppliers kept their offer prices stable at Rs88,000-89,000/t ex-works north east India, unchanged from 25 February amid limited demand from stainless steel sector.

Most producers are fully booked for the time being and have limited alloy to offer on the spot market. Suppliers with inventories are offering material at higher prices, with deals being done within the assessed range.

China: Low demand weighs on FeCr, Mn alloys

Prices for ferro-chrome and manganese alloys moved down on weak demand from steelmakers. Ferro-silicon producers maintained their prices to wait for steelmakers' March tender prices.

Ferro-chrome

The range for 50pc grade alloy dropped to 5,800-6,100 yuan/t (\$830-870/t) ex-works today from the 25 February assessment of Yn5,900-6,200/t on reduced demand from stainless steel mills and lower offer prices from suppliers.

Steelmakers were forced to cut output because of higher stocks and falling steel prices. Steel stocks at major steel mills rose to around 21.3mn t in mid-February amid traffic restrictions to contain the spread of the coronavirus.

Activity was limited in the chrome ore market as alloy smelters were not keen to restock ore on expectations of lower prices because of high port stocks and the fall in alloy prices.

Port prices for South African UG2 40-42pc grade concentrate held at Yn26.50-28/mtu today, with import prices steady at \$130-132/t cif. Port prices for South African 42-44pc grade were stable at Yn29-31/mtu and import prices held at \$148-152/t cif. Port prices for Turkish 40-42pc grade lumpy ore remained at Yn42-44/mtu, with the import range unchanged at \$180-185/t cif.

Ferro-manganese

Plentiful spot supplies and lower ore feedstock costs weighed on the market. *Argus* assessed the range for 65pc grade high-carbon alloy lower by Yn50/t from 25 February at Yn5,750-6,050/t ex-works today, with 75pc grade prices also falling by Yn50/t to Yn6,550-6,850/t ex-works. Spot demand remained weak, with trading firms observing the market to wait for steelmakers to issue their March tender prices.

Silico-manganese

The market fell as suppliers cut offer prices in response to limited demand and surplus inventories. *Argus* assessed the range for 65/17 grade alloy at Yn6,100-6,300/t ex-works today, down by Yn100/t from 25 February, with buyers bidding below Yn6,200/t.

The ore market moved down, as weak alloy demand outweighed a rise in ore import costs. The range for Australian lumpy 44-46pc grade ore dropped by Yn1/mtu from 25 February to Yn39-41/mtu deq today.

An expected rise in alloy demand prompted mining companies to raise their export prices to China, although trading activity remained low amid the fall in alloy and spot ore prices.

The import range for Australian lumpy 44-46pc ore was assessed higher by 0.20¢/dry metric tonne (dmtu) from 20 February at \$4.50-4.65/dmtu cif today, with Australian chip 48-50pc prices also rising by 0.20¢/dmtu to \$4.30-4.45/dmtu cif over the same period.

Import prices for South African lumpy 36-38pc grade moved up to \$4.05-4.20/dmtu cif today, up by 10¢/dmtu from the 20 February assessment.

Ferro-silicon

The market was stable as alloy producers maintained their offer prices to wait for March tender prices from steelmakers. Domestic prices for 72pc grade alloy remained at Yn5,400-5,700/t ex-works today, with prices for 75pc grade alloys steady at Yn5,800-6,000/t ex-works.

Export prices were assessed unchanged at \$1,130-1,150/t fob for 72pc grade alloy and \$1,150-1,180/t fob for 75pc grade alloy, in line with the stable domestic prices.

FERRO-ALLOYS: NOBLE-ALLOY MARKET COMMENTARY

Europe: FeW extends gains on tight supply

Ferro-tungsten prices continued to climb higher as Europe faced a supply shortfall in the spot market, whereas most other noble alloy markets declined on softening demand or remained flat.

Ferro-molybdenum

The spot market price for 65-70pc grade alloy, which dropped to around \$22.60/kg yesterday, rebounded to around \$23/kg today but were still under pressure from weakening demand and falling prices in China.

Export prices for 60pc grade alloy fell for the third consecutive session to reach \$25.50-26/kg fob China on 27 February, losing more than \$2/kg in the last two weeks, Argus data shows. In Europe, Argus assessed prices for 65-70pc grade alloy slipped to \$23-23.50/kg on 27 February, down from the previous assessment of \$23.50-24/kg on 25 February, down from \$24.90-25.50/kg on 20 February.

Ferro-niobium

Prices for the niobium alloy fell sharply after holding stable for most of February on weakening spot demand and lower bids from consumers. This decline in prices came despite a small uptick in raw material columbite prices in China, traders said. One deal for 1t of 65pc grade alloy was concluded at \$37.60/kg duty unpaid Rotterdam, while a producer reported offering material at \$37.50/kg in Europe this week. Argus assessed prices for 65pc grade alloy at \$37.50-38/kg on 27 February, down from the previous assessment of \$38-39.50/kg on 25 February.

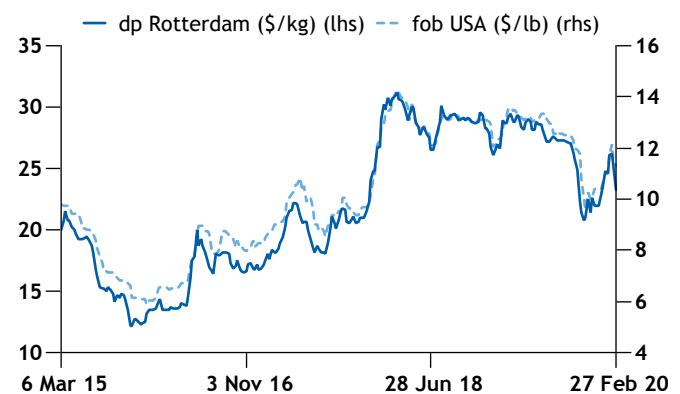
Ferro-titanium

Low spot demand kept prices steady at \$3.50-3.65/kg for Russian duty-unpaid and \$3.70-3.85/kg for western duty-free lump in warehouse Rotterdam. Reduced demand in the automotive supply chain and thereby from the steel industry has dampened demand for ferro-titanium. There was active competition on prices for consumer business, while traders have been able to negotiate deals at a discount from producers.

But ferro-titanium producers are facing margin pressures because of falling alloy prices and rising raw material costs. Scrap prices in Europe began to rise towards the end of February. A contango has formed on forward shipments from the US where prices were increasing because of a shortage of scrap from the titanium machining market. On the spot market, prices for Ti-6Al-4V alloy turnings edged up 3¢/lb to 81-86¢/lb delivered duty paid UK.

Noble-alloy and feedstock prices				
Market	Unit	27 Feb		±
		Low	High	
Ferro-boron				
17% B fob warehouse US	\$/lb	1.45	1.65	-0.025
Ferro-molybdenum				
60% Mo du Rotterdam	\$/kg Mo	22.90	23.50	-0.550
65-70% Mo dp Rotterdam	\$/kg Mo	23.00	23.50	-0.500
Min 65% Mo max 1.5% Si fob North America warehouse	\$/lb Mo	11.20	11.40	-0.225
60% Mo fob China	\$/kg	25.50	26.00	-0.400
60% Mo ex-works China	Yn/t	107,000	110,000	-1,500
60% Mo ex-works India	Rs/kg	1,100	1,120	nc
Ferro-niobium				
Min 65% Nb du Rotterdam	\$/kg Nb	37.50	38.00	-1.000
65% Nb fob US warehouse (31 Jan)	\$/lb	17.35	18.10	+1.350
Min 66% Nb Brazilian Imports fca China port (25 Feb)	Yn/t	200,000	205,000	nc
Ferro-tungsten				
Min 75% W du Rotterdam	\$/kg W	36.00	37.00	+0.500
75% W fob North America warehouse	\$/lb	16.00	16.50	nc
75% ex-works China	Yn/t	160,000	162,000	nc
Min 75% W fob China	\$/kg	36.00	37.00	+3.000
Ferro-titanium				
Russian min 70% Ti du Rotterdam	\$/kg Ti	3.50	3.65	nc
Min 70% Ti dp/duty-free Rotterdam	\$/kg Ti	3.70	3.85	nc
70% Ti fob North America warehouse	\$/lb	1.87	2.00	nc
30% Ti ex-works China (25 Feb)	Yn/t	10,000	10,500	nc
70% Ti rutile ex-works China (25 Feb)	Yn/t	33,500	34,500	nc
70% scrap grade ex-works China (25 Feb)	Yn/t	32,500	33,500	nc

Ferro-molybdenum 65-70% Mo Europe v US



FERRO-ALLOYS: NOBLE-ALLOY MARKET COMMENTARY

Ferro-tungsten

A shortage in supply and shrinking inventory levels pushed prices for ferro-tungsten spot prices higher in Europe. Speciality steelmakers have re-entered the spot market to purchase 5t-15t of material for immediate consumption and in anticipation of a further supply crunch. Sellers confirmed some shipments of alloy have left China and will reach European shores in around 4 weeks, until which the supply shortfall may persist.

One truckload of the tungsten alloy was sold for \$36.05/kg delivered duty paid to consumer in Europe, while another sale of 15t of material was concluded at \$36.50/kg spot delivery Rotterdam. Prices for 75pc grade alloy rose to \$36-37/kg on 27 February, up from the previous range of \$35-37/kg on 25 February.

Ferro-vanadium

Falling Chinese domestic and export prices coupled with plentiful supply in Europe and softening spot demand weighed on the ferro-vanadium market in Europe. But prices were unchanged. Argus' assessment for 78-82pc grade alloy stayed stable at \$27-28/kg on 27 February.

Consumers are entering the spot market for purchase of material for immediate requirements only. Although a sale of 10t of alloy was made at \$28.25/kg delivery duty paid to customer earlier this week, prices have slipped in the latter half of the week. A trader bought 5t of alloy at \$27.50/kg yesterday duty paid Rotterdam.

US: Mo continues decline

Molybdenum oxide prices dropped further in the past week on concerns that muted demand in South Korea will affect global demand in the near-term, while the decline in ferro-molybdenum offers and sales prices was less steep.

Ferro-molybdenum

The assessment for 65pc grade alloy fell to \$11.20-11.40/lb today from \$11.40-11.65/lb on 20 February. Multiple offers followed the downturn in prices in Europe, though the decline was less pronounced. Almost half a truckload of alloy sold for around \$11.30/lb on an in-warehouse basis, while smaller lots of unknown quantities concluded between \$11.20-11.30/lb on an in-warehouse basis. Offers in the spot market were as high as \$11.40/lb. Market participants noted a very volatile spot market for both alloy and feedstock prices as global prices have oscillated in recent weeks on coronavirus concerns.

Noble-alloy and feedstock prices

Market	Unit	27 Feb		±
		Low	High	
Ferro-chrome				
Charge chrome 52% Cr ddp Europe *	\$/lb Cr	1.01	1.01	nc
Titanium				
Turnings 90/6/4 max 0.5% Sn ddp UK	\$/lb	0.81	0.86	+0.020
Scrap min 85% Ti tin-bearing mixed turnings del US dealer/processor	\$/lb	0.27	0.29	nc
Scrap min 85% Ti non-tin-bearing mixed turnings del US dealer/processor	\$/lb	0.29	0.35	nc
Ferro-vanadium				
78-82% V dp Rotterdam	\$/kg V	27.00	28.00	nc
78-82% V max 1.5% Si fob North America warehouse	\$/lb V	12.90	13.45	-0.050
50% V ex-works China (27 Feb)	Yn/t	100,000	104,000	-2,000
80% V fob China (27 Feb)	\$/kg	29.00	30.00	nc
60% V ex-works India	Rs/kg	1,500	2,000	nc
Vanadium-nitrogen alloy				
77% V, 18% N ex-works China	Yn/t	149000	152000	-2500

Nickel and stainless steel scrap prices

Market	Unit	27 Feb		±
		Low	High	
Nickel				
Ore min 1.8% Ni fca China (25 Feb)	Yn/wmt	550	570	-10.000
Pig iron min 10% ex-works China	Yn/wmt	900	930	-30.000
Secondary				
Nickel-Cobalt refinery scrap nickel contained del US processor (31 Jan)	\$/lb	2.00	2.30	-0.200
Stainless steel				
304 (18-8) scrap solids cif Rotterdam USD/lb	\$/lb	0.491	0.506	+0.0025
304 (18-8) scrap solids cif Rotterdam EUR/t	€/t	990.00	1020.00	nc
304 (18-8) scrap solids cif Japan	\$/lb	0.49	0.50	nc
304 (18-8) scrap solids cif South Korea	\$/lb	0.49	0.50	nc
304 (18-8) scrap solids cif Taiwan	\$/lb	0	0	nc
409/410 scrap solids del US processor	\$/long ton	246	269	nc
430 scrap solids del US processor	\$/long ton	336	381	nc

FERRO-ALLOYS: NOBLE-ALLOY MARKET COMMENTARY

Oxide prices fell to \$9.40-9.55/lb from \$10.30-10.40/lb on 20 February - their second consecutive week of declining at a rate greater than 5pc. Domestic offers dropped in response to falling global prices. Prices in Europe and China have fallen as news of coronavirus cases spreading in South Korea increased. South Korea contains a large amount of alloy conversion capacity and expectations are that demand for oxide will face headwinds in the near-term.

Ferro-titanium

Prices for 70pc grade alloy were assessed today at \$1.87-2.00/lb, unchanged from 20 February. Market participants did not mention any consumer inquiries in the past week, with some end-users having held back from the spot market in recent weeks

Ferro-vanadium

Prices for 80pc grade alloy have declined to \$12.90-13.45/lb from \$12.95-13.50/lb on 20 February. Some suppliers began the week successfully testing higher offers to mills at \$13.60/lb on in-warehouse basis and \$13.60/lb on a delivered basis for less-than-truckload sized lots.

Sellers then began offering lower at \$13.25/lb for smaller lots as the week progressed and were willing to offer lots sub-\$13/lb by the end of the assessment period, like the prior week.

India: FeMo, FeV hold steady

Domestic prices for ferro-molybdenum and ferro-vanadium are holding steady, staving off price cuts but unable to move higher in the face of fairly sluggish local demand.

Ferro-molybdenum

Prices were assessed at Rs1,100-1,120/kg ex-works today, flat on 25 February as sluggish demand curbs any price growth. Suppliers have kept their prices stable for March intakes and demand from steel mills is widely expected to remain limited in the near-term before a potential slight rise on restocking.

Prices for 57pc oxide were assessed unchanged at Rs980-1,000/kg ex-works. Market participants expect molybdenum oxide prices to remain rangebound in line with offers from overseas market, but higher rupee values might lead buyers to seek lower offers.

Ferro-vanadium

Prices were assessed at Rs1,500-2,000/t ex-works, unchanged from 25 February on moderate demand from the steel industry. Suppliers have kept their offer prices flat, hoping for a rise in restocking enquiries in March.

China: Weak demand persists

Lower demand and tender prices from steelmakers continued to weigh on the ferro-molybdenum and ferro-vanadium market.

Ferro-molybdenum

Limited demand and lower tender prices from steelmakers pushed down the domestic range for 60pc grade alloy to 107,000-110,000 yuan/t (\$25.40-26.20/kg) from the 25 February assessment of Yn108,000-112,000/t. Export prices fell to \$25.50-26/kg fob today from \$25.90-26.40/kg fob on 25 February.

Several alloy producers stopped quoting prices for new deals over the past two days because of low profit margins, opting to wait for more tender prices from steelmakers.

Prices for 45pc grade concentrate fell to Yn1,600-1,630/mtu ex-works today, down by Yn110/mtu from 25 February, on lower demand from alloy producers following the fall in alloy prices. Prices for 57pc grade roasted concentrate dropped to Yn1,700-1,710/mtu ex-works today from Yn1,800-1,810/mtu ex-works on 25 February.

Ferro-vanadium

Prices for 50pc grade alloy fell to Yn100,000-104,000/t ex-works today from Yn102,000-106,000/t ex-works on 26 February assessment and Yn102,000-108,000/t ex-works on 25 February, in response to reduced demand and lower tender prices from steel mills.

Xinyu Special purchased 32t of the alloy at Yn101,900/t delivered plus value-added tax and payable by acceptance bill.

Export prices for 80pc grade alloy dipped to \$29-30/kg fob today from the 25 February assessment of \$29.50-30.50/kg fob, in line with the lower domestic prices, a fall in bid prices and weak demand from international consumers. A Panzihua-based exporter reduced offer prices to \$30/kg fob from \$30.50/kg fob to attract sales from European buyers to avoid further price falls amid a weak global steel market.

FERRO-ALLOYS: NEWS AND ANALYSIS

China's steel stock build slows on output cuts, sales

China's steel inventory build slowed this week as mills and traders ran out of storage space, forcing output cuts and an increase in deliveries to customers.

Steel mills accelerated production cuts in mid-February to reduce pressure on supply caused by the loss of demand that resulted from restrictions aimed at slowing the coronavirus outbreak.

Steel stocks peak in late winter every year before the construction season restarts in March, but they are rising to record levels this year, especially for mills' long product inventories.

Mills held about 13.4mn t of steel in the week to 27 February, roughly 68pc above the previous five-year high, a China-based analyst said. Mills' rebar inventories rose by 6.5pc to more than 7mn t this week.

China's warehouse steel stocks held by traders rose by 11pc to nearly 24mn t in the latest week, exceeding previous highs of about 20mn t that are typically reached in late February or early March. Combined with mill inventories, China's total steel stocks rose by 8pc from last week to more than 37mn t, according to industry data that includes rebar, wire rod, hot-rolled coil (HRC), cold-rolled coil and plate.

The increase marks a slowdown from the 13pc increase for mills and trading firms last week.

Output cuts were a factor, with market participants pointing to output data for a subset of mills that shows a 2.5pc week-on-week decline in the week to 20 February, or around 11.8pc below pre-holiday levels.

Production cuts have been most aggressive for rebar, so there is limited downside for rebar output levels in the near term, while HRC output will continue to edge lower as many large mills are announcing maintenance outages in late February or March.

Around 80pc of businesses have restarted in 24 cities in China, but steel demand has not increased enough to absorb the high inventories. Transportation links are slowly reopening to allow workers to return to construction sites in early March, but in some cities such as Beijing they will be required to undergo a 14-day quarantine.

There will still be more downside pressure on steel prices, with steel inventories rising and mills and traders running out of storage space, a Shanghai-based trader said.
By China staff

For more news and analysis, please [click here](#)

FeNb: China import fall may spark US oversupply

Concerns of oversupply of ferro-niobium in the US are likely to be heightened in coming weeks and months as factories in China, the largest consumer of the alloy, have partly seized up amid work slowdowns caused by the corona virus.

Even before the virus's outbreak, shipments of ferro-niobium to China from top global producer Brazil had dropped by over 80pc in December/January from a year earlier.

Brazilian exports of ferro-niobium to China fell to 1,750metric tonnes (t) in the two months from a year earlier, according to data from Brazil's Ministry of Development, Industry, and Foreign Trade. Until December, Brazil's exports of ferro-niobium to China had averaged 3,622t a month last year.

Market participants are increasingly concerned that the steep drop in demand in China in late 2019 could extend into 2020 because of logistical complications and slower mill ramp-ups from the lunar new year holidays because of the coronavirus. In turn, slower demand in slower China might force suppliers to redirect volumes to an already well-supplied US market.

Brazil accounted for an estimated 88pc of total global niobium production -- used to make the alloy for construction steel -- in 2019, according to the US Geological Survey. China accounted for 38pc of the ferro-niobium exported from Brazil in the same period.

Ferro-niobium is used as a substitute for ferro-vanadium when its prices trade at a premium. The market has been slowly correcting after a late-2018/early-2019 ferro-vanadium rally, largely a response to supply concerns amid stricter Chinese rebar standards, which led to increased substitution among mills.

The US Geological Survey in August had expected Chinese ferro-niobium consumption to grow by 50pc in 2019. But Brazilian exports to China increased by only 14pc to 39,800t last year.

Argus last assessed US ferro-niobium prices at \$17.35-18.10/lb on 31 January, as much as a \$5.15/lb premium to ferro-vanadium, undercutting most demand for substitution.

Imports have continued to flow into the US, despite sparse spot market trading, according to market sources. US imports of ferro-niobium from Brazil totaled 9,670t in 2019, up from 8,560t in 2018. Imports continue to climb, rising by 38pc to 664t in January from a year earlier.

Should China's imports of Brazilian ferro-niobium remain muted, Brazil's major producers will either need to cut capacity or global consumers will need to boost intake to avoid a drop in ferro-niobium prices.

By Nicholas Bell

FERRO-ALLOYS: PRICE INDEXES

Monthly averages					
	Unit	Month index Feb 2020 low	Month index Feb 2020 high	Month index Jan 2020 final low	Month index Jan 2020 final high
Ferro-chrome					
HC basis 60% Cr 6-8% C ddp NWE	\$/lb Cr	0.78	0.84	0.77	0.82
LC Cr min 65% 0.10% C ddp Europe works	\$/lb Cr	1.59	1.69	1.53	1.63
Charge Chrome fob US warehouse	\$/lb	0.73	0.77	0.76	0.80
HC min 60-65% Cr 6-8% C fob US warehouse	\$/lb Cr	0.83	0.92	0.84	0.89
LC min 60-65% Cr 0.05% C max 1.5% Si fob US warehouse	\$/lb Cr	1.93	1.98	1.95	2.00
LC min 60-65% Cr 0.10% C max 1.5% Si fob US warehouse	\$/lb Cr	1.66	1.72	1.69	1.74
LC 60% Cr 0.15% C fob US warehouse	\$/lb	1.63	1.65	1.66	1.68
Ferro-manganese					
HC Mn 78% ddp Europe works	€/t	930.00	980.00	891.11	958.89
MC 78% Mn 1.5-2% C 0.15-0.20 P ddp Europe works	€/t	1,312	1,412	1,222	1,322
HC min 80% Mn 6-8% C fob North America warehouse	\$/lt	1,070.00	1,125.00	1,050.00	1,100.00
MC 80% Mn 1-2% C fob North America warehouse	\$/lb	0.85	0.90	0.86	0.91
Manganese ore					
44-46% lumpy ore fca China	Yn/mtu	41.31	43.31	42.00	43.50
Silico-manganese					
65% Mn ddp Europe works	€/t	920.00	980.00	887.78	945.56
Min 65% Mn 16% Si fob North America warehouse	\$/lb	0.52	0.54	0.52	0.54
65% Mn 17% Si fob China	\$/t	1,130.00	1,160.00	1,074.00	1,104.00
65% Mn 15% Si fob India East Coast	\$/t	971.25	981.25	983.33	998.89
60% Mn 14% Si fob India East Coast	\$/t	888.75	898.75	913.33	925.56
Ferro-silicon					
75% Si ddp NWE	€/t	1,146.88	1,196.88	1,058.89	1,113.33
Low aluminium 75% Si 0.1% Al fob China	\$/t	1,248.75	1,268.75	1,223.33	1,243.33
Low aluminium 75% Si 0.5% Al fob China	\$/t	1,198.75	1,218.75	1,173.33	1,193.33
72% Si fob China	\$/t	1,107.50	1,131.25	1,063.33	1,083.33
75% Si fob China	\$/t	1,138.75	1,165.00	1,113.33	1,133.33
Min 75% Si max 0.1% C fob US warehouse	\$/lb Si	0.78	0.82	0.74	0.78
Calcium-silicon					
Min 28% Ca 55-60% Si fob China	\$/t	1,355.00	1,385.00	1,364.00	1,394.00
Min 30% Ca 55-60% Si fob China	\$/t	1,385.00	1,415.00	1,392.50	1,422.50
Ferro-boron					
17% B fob US warehouse	\$/lb	1.50	1.66	1.55	1.70
Ferro-molybdenum					
60% Mo du Rotterdam	\$/kg Mo	24.87	25.43	23.36	23.81
65-70% Mo dp Rotterdam	\$/kg Mo	24.89	25.43	23.36	23.81
Min 65% Mo max 1.5% Si fob North America warehouse	\$/lb Mo	11.55	11.79	10.54	10.83
60% Mo fob China	\$/kg	27.61	28.11	25.86	26.36
Ferro-niobium					
Min 65% Nb du Rotterdam	\$/kg Nb	37.94	39.31	38.44	39.50
Min 66% Nb Brazilian Imports fca China port	Yn/t	200,000.00	204,000.00	200,000.00	203,000.00
Ferro-tungsten					
Min 75% W du Rotterdam	\$/kg W	33.06	34.25	29.18	30.09
75% W fob North America warehouse	\$/lb	15.94	16.44	15.80	16.30
Min 75% W fob China	\$/kg	32.38	33.38	28.50	29.50
Ferro-titanium					
Russian min 70% Ti du Rotterdam	\$/kg Ti	3.49	3.68	3.73	3.96
Min 70% Ti dp/duty-free Rotterdam	\$/kg Ti	3.67	3.91	3.88	4.09
70% Ti fob North America warehouse	\$/lb	1.87	2.00	1.90	2.04
Ferro-vanadium					
Ferro-vanadium 78-82% V dp Rotterdam	\$/kg V	28.88	29.94	24.37	25.82
Ferro-vanadium 78-82% V max 1.5% Si fob North America warehouse	\$/lb V	12.99	13.36	10.77	11.04
Ferro-vanadium 80% V fob China	\$/kg	30.14	31.29	24.55	26.09

RARE EARTHS: MARKET COMMENTARY

Rare earths: Pr/Nd drops; Dy, Tb prices climb

Plentiful spot supplies and limited demand from the magnet sector continued to push down praseodymium-neodymium prices. The dysprosium and terbium markets moved up on limited ore feedstock availability and lower output.

Light rare earths

Suppliers cut their offer prices to boost sales and raise cash flow, while buyers from the downstream magnet sector operated from plentiful inventories and observed the market on expectations of even lower prices in the near term.

Small magnetic material plants have yet to resume operations because of transport restrictions and quarantine measures to contain the spread of the coronavirus. Large producers are maintaining low operating rates in light of weaker magnet sales. This has led to a fall in rare earth feedstock consumption and prices.

The range for 99pc praseodymium-neodymium oxide fell by 2,000 yuan/t (\$285/t) from 25 February to Yn280,000-284,000/t ex-works on 26 February, and continued to decline to Yn278,000-282,000/t ex-works today. Argus assessed export prices lower at \$39,800-40,300/t fob today, down from \$40,100-40,600/t fob on 26 February and \$40,300-40,800/t fob on 25 February.

The fall in oxide prices and low magnet demand pushed down the range for 99pc praseodymium-neodymium metal to Yn356,000-360,000/t ex-works today from Yn357,000-361,000/t ex-works on 26 February and Yn358,000-362,000/t ex-works on 25 February. Lower domestic prices and limited international demand weighed on the export market, with prices falling to \$50.80-51.30/kg fob today from \$50.90-51.40/kg fob on 26 February and \$51.10-51.60/kg fob on 25 February.

The weaker praseodymium-neodymium oxide prices and limited spot demand pushed down the range for 99.5-99.9pc neodymium oxide to Yn295,000-299,000/t ex-works today from the 25 February assessment of Yn298,000-302,000/t ex-works.

The range for 99pc neodymium metal fell by Yn3,000/t from 25 February to Yn374,000-379,000/t ex-works today, in line with the lower oxide prices and decline in magnet demand.

Export prices for 99.5-99.9pc neodymium oxide were assessed lower by \$400/t from 25 February to \$42,250-42,850/t fob today, with 99pc metal prices falling to \$53.50-54.10/kg fob from \$53.80-54.50/kg fob over the same period.

China export and delivered Europe prices

Element	units	Date	Low	High	±
Cerium					
carbonate min 45% REO fob China	\$/kg	25 Feb	0.72	0.82	nc
metal min 99.9% C 0.03% max. Fe 0.2% max fob China	\$/kg	27 Feb	6.50	7.00	nc
metal min 99% fob China	\$/kg	27 Feb	5.60	5.95	nc
oxide 99.5-99.9% fob China	\$/t	27 Feb	1,770	1,850	nc
oxide 99.5-99.9% cif Europe	\$/kg	3 Feb	1.90	2.00	nc
Dysprosium					
metal min 99% fob China	\$/kg	27 Feb	332.00	337.00	nc
oxide min 99.5% fob China	\$/kg	27 Feb	256.00	261.00	+1.000
oxide min 99.5% cif Europe	\$/kg	3 Feb	245.00	252.00	nc
Europium					
metal min 99.9% fob China	\$/kg	27 Feb	271.00	283.00	nc
oxide min 99.99% fob China	\$/kg	27 Feb	30.90	32.50	nc
Erbium					
oxide min 99.5% cif Europe	\$/kg	3 Feb	23.00	24.00	nc
Ferro-dysprosium					
min 80% Dy fob China	\$/kg	27 Feb	250.00	255.00	nc
Gadolinium					
metal min 99% fob China	\$/kg	25 Feb	38.00	45.00	+0.500
oxide min 99.999% fob China	\$/t	25 Feb	43,600	44,600	+100
Lanthanum					
metal min 99.9% C 0.03% max. Fe 0.2% max fob China	\$/kg	27 Feb	6.15	6.50	nc
metal min 99% fob China	\$/kg	27 Feb	5.55	5.70	nc
oxide 99.5-99.9% fob China	\$/t	27 Feb	1,740	1,790	nc
oxide min 99.999% fob China	\$/kg	27 Feb	3.23	3.53	nc
Mischmetal					
35% La 65% Ce fob China	\$/kg	27 Feb	5.20	5.60	nc
low Zn and Mg fob China	\$/kg	25 Feb	21.50	23.00	nc
Neodymium					
metal min 99% fob China	\$/kg	27 Feb	53.50	54.10	-0.350
oxide 99.5-99.9% fob China	\$/t	27 Feb	42,250	42,850	-400
metal 99% cif Europe	\$/kg	3 Feb	54.00	56.00	nc
oxide 99.5-99.9% cif Europe	\$/kg	3 Feb	41.50	44.00	nc
Praseodymium					
metal min 99% fob China	\$/kg	27 Feb	94.50	97.50	nc
oxide 99.5-99.9% fob China	\$/t	27 Feb	44,800	45,300	nc
Praseodymium-Neodymium					
metal min 99% fob China	\$/kg	27 Feb	50.80	51.30	-0.100
oxide min 99% fob China	\$/t	27 Feb	39,800	40,300	-300
Samarium					
metal min 99% fob China	\$/kg	27 Feb	13.00	14.00	nc
oxide min 99.5% fob China	\$/kg	27 Feb	1.68	1.80	nc
Terbium					
metal min 99.9% fob China	\$/kg	27 Feb	737.00	744.00	+14.000
oxide min 99.99% fob China	\$/kg	27 Feb	581.00	588.00	+16.000
oxide min 99.99% cif Europe	\$/kg	3 Feb	506.00	511.00	nc
Yttrium					
metal min 99.9% fob China	\$/kg	25 Feb	32.00	35.00	nc
oxide min 99.999% fob China	\$/t	27 Feb	2,550	2,800	nc
oxide 99.999% cif Europe	\$/kg	3 Feb	3.50	4.00	nc

RARE EARTHS: MARKET COMMENTARY

Medium and heavy rare earths

A fall in ore feedstock supplies and lower operating rates in south China during the coronavirus crisis continued to boost prices for dysprosium, terbium and gadolinium.

The range for 99.5pc dysprosium oxide rose by Yn10/kg from the low end of the 25 February range to Yn1,810-1,830/kg ex-works on 26 February and moved up further to Yn1,810-1,840/kg ex-works today, in response to higher bid prices from major rare earth firms.

The rise in domestic prices boosted the export range for 99.5pc dysprosium oxide to \$256-261/kg fob today, up by \$1/kg from 26 February and by \$2/kg from 25 February.

Argus assessed the range for 80pc ferro-dysprosium unchanged from 26 February at Yn1,780-1,810/kg ex-works today but up by Yn10/kg from 25 February, in line with the higher oxide prices. Export prices for 80pc ferro-dysprosium were flat from 26 February at \$250-255/kg fob today but higher by \$2/kg from 25 February.

The range for 99.99pc terbium oxide climbed to Yn4,100-4,150/kg ex-works today from Yn4,000-4,050/kg ex-works on 26 February and Yn3,940-3,980/kg ex-works on 25 February.

Export prices moved up to \$581-588/kg fob today from \$565-572/kg fob on 26 February and \$559-563/kg fob on 25 February, as the rise in domestic prices outweighed flat international demand. Buyers outside of China operated from plentiful inventories that were purchased before the Christmas and new year holidays.

The higher oxide prices lifted the range for 99.9pc terbium metal to Yn5,200-5,250/kg ex-works today from Yn5,100-5,170/kg ex-works on 26 February and Yn5,050-5,100/kg ex-works on 25 February. Spot demand from the magnet sector remained low as buyers opted to observe the market for further developments.

Export prices for 99.9pc terbium metal increased to \$723-730/kg fob on 26 February from the 25 February assessment of \$717-722/kg fob, rising further to \$737-744/kg fob today, supported by the higher domestic prices.

The range for 99.5-99.9pc gadolinium oxide held unchanged from 26 February at Yn169,000-173,000/t ex-works today but was higher by Yn1,000/t from 25 February on tight ore supplies. Prices for 75pc ferro-gadolinium rose by Yn1,000/t from 25 February to Yn168,000-172,000/t ex-works on 26 February, holding at Yn168,000-172,000/t ex-works today in response to the stable oxide prices and low trading activity.

China domestic ex-works prices

Element	units	Freq.	Low	High	±
Cerium					
carbonate min 45% REO	Yn/t	25 Feb	4,300	4,800	nc
metal min 99.9% C 0.03% max. Fe 0.2% max	Yn/t	27 Feb	39,000	41,000	nc
metal min 99%	Yn/t	27 Feb	31,500	33,500	nc
oxide 99.5-99.9%	Yn/t	27 Feb	11,300	11,700	nc
Dysprosium					
metal min 99%	Yn/kg	27 Feb	2,360	2,410	nc
oxide min 99.5%	Yn/kg	27 Feb	1,810	1,840	+5
Erbium					
oxide min 99.5%	Yn/t	27 Feb	156,000	160,000	+500
Europium					
oxide min 99.99%	Yn/kg	27 Feb	213	223	nc
Ferro-dysprosium					
min 80% Dy	Yn/kg	27 Feb	1,780	1,810	nc
Ferro-gadolinium					
min 75% Gd ex-works China	Yn/t	27 Feb	168,000	172,000	nc
Gadolinium					
metal min 99%	Yn/t	25 Feb	275,000	320,000	+9,500
oxide 99.5-99.9%	Yn/t	27 Feb	169,000	173,000	nc
Lanthanum					
metal min 99.9% C 0.03% max. Fe 0.2% max	Yn/t	27 Feb	38,500	40,500	nc
metal min 99%	Yn/t	27 Feb	31,500	33,000	nc
oxide min 99.999%	Yn/t	27 Feb	22,500	23,500	nc
oxide 99.5-99.9%	Yn/t	27 Feb	11,200	11,600	nc
Ce chloride min 45% REO	Yn/t	25 Feb	3,500	4,000	nc
Mischmetal					
35% La 65% Ce	Yn/t	27 Feb	32,500	34,500	nc
low Zn and Mg	Yn/t	25 Feb	140,000	150,000	nc
Neodymium					
metal min 99%	Yn/t	27 Feb	374,000	379,000	-3,000
oxide 99.5-99.9%	Yn/t	27 Feb	295,000	299,000	-3,000
Praseodymium					
metal min 99%	Yn/t	27 Feb	660,000	680,000	nc
oxide 99.5-99.9%	Yn/t	27 Feb	315,000	320,000	nc
Praseodymium-Neodymium					
metal min 99%	Yn/t	27 Feb	356,000	360,000	-1,000
oxide min 99%	Yn/t	27 Feb	278,000	282,000	-2,000
Samarium					
metal min 99%	Yn/t	27 Feb	93,000	97,000	nc
oxide min 99.5%	Yn/t	27 Feb	12,000	13,000	nc
Terbium					
metal min 99.9%	Yn/kg	27 Feb	5,200	5,250	+90
oxide min 99.99%	Yn/kg	27 Feb	4,100	4,150	+100
Yttrium					
metal min 99.9%	Yn/kg	25 Feb	225	240	nc
oxide min 99.999%	Yn/t	27 Feb	18,000	19,500	nc

RARE EARTHS: NEWS AND ANALYSIS

Lynas gets three-year licence for Malaysian RE plant

Malaysia has granted Australian light rare earth producer Lynas a three-year licence to operate its separation plant at Gebeng in Pahang state.

The licence is subject to the company meeting several conditions. Lynas, the only large producer of light rare earth outside of China, must develop a permanent disposal facility within the first year from the date of approval of the licence and submit a work development plan for the plant's construction to the Malaysian Atomic Energy Licensing Board.

The company must also ensure that its [planned cracking and leaching plant](#) in Kalgoorlie city in Western Australia (WA) starts operating by July 2023, after which it cannot import raw materials containing naturally occurring radioactive material to Malaysia.

The Malaysian government agreed in September to extend the operating licence subject to Lynas meeting [three requirements](#) by February 2020. These include progress on the relocation of primary processing, cracking and leaching – which includes the removal of low-level radioactive waste – to Australia within four years; construction of a permanent storage facility for leach residue; and the transfer of a portion of research and development funds. Lynas announced in January that the Pahang state government has granted approval for the location of a permanent disposal facility for water leach purification residue.

The separation plant in Malaysia processes and separates rare earth concentrate from Lynas' Mount Weld mine in WA. The plant, located near Kuantan port in the east of peninsular Malaysia, is one of the largest light rare earth plants in the world and supplies around 8pc of global output of neodymium and praseodymium oxide – essential material for permanent magnets used in electric vehicle batteries.

By Reena Nathan

Virginia lawmakers approve RGGI membership

Virginia is a step closer to becoming the 11th member of the Regional Greenhouse Gas Initiative (RGGI) after lawmakers yesterday approved legislation allowing the state to join the program.

The Virginia House of Delegates voted 51-47 and the Senate 23-17 in favor of legislation authorizing the RGGI link, sending the bill on to governor Ralph Northam (D), who has made joining RGGI one of his top climate policy priorities this year.

Lawmakers originally approved the bills, SB 1027 and HB 981, [two weeks ago](#), but had to resolve minor differences

between the House and Senate versions before sending them to the governor.

The office of senator Lynwood Lewis (D), the lead sponsor of SB 1027, did not immediately respond to a request for comment.

The bills allow the Department of Environmental Quality (DEQ) to enforce power plant CO₂ limits and to use auctions to distribute RGGI allowances to power plants. They also set out how the resulting revenue would be spent.

Half the funds would be used to support energy efficiency programs for low-income households, while 45pc would help state residents and businesses deal with the effects of climate change, including flooding and sea-level rise.

The remaining funds would be used mostly to cover the administration of the state's RGGI program, the energy efficiency programs and state planning activities related to climate change.

DEQ finalized its regulations last year but could not implement them because Republicans inserted language into the state budget that prevented the program from moving forward.

Democrats prevailed in November's election, winning majorities in the House and Senate, clearing the way for the state to join RGGI.

Virginia's participation would mark a significant expansion of the RGGI market.

The DEQ regulations cap power plant CO₂ emissions this year at 28mn short tons, compared with an overall limit of 96.2mn st for RGGI's current 10 members. If Virginia joins in 2021, the state's cap in effect would be just under 27.2mn st.

Environmentalists cheered the votes as an important step in helping the state and its coastal communities address climate change.

"The state of Virginia is like a house being overwhelmed by the big storm of climate change," said Harrison Wallace, Virginia director of the CCAN Action Fund, the advocacy arm of the Chesapeake Climate Action Network. "Today, the General Assembly made a down payment on reinforcing the foundation of that house while addressing the core cause of the storm itself."

By Michael Ball

For more news and analysis, please [click here](#)

RARE EARTHS: PRICE INDEXES

Argus rare earths indexes (cumulative averages)					
element	units	month index Feb 2020 low	month index Feb 2020 high	month index Jan 2020 final low	month index Jan 2020 final high
Cerium					
carbonate min 45% REO fob China	\$/kg	0.72	0.82	0.73	0.84
metal min 99.9% C 0.03% max. Fe 0.2% max fob China	\$/kg	6.50	7.00	6.53	7.03
metal min 99% fob China	\$/kg	5.60	5.95	5.62	5.97
oxide 99.5-99.9% fob China	\$/t	1,770.00	1,850.00	1,780.00	1,860.00
Dysprosium					
metal min 99% fob China	\$/kg	309.88	314.88	295.00	300.00
oxide min 99.5% fob China	\$/kg	247.53	252.26	241.19	246.19
Europium					
metal min 99.9% fob China	\$/kg	271.75	283.75	272.00	284.00
oxide min 99.99% fob China	\$/kg	30.98	32.73	31.00	32.80
Ferro-dysprosium					
min 80% Dy fob China	\$/kg	242.32	246.95	236.27	241.27
Gadolinium					
metal min 99% fob China	\$/kg	37.63	44.63	37.50	44.50
oxide min 99.999% fob China	\$/t	43,525.00	44,525.00	43,500.00	44,500.00
Lanthanum					
metal min 99.9% C 0.03% max. Fe 0.2% max fob China	\$/kg	6.15	6.50	6.18	6.55
metal min 99% fob China	\$/kg	5.55	5.70	5.57	5.77
oxide 99.5-99.9% fob China	\$/t	1,740.00	1,790.00	1,750.00	1,800.00
oxide min 99.999% fob China	\$/kg	3.23	3.53	3.25	3.55
Mischmetal					
35% La 65% Ce fob China	\$/kg	5.20	5.60	5.20	5.60
low Zn and Mg fob China	\$/kg	21.50	23.00	21.50	23.00
Neodymium					
metal min 99% fob China	\$/kg	53.07	53.76	52.59	53.29
oxide 99.5-99.9% fob China	\$/t	42,097.37	42,802.63	41,586.36	42,390.91
Praseodymium					
metal min 99% fob China	\$/kg	93.43	96.30	92.80	95.60
oxide 99.5-99.9% fob China	\$/t	45,821.05	46,321.05	46,500.00	47,000.00
Praseodymium-Neodymium					
metal min 99% fob China	\$/kg	51.09	51.73	50.91	51.61
oxide min 99% fob China	\$/t	40,184.21	40,873.68	40,031.82	40,800.00
Samarium					
metal min 99% fob China	\$/kg	13.00	14.00	13.00	14.00
oxide min 99.5% fob China	\$/kg	1.68	1.80	1.68	1.80
Terbium					
metal min 99.9% fob China	\$/kg	672.37	677.58	642.00	647.00
oxide min 99.99% fob China	\$/kg	526.47	531.63	495.00	500.00
Yttrium					
metal min 99.9% fob China	\$/kg	32.00	35.00	32.00	35.00
oxide min 99.999% fob China	\$/t	2,550.00	2,800.00	2,550.00	2,800.00

*Additional user fees apply for real-time LME and COMEX data



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ANNOUNCEMENT

Termination of Japan aluminium premium

Argus is proposing to discontinue its spot aluminium P1020 duty paid cif Japan assessment.

Under this proposal Argus would discontinue publishing its assessment for spot aluminium P1020 duty paid cif Japan (PA0018785).

Also under this proposal, Argus would change the frequency for quarterly aluminium P1020 duty paid premium cif Japan (PA0018783) to upload by the 15th calendar day of each quarter from weekly on Wednesdays to more accurately reflect when the price is assessed.

Argus will be accepting comments on this proposal up to 6 March 2020. To discuss comments on this proposal, please contact Blake Hurtik at blake.hurtik@argusmedia.com or +1 713 360 7590.

Formal comments should be marked as such and may be submitted by email to metalprices@argusmedia.com or by post to Blake Hurtik, Argus Media, 2929 Allen Parkway, Suite 700, Houston, Texas, 77019, and be received by 6 March 2020. Please note, formal comments will be published after the consultation period unless confidentiality is specifically requested.



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