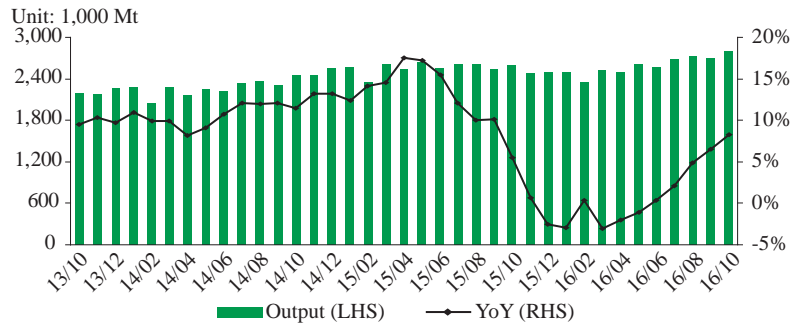


## Table of Contents

Supply & Demand Balance	P1
Alumina Price Forecast	P1
<b>Bauxite</b>	<b>P2</b>
Alumina	P4
Output	P4
Price	P6
Aluminum	P7
Output	P7
Aluminum Semis	P9
Output, Import & Export	P9
Inventory	P10
Aluminum Supplementary	P12
Scrap Aluminum	P13
FRP	P14
Aluminum Extrusion	P18
Aluminum Wire & Cable	P20
Aluminum Alloy Ingot	P23

## SMM

### China Aluminum Monthly Output



Source: SMM

### Highlights

**Alumina:** China's alumina output is expected to be 5.26 million mt in November, up 11.56% YoY, and the average operating rate at alumina producers will rise to 89.1%. (P4)

**Aluminum:** As of November 15, aluminum inventories in the five regions of China grew to 280,000 mt. Shipments piled at Xinjiang's railway station exceeded 200,000 mt. Domestic total aluminum inventories grew over 230,000 mt from mid-October. (P7)

**Aluminum Semis:** China Customs reports exports of unwrought aluminum and aluminum semis were 350,000 mt in October, down 40,000 mt from September and up 6.1% YoY, with year-on-year growth narrower. (P9)

## Contact us

**Hotline:**  
+86-21-5155-0322

**Mail:**  
[service.en@smm.cn](mailto:service.en@smm.cn)

**Fax:**  
+86-21-5155-0345

**Address:**  
8th FL in North Section, Building 9,  
Lujiazui Software Park, No. 20, Lane 91,  
E'Shan Road, Pudong New Area, Shanghai,  
200127, China.

## Supply & Demand Balance

SMM Exclusive Data on China Aluminum Market

		Unit	2015	2016						2016(E)	
				Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	
Alumina	Output <sup>1</sup>	1,000 mt	56,425	4,618	4,849	4,864	5,047	4,976	4,943	5,258	57,500
	Net Imports	1,000 mt	4,200	85	171	158	215	124	116	-	3,500
	Apparent Consumption <sup>2</sup>	1,000 mt	60,625	4,703	5,020	5,022	5,262	5,100	5,059	5,258	61,000
	Actual Consumption <sup>3</sup>	1,000 mt	60,941	4,946	5,170	5,095	5,280	5,386	5,334	5,524	62,453
	S/D Balance	1,000 mt	-316	-243	-150	-73	-18	-286	-275	-266	-1,453
Aluminum	Output <sup>1</sup>	1,000 mt	30,756	2,494	2,610	2,571	2,677	2,732	2,705	2,803	31,500
	Net Imports	1,000 mt	150	5	1	13	18	9	13	-	95
	Apparent Consumption <sup>2</sup>	1,000 mt	30,906	2,499	2,611	2,584	2,695	2,741	2,718	2,803	31,595
	Inventory <sup>4</sup>	1,000 mt	-	570	445	283	252	314	252	265	-
	Inventory Changes	1,000 mt	-	-162	-125	-162	-31	62	-62	13	-
	Inventory/Consumption <sup>5</sup>	Day	-	6.9	5.3	3.8	2.9	3.6	2.8	2.8	-
OR at Aluminum Semis	FRP	%	-	61.70	60.63	61.32	61.38	60.17	61.76	62.47	-
	Extrusion	%	-	60.00	57.41	53.94	52.65	51.00	52.28	52.65	-
	Alloy Ingot	%	-	62.94	63.32	61.87	58.34	56.57	58.19	64.45	-
	Wire and Cable	%	-	66.70	71.38	69.90	64.24	69.95	69.24	66.19	-
Price	SMM Alumina	RMB/mt	2,355	1,946	1,993	1,957	1,802	1,792	1,975	2,502	-
	Alumina at Port	RMB/mt	2,458	2,038	2,078	2,060	1,979	1,967	2,014	2,413	-
	China Long-Term Contract <sup>6</sup>	RMB/mt	2,233	2,187	2,198	2,158	2,230	2,215	2,175	2,314	-
	LME 3M	USD/mt	1,680	1,583	1,565	1,605	1,640	1,652	1,609	1,671	-
	SHFE 3M	RMB/mt	12,191	12,153	12,212	11,991	12,389	12,354	12,086	12,853	-
	SMM Aluminum	RMB/mt	12,063	12,134	12,403	12,425	12,797	12,636	12,791	13,718	-
	Aluminum Sopt Premiums/Discounts	RMB/mt	-96	-7	42	55	77	103	248	277	-

Sources: SMM, SHFE, China Customs

Notes: ① the data is based on SMM's survey of major domestic alumina and aluminum producers. ② apparent consumption = output + net imports. ③ real consumption is roughly estimated based on SMM's aluminum output data. ④ inventories include stocks in Shanghai, Wuxi, Hangzhou, and Nanhai. ⑤ (Inventories/annual consumption) \*365. ⑥ Prices for domestic long-term alumina contracts in 2013, 2014, 2015 and 2016 are calculated by multiplying SHFE three-month aluminum contract prices by 17%, 17.3%, 17.5% and 18%, respectively.

## Aluminum Price Forecast

### SHFE and LME Aluminum Register Significant Volatility during Early October and Mid-November

LME aluminum was boosted during early October and mid-November by SHFE aluminum, and less subject to the US dollar index. LME aluminum fluctuated narrowly in early October as SHFE market was closed due to China's National Day holiday. Since SHFE aluminum fell later the month, LME aluminum plummeted and reported a 4-day losing streak in mid-October, falling nearly USD 90/mt to USD 1,608/mt. With strengthening SHFE aluminum, LME aluminum surged and broke through the 5- and 10-day moving average, and reached USD 1,794.5/mt in early November, but fell with SHFE aluminum later the month.

SHFE aluminum entered upward track in October. SHFE 1701 aluminum fell to RMB 12,265/mt October 21 due to the shift of SHFE front-month aluminum contract. Spot trading inventories remained low due to transportation problem in Xinjiang, driving up SHFE aluminum, which rose by daily limit at one point. Positions continued to increase from early November as a large number of speculative investors entered the market, increasing volatility in SHFE aluminum prices. SHFE 1701 aluminum fell by daily limit in early November, but then advanced to a high of RMB 14,850/mt, and slumped later on.

In China's spot markets, aluminum trading inventories were below 300,000 mt, according to SMM statistics. Goods available were limited due to low arriving shipments, with spot premiums between RMB 300-600/mt during mid-October and mid-November excluding trading days around delivery date.

## LME and SHFE 3-Month Aluminum Prices



Sources: SMM, LME and SHFE

## SMM Aluminum Price and Spot Premiums/Discounts



Source: SMM

## Aluminum Prices to Swing at Highs during Mid-November and Mid-December

SHFE aluminum fell in the week ending November 15, affected by domestic market sentiment, other base metals and slumping ferrous metals. Arriving shipments in East China may have increased during the week of November 14-18 due to those delivered by automobile. Nonetheless, rail transportation in Xinjiang was still abnormal. When combined with high alumina and coal prices, SHFE aluminum prices will swing at highs during mid-November and mid-December, with SHFE 1701 aluminum at RMB 13,000-15,000/mt.

LME aluminum will be greatly affected by SHFE aluminum, falling sharply but finding support from the 60-day moving average. LME aluminum will hover between USD 1,650-1,800/mt during mid-November and mid-December.

In China's spot markets, spot trading inventories are still low. Rail transportation now puts emphasis on coal delivery, restricting aluminum ingot transportation in Xinjiang. Spot premiums against SHFE 1611 aluminum rose to RMB 500/mt after delivery, and spot premiums are expected to be RMB 200-500/mt over SHFE 1612 aluminum during mid-November and mid-December.

## Bauxite

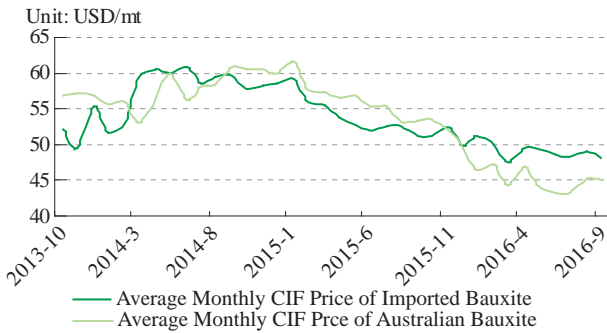
### Import & Export

#### China Bauxite Imports Stabilize in September

China Customs reported bauxite imports were 4.47 million mt in September, down 2.87% YoY, but up 0.2% MoM. Bauxite supplying countries increased from August.

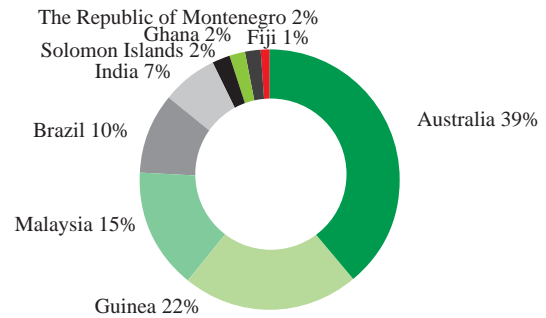
Imports from Australia fell 22.4% MoM to 1.74 million mt in September, and imports from the Republic of Guinea decreased 3.3% MoM to 970,000 mt. Bauxite imports from Malaysia jumped 33.8% MoM to 678,900 mt. Imports from India, Solomon Islands and Fiji grew noticeably. Chinese alumina producers raised their operating rates as domestic alumina prices rose. Many alumina producers in Shandong restarted, growing demand for imported bauxite. China's bauxite imports are expected to grow in the near term.

## Bauxite Import Prices in China 2013-2016



Sources: SMM, China Customs

## China Bauxite Imports by Origin in Sep.

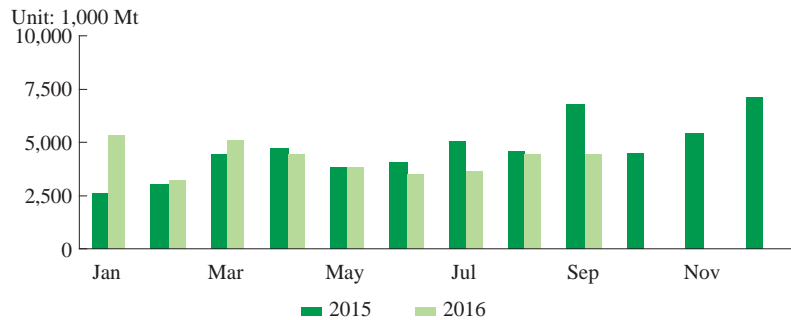


## China Bauxite Import CIF Prices by Country of Origin in Sep.

Country of Origin	Imports (mt)	Average CIF Price (USD/mt)	YoY (%)
Australia	1,736,741	45.12	-15.43%
Guinea	970,425	54.36	-
Malaysia	678,810	39.92	-13.16%
Brazil	434,657	59.63	-19.50%
India	319,131	34.9	-44.98%
Solomon Islands	106,158	42.41	-
Ghana	95,517	80.75	-15.49%
The Republic of Montenegro	67,178	69.83	-
Fiji	58,034	45.47	-
<b>Total</b>	<b>4,466,650</b>	<b>48.09</b>	<b>-6.11%</b>

Source: SMM

## China Bauxite Monthly Imports 2015-2016



Sources: SMM, China Customs

## CIF Price for Imported Bauxite Slides in September

The average CIF price for imported bauxite fell USD 0.95/mt to USD 48.09/mt in September, down 6.11% YoY and 1.94% MoM. CIF price for goods from Australia only fell 0.4%, while that from both Guinea and Brazil rose because of higher sea freight charges. CIF price for bauxite from India slid 11.6% MoM.

## China Bauxite Price Offers by Region Oct. 2016

Region	Grade	Alumina Content (%)	Price (RMB/mt)	Up/Down
Shanxi	6≤alumina-silica ratio<7	63	285-355	30/30
	4.5≤alumina-silica ratio<5.5	63	190-265	30/30
Henan	6≤alumina-silica ratio<7	65	310-390	35/35
	4.5≤alumina-silica ratio<5.5	65	210-270	40/40
Guangxi	6.5≤alumina-silica ratio<7.5	65	225-340	0/0
	5.5≤alumina-silica ratio<6.5	65	180-235	10/10
Guizhou	6.5≤alumina-silica ratio<7.5	65	250-330	0/0
	5.5≤alumina-silica ratio<6.5	65	190-250	10/10

Source: SMM

Note: In order to comply with quotes on SMM website, some regions' ore grade in the monthly report was adjusted, so that local quotes also change.

## China Bauxite Prices Rise Further in October

Domestic bauxite prices rose noticeably in October. Prices in some regions with tight supply continued to rise in November. Bid prices for bauxite were hiked by RMB 10-20/mt in Shanxi and Henan. Buyers reported prices continued to rise due to supply tightness and stronger demand from higher alumina prices. Most built stocks which are sufficient to 3 months of production. Domestic bauxite prices are expected to stabilize in the near term.

## Alumina

## Output

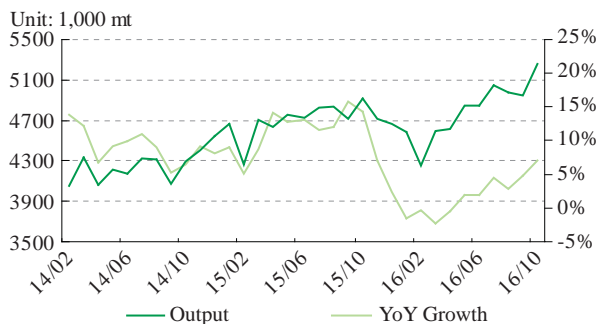
## China Alumina Monthly Output

Unit: 1,000 mt

	2015	2016	2016	2016	2016	2016	2016	2016	2016
		Q1	Q2	Q3	Aug.	Sep.	Oct.	Nov. (E)	2016(E)
Output	56,425	13,438	14,331	14,966	4,976	4,943	5,258	5,261	57,500
YoY %	9.3	-1.4	1.5	4.1	2.9	4.8	7.0	11.6	1.9
Annualized	-	-	-	-	58,588	60,140	61,909	64,009	-
Capacity	-	-	-	-	58,588	60,140	61,909	64,009	-
YoY Growth	-	-	-	-	1648.0	2750.0	4051.0	6631.0	-

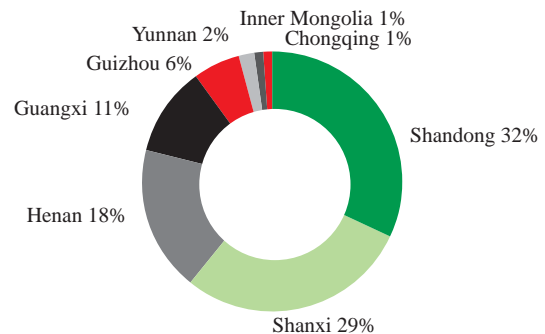
Source: SMM

## China Alumina Output by Month 2013-2016



Source: SMM

## China Alumina Output by Region in Oct. 2016



## China Alumina Output Increases Significantly in October

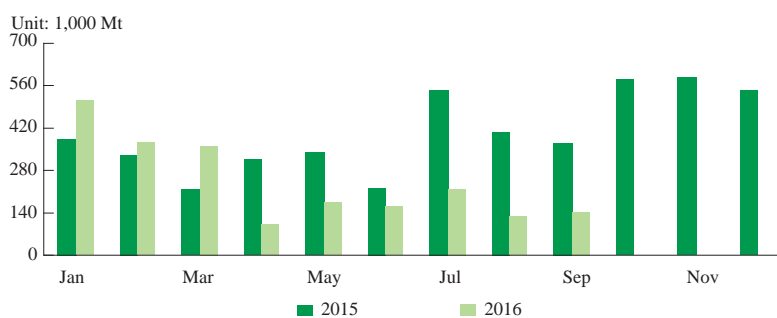
China's alumina output rose 6.37% MoM, and 7% YoY in October, with operating rates at alumina plants up to 86.2%. The big growth in output is due mainly to rising alumina prices, which incentivized alumina plants to raise operating rates. Alumina producers in Shandong, including Chalco Shandong Branch and Shandong Lubei Chemical restarted 500,000 mt/yr of capacity apiece. Chalco Shanxi Branch which cut output early this year also resumed nearly 700,000 mt/yr of capacity in mid-October and reached full operation.

China's alumina output is expected to be 5.26 million mt in November, up 11.56% YoY, and the average operating rate at alumina producers will rise to 89.1%. Capacity restarted in October was fully released. Shandong Lubei Chemical will restart all of the 1 million mt/yr capacity by late November. Chalco Henan Branch has put its 1 million mt/yr new capacity into trial production, so its output will grow slightly in November. But the company will unlikely reach full production until December.

China Customs data show alumina imports were 142,500 mt in September, up 10.7% MoM, but down 62.3% YoY, remaining at a low level. Prices for imported alumina were higher than domestic prices in the first half of this year. Imported goods gained price advantage in the latter half of the year as domestic prices jumped, but overseas supplies were limited. Importers showed increasing interest in imports at present, growing arriving shipments at the Port of Lianyungang. China's alumina imports will increase slowly in the near term.

Indonesia topped China's alumina supplying countries in September. Alumina imports from Australia decreased 67.3% MoM to 31,500 mt in September. Imports from Indonesia leapt 191.1% MoM to 81,800 mt. PT. Well Harvest Winning Alumina Refinery's 1 million mt/yr alumina capacity in Indonesia operated near capacity, and almost all goods yielded were shipped to China.

### China Alumina Monthly Imports



Sources: SMM, China Customs

### China Alumina Imports by Origin

Country of Origin	Imports (1,000 mt)
Indonesia	81.8
Australia	31.5
US	25.8
Japan	1.6
Germany	0.9
France	0.6
Others	0.3
<b>Total</b>	<b>142.5</b>

Sources: SMM, China Customs

## Price

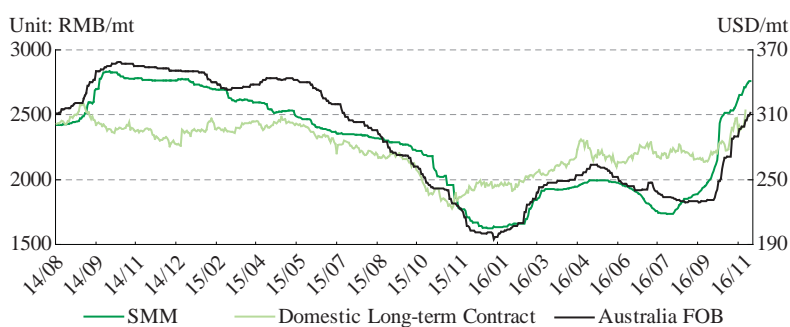
### Imported Alumina Prices Surge with Domestic Alumina Prices in October

Domestic alumina prices continued to rise dramatically in October as market optimism prevailed in the market. Downstream buyers purchased and made inquiries actively before China's National Day holiday in early October due to continuously rising quotes. After the holiday, aluminum prices were up RMB 300/mt from pre-holiday level. Quotes increased all the way later the month.

Weighted average price in the four regions rose from RMB 2,148/mt in late September to RMB 2,596/mt at the end of October. The average price in October climbed 27% from September's. Prices maintained upward momentum in November, with the weighted average price up 8% MoM in early November.

Traders and aluminum producers both turned to imported goods as domestic alumina prices advanced significantly. Overseas alumina prices rose in tandem with domestic alumina prices from late September. FOB price for imported alumina from Western Australia rose from USD 248/mt in early October to USD 309/mt in mid-November. Arriving shipments were still limited. Quotes for imported alumina at China's ports rose from RMB 2,225/mt in early October to RMB 2,800/mt in mid-November.

#### Alumina Prices 2014-2016



Source: SMM

#### China New Alumina Capacity in 2014-2019

Unit: 1,000 mt/yr

Company		Existing Capacity	New Capacity	Operation Time	Current Status
Guizhou Huajin Aluminum Co., Ltd.1	Southwest	0	800	Apr. 2015	Under operation
Guizhou Huajin Aluminum Co., Ltd.2	Southwest	800	800	Sep. 2015	Under operation
Chalco Shanxi Huaxing Aluminum Co., Ltd.	North China	1,000	1,000	Apr. 2016	Under operation
Easthope Jinzhong Chemical Co., Ltd.	North China	0	1,000	May 2016	Under operation
Shandong Weiqiao Group	East China	10,500	2,000	Q3 2016	Under operation
Chalco Henan Branch (Alumina capacity replacement)	Central China	1,200	1,000	Nov. 2016	Trial production
Easthope Jinzhong Chemical Co., Ltd. 2	North China	1,000	1,000	Dec. 2016	Under construction
Shanxi Liulin Senze Coal & Aluminum Co., Ltd. 2	North China	600	600	Q1 2017	Delayed
Yunnan Wenshan Alumina Co., Ltd. 2	Southwest	800	800	Q1/Q2 2017	Under construction
Shandong Weiqiao Group	East China	12,500	2,000	2017	Under construction
Chalco Huanghuagang aluminum project	North China	0	2,000	Dec. 2017	Under construction
Guizhou Jinyuan Group Wuchuan Branch Shanxi	Southwest	0	800	2018	Under construction
Shanxi Tongde Aluminum Co., Ltd.	North China	0	1,000	2018	Suspended
Shanxi Xinfu Chemical Co., Ltd.2	North China	1,600	1,600	2018	In preparation
Inner Mongolia Xinwang Renewable Resources Co., Ltd.2	North China	500	500	2018	Suspended
<b>2016 Total</b>		<b>12,700</b>	<b>6,000</b>		

Source: SMM

Note: Numbers behind the company names refer to the phase of the projects.

## China Alumina Prices to Remain in upward Track

Domestic alumina prices continued to rise recently due to stronger demand. As domestic aluminum prices continued to rise sharply, aluminum producers added or restarted capacities. Meanwhile, traders also entered the market, which have some alumina inventories on hand now. At the same time, goods available in the market were limited because of strict transportation regulations and insufficient rail transportation capacity in Shanxi, leaving low spot inventories at most plants. In addition, higher raw material cost also drove up alumina prices. Aside from coal, caustic soda and lime prices also edged up because of environmental protection factor. Bauxite prices were also hiked by many producers.

Despite higher cost, alumina prices remained in profitability. They stepped up production given high alumina prices. The average operating rate was 83.8% in September, and increased to 86.2% in October. The average operating rate is expected to rise to 89.1% in November.

However, commissioning of new capacities will be limited this year. Only Chalco Henan Branch put its 1 million mt/yr new capacity online in November, and may reach full operation in mid-to-late December. East Hope Jinzhong Alumina's Phase 2 project is being constructed, and is expected to come online in late 2016. Alumina imports will unlikely see big growth for the rest of the year, so domestic alumina supply will remain in deficit in the near term. In this scenario, domestic alumina prices will continue rising in the near term.

## Aluminum

### Output

China Aluminum Monthly Output

Unit: 1,000 Mt

	2015	2016	2016	2016	2016	2016	2016	2016	2016
		Q1	Q2	Q3	Aug.	Sep.	Oct.	Nov. (E)	(E)
Output	30,577	7,368	7,675	8,114	2,732	2,705	2,803	2,753	32,000
YoY %	10.3	-1.9	-0.9	4.5	4.9	6.5	8.3	11.1	3.0
Annualized Capacity	-	-	-	-	32,167.1	32,910.8	33,003.1	33,494.8	-
YoY Growth	-	-	-	-	1057	2000	2543	3346	-

Source: SMM

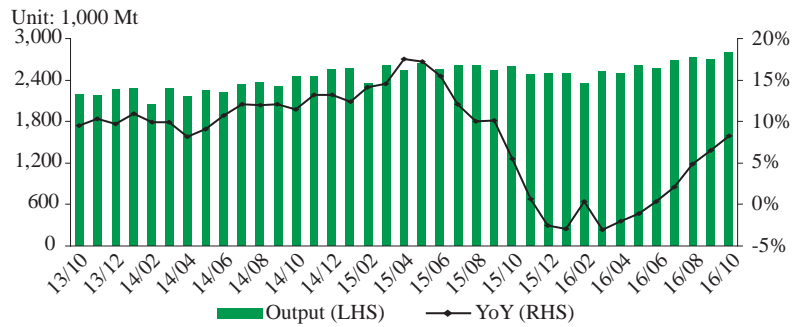
### China Aluminum Output Increases in October

Domestic aluminum output was 2.80 million mt in October, up 8.3% YoY. China's operational aluminum capacity outstripped 34 million mt/yr in October due to release of new capacity at Weiqiao Pioneering Group, Xinfu Group and Baise Mining Group, and restarted capacity at Gansu Dongxing Aluminum, Yunnan Aluminum and Jiaozuo Wanfang Aluminum Manufacturing. Taiyuan Donglv Aluminum, Zunyi Aluminum, Hualong Xianqi Aluminum Industry and Baihe Secondary Aluminum Industry are restarting production during October-November. Domestic operational aluminum capacity is expected to reach nearly 35 million mt/yr at the end of November, and domestic aluminum output will total 2.75 million mt in November (30 days).

*SMM surveys China's major aluminum producers every month to compile monthly and annual output data from primary sources. SMM's data may thus differ from that of the National Statistical Bureau and the China Nonferrous Metals Industry Association due to differences in survey samples.*



## China Aluminum Monthly Output 2014-2016



Source: SMM

## China New Aluminum Capacity 2015-2018

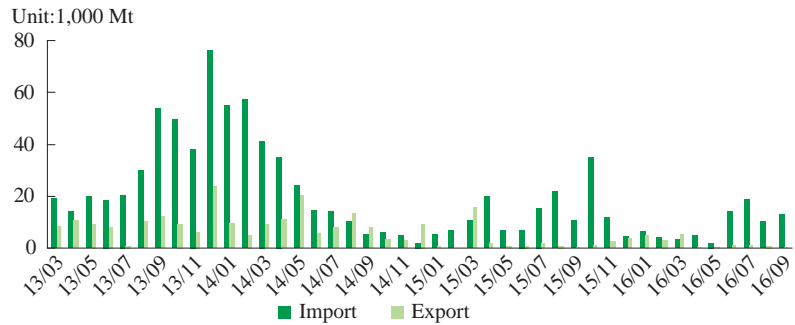
Unit: 1,000 mt/yr

Company	Location	Existing Capacity	New Capacity	Commencement Schedule
Xinjiang Jiarun Resources Holding	Northwest China	450	450	Oct. 2015
Shandong Weiqiao Group 2	East China	5,200	1,800	Oct. 2015
Chongqing Jinghongyuan Industrial Co., Ltd.	Southwest China	0	100	Sep. 2015
Xinjiang East Hope Nonferrous Metals Company 2	Northwest China	900	900	Sep. 2015
Baise Mining Group	South China	0	300	Sep. 2016
Guangxi Denggao Group	Southwest China	0	50	Q4 2016
Guangxi Suyuan Investment Co., Ltd.	South China	0	200	Q4 2016
Qinghai Western Mining Baihe Aluminum Co., Ltd.	Northwest China	100	100	Q4 2016
Xinfa Group	East China	1,150	1,000	Q4 2016
Xinjiang Tianlong Mining Co., Ltd.	Northwest China	150	100	Q4 2016
Xinjiang Tianshan Aluminum Co., Ltd.	Northwest China	1,200	200	Q4 2016
Inner Mongolia Jinlian Aluminum Co., Ltd. 2	North China	800	200	Q1 2017
Baotou Aluminum Company	North China	620	500	Q2 2017
Zhongwang Aluminum Co., Ltd.	Northeast China	400	430	Q2 2017
Chongqing Qineng Electricity & Aluminum Co., Ltd.	Southwest China	340	170	Q3 2017
Meixin Aluminum	Northwest China	0	300	Q3 2017
Inner Mongolia Chuangyuan Metal Co., Ltd.	North China	0	800	Q4 2017
Shanxi Chalco Huarun Co., Ltd.	North China	0	500	Q1 2018
Guangxi Hualei New Materials Co., Ltd.	South China	0	400	Q1 2018
Baotou Aluminum Company 2	North China	1,120	1,000	Q3 2018
Inner Mongolia Jinlian Aluminum Co., Ltd. 3	North China	1,000	1,000	Q4 2018
Baise Mining Group 2	South China	300	300	Q4 2018
<b>Total</b>		<b>13,730</b>	<b>10,800</b>	

Source: SMM

Note: Numbers behind the company names refer to the phase of the projects.

## China Aluminum Monthly Import and Export

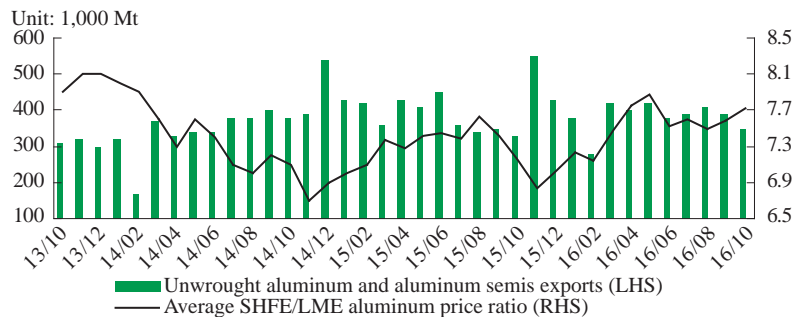


Sources: SMM, China Customs

## Aluminum Semis

### Output, Imports and Exports

## China Exports of Unwrought Aluminum and Aluminum Semis Vs SHFE/LME Aluminum Price Ratio



Sources: SMM, China Customs

### China Exports of Unwrought Aluminum and Aluminum Semis Fall in October on Higher SHFE/LME Aluminum Price Ratio

China Customs reports exports of unwrought aluminum and aluminum semis were 350,000 mt in October, down 40,000 mt from September and up 6.1% YoY, with year-on-year growth narrower. Exports of unwrought aluminum and aluminum semis totaled 3.82 million mt in the first ten months of 2016, down 1.7% YoY. The SHFE/LME aluminum price ratio rose to 7.72 in October due to surge in aluminum prices in China. Hence, aluminum semis producers curtailed export orders. SMM expects exports of unwrought aluminum and aluminum semis to fall further in November due to rising domestic prices. Aluminum processors are seeking for more domestic orders to offset fewer export orders.

## Inventory

### China Aluminum Inventories to Grow in Near Term

As of November 15, aluminum inventories in the five regions of China grew to 280,000 mt. Shipments piled at Xinjiang's railway station exceeded 200,000 mt. Domestic total aluminum inventories grew over 230,000 mt from mid-October.

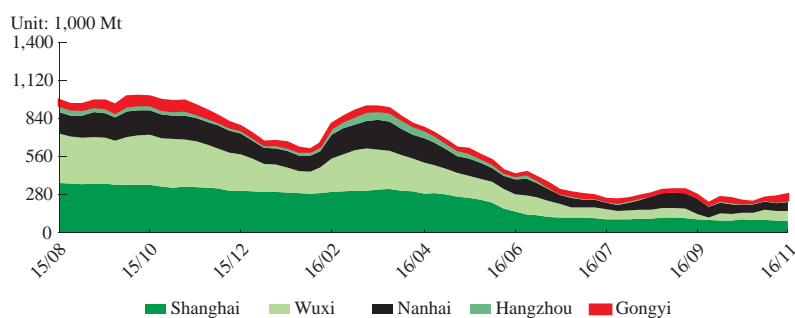
Domestic aluminum ingot inventories increased rapidly over the past four weeks because of commissioning of new capacity and growing capacity restarted, which added to output. Besides, aluminum processors mainly worked through inventories on hand in the face of big gains in domestic aluminum prices, weakening aluminum consumption and reducing outward shipments from warehouses.

Transportation capacity for aluminum ingot in Xinjiang was squeezed by that for coal. Besides, aluminum ingot delivery by automobile was also affected due to higher freight charges, precipitating backlogs at Xinjiang's railway station. Shipments by automobile increased in mid-November, but were still lower than before mid-October. SMM understands shipments from Xinjiang increased after mid-November.

Transportation capacity by automobile and railway increased somewhat. Some smelters said delivery period for goods transported from Xinjiang to Henan decreased from 10 days to around 7 days after mid-November.

As such, aluminum ingot inventories in East and South China will remain low in the near term due to transportation problem. But domestic supply is expected to grow. When combined with the onset of the low-demand season, domestic aluminum ingot inventories will continue to grow in the foreseeable future.

### China Aluminum Spot Inventory



Source: SMM

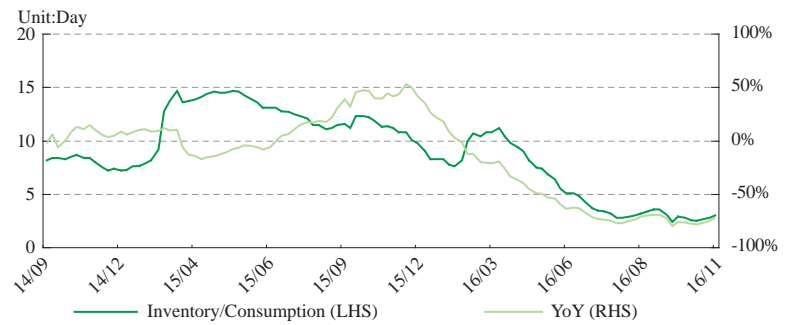
### Domestic Aluminum Inventory

Unit: 1,000 Mt

Data	Shanghai	Wuxi	Hangzhou	Nanhai	Gongyi	Total
13 <sup>th</sup> Oct.	88	47	17	70	30	252
11 <sup>th</sup> Nov.	87	71	57	13	37	265
MoM	-1	24	40	-57	7	13

Source: SMM

## China Aluminum Spot Inventory VS Consumption



Source: SMM

## LME Aluminum Inventory

Unit: Mt

	LME	Breakdown of LME Aluminum Inventory			
	Total	Cancelled Warrant	Europe	Asia	North America
2016/6/15	2,458,850	1,078,275	1,614,875	564,675	279,300
2016/7/15	2,319,125	973,525	1,478,300	564,000	276,825
Change	-139,725	-104,750	-136,575	-675	-2,475
2016/8/15	2,224,550	944,450	1,347,035	603,275	274,250
Change	-94,575	-29,075	-131,265	39,275	-2,575
2016/9/15	2,172,975	877,175	1,222,075	655,225	295,675
Change	-51,575	-67,275	-124,960	51,950	21,425
2016/10/13	2,099,475	838,575	1,149,600	660,700	289,175
Change	-73,500	-38,600	-72,475	5,475	-6,500
2016/11/15	2,160,475	749,250	1,065,725	812,500	282,250
Change	61,000	-89,325	-83,875	151,800	-6,925

Sources: SMM, LME

## SHFE Aluminum Inventory

Unit: Mt

	SHFE	Breakdown of SHFE Aluminum Inventory			
	Total	Shanghai	Guangdong	Jiangsu	Zhejiang
2016/6/8	227,663	61,050	47,809	102,858	15,946
2016/7/15	144,058	33,061	45,555	52,789	12,653
Change	-83,605	-27,989	-2,254	-50,069	-3,293
2016/8/12	113,691	28,749	34,108	38,181	12,653
Change	-30,367	-4,312	-11,447	-14,608	0
2016/9/14	118,438	32,384	36,856	34,064	15,134
Change	4,747	3,635	2,748	-4,117	2,481
2016/10/14	84,655	23,144	35,056	12,135	14,320
Change	-33,783	-9,240	-1,800	-21,929	-814
2016/11/10	87,120	25,407	20,947	27,677	13,089
Change	2,465	2,263	-14,109	15,542	-1,231

Sources: SMM, SHFE

## Aluminum Supplementary Materials

### Prebaked Anode Prices Inch Up during October 15-November 15

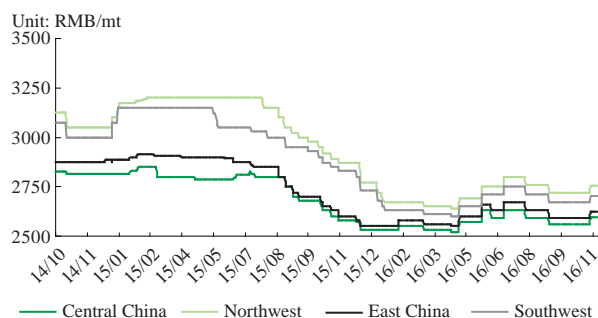
Aluminum prices in domestic market shot up sharply during mid-October and mid-November, but prebaked anode prices rose much more slowly. This is because prebaked anode market remained a buyer's market.

Transport capacity tightened and freight charges increased at least RMB 40/mt, adding to burden for prebaked anode producers. Aluminum smelters had intended to cut prebaked anode purchasing prices by RMB 20/mt in late October, but prebaked anode producers disagreed. After another round of negotiation, aluminum smelters agreed to hike prebaked anode purchasing prices by RMB 35/mt in November compared with October. The price hike was smaller than the increase in freight charges, so profit shrank at prebaked anode producers. Mainstream traded prices for prebaked anode were RMB 2,505-2,745/mt in East China, RMB 2,485-2,705/mt in Central China, RMB 2,705-2,805/mt in Northwest China, and RMB 2,655-2,755/mt in Southwest China.

Prices for medium-sulfur petroleum coke gained RMB 100/mt to RMB 940-1,100/mt in Shandong and those for high-sulfur petroleum coke rose RMB 45/mt to RMB 620-710/mt in East China. Rising raw material prices will push up prebaked anode costs and prices.

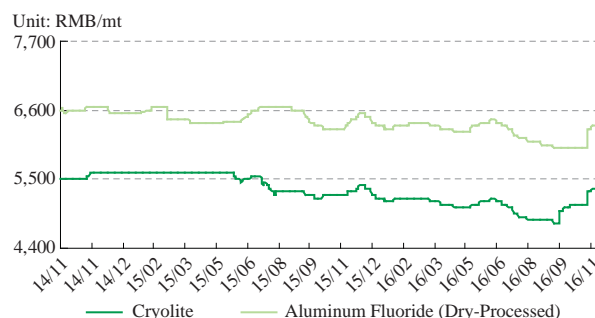
Customs data showed Shandong, Henan, Jiangsu and Guangxi exported 69,108 mt of prebaked anode in September, down 39% MoM, but up 19.1% YoY. Rising aluminum prices and prebaked anode prices boosted prebaked anode exports. Exports by Henan fell because environmental protection inspections caused local prebaked anode output to fall sharply.

China Prebaked Anode Price



Source: SMM

China Fluoride Salt Price



Source: SMM

### Aluminum Fluoride Prices Rise on Tight Raw Material Supply

Anhydrous aluminum fluoride prices in China rose rapidly during mid-October and mid-November, with the average price at RMB 6,700/mt in mid-November and mainstream traded prices between RMB 6,200-6,600/mt. Cryolite prices continued advancing over the past month, with the average price up RMB 300/mt to RMB 5,300/mt and mainstream traded prices between RMB 5,150-5,450/mt.

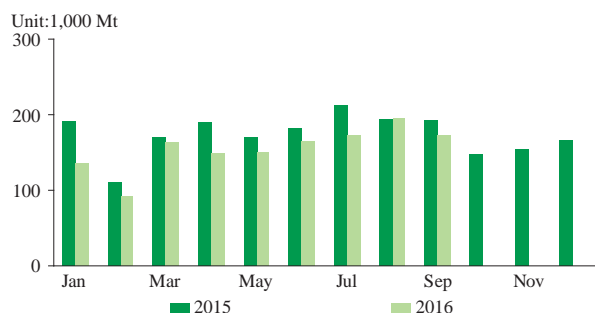
Snowfalls in Xinjiang and Inner Mongolia tightened fluorite supply and pushed up fluorite prices, in turn offering upward momentum to aluminum fluoride prices. In addition, rising aluminum prices and transport costs also contributed to gains in fluoride salt prices.

Rising aluminum fluoride and cryolite prices added to costs at aluminum smelters. Continuous gains in aluminum prices mean there is still room for aluminum fluoride and cryolite prices to increase.

Customs data showed China exported 14,220 mt of anhydrous aluminum fluoride in September, up 88.1% MoM and 21.1% YoY. Rising aluminum fluoride prices incentivized aluminum fluoride producers to step up exports, but their export profit shrank. Major export destinations were Russia, Australia, the US, Malaysia, Qatar and India. Export prices averaged USD 920/mt in September, down USD 27/mt MoM.

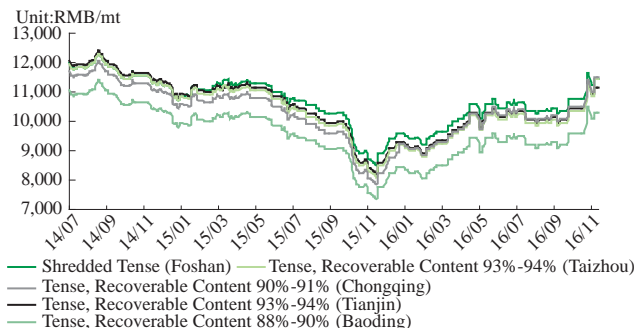
## Scrap Aluminum

### China Scrap Aluminum Monthly Imports



Sources: SMM, China Customs

### China Scrap Aluminum Price



Source: SMM

### Scrap Aluminum Prices Follow Primary Aluminum Up during October 15-November 15

Prices for A00 aluminum in China soared nearly RMB 2,200/mt to around RMB 15,400/mt from mid-October to mid-November. This drove scrap aluminum prices in domestic market up RMB 700-1,400/mt and allowed import scrap aluminum prices to rise USD 180/mt.

China's scrap aluminum imports fell 11.8% MoM and 10.7% YoY to 172,000 mt in September, marking the first decline after four consecutive months of growth.

Secondary aluminum alloy industry entered peak production season in September. This, combined with strong automobile production and sales, boosted scrap aluminum demand.

Domestic scrap aluminum producers and traders began stockpiling goods since September. Rising aluminum prices boosted trading activity in domestic scrap aluminum market. Some scrap aluminum suppliers in Southwest China began reducing shipments in early October as rising aluminum prices turned them bullish. Aluminum prices continued advancing in late October, which turned scrap aluminum suppliers in East and South China optimistic and encouraged them to reduce shipments. Secondary aluminum alloy producers in East and South China said scrap aluminum supply remained in shortage as of mid-November. Some small and medium secondary aluminum alloy producers and those that rely on imported scrap aluminum were affected limitedly, though. Some medium secondary aluminum alloy producers, whose capacity and raw material demand are both small, even earned money by selling scrap aluminum stocks on hand. Ample inventories of scrap aluminum imported earlier at lower prices helped some secondary aluminum alloy producers in Guangdong and Jiangsu to grab market share by selling at lower prices. Most secondary aluminum alloy producers suffered from tight raw material supply since the number of alloy producers that use imported scrap aluminum is small.

SMM expects scrap aluminum prices to continue rising in the coming month.

### Imported Scrap Aluminum Price (CIF)

Unit: USD/mt

Origin	Name	Specification	Oct. 14	Nov. 15	+/-
US	Tense	Clean automobile or airplane castings without ingot iron, with oil and other impurities <2%	1,450	1,630	180
	Zorba	Recycling rate 93%, with copper content of 3%	1,470	1,650	180

Source: SMM

Note: the above scrap aluminum prices are based on the average mainstream traded price, not excluding all traded prices.

## China Scrap Aluminum Price (Excluding VAT)

Unit: RMB/mt

Region	Name	Specification	Oct. 14	Nov. 15	+/-
Foshan (Guangdong)	Clean Tapping Aluminum Wire	surface clean, non-oxidation	11,350	12,750	1400
	Extrusion	Imported clean 6063 extrusion	10,250	11,550	1300
	Shredded Tense	Recoverable content 91%-93%	10,750	11,450	700
	Shredded Taint	Recoverable content 90%-92%	9,850	10,950	1100
	UBC Baled	--	8,700	9,500	800
	Painted Siding	--	10,350	11,650	1300
Shanghai	Clean Tapping Aluminum Wire	surface clean, nonoxidation	11,350	12,750	1400
	Extrusion	Domestic 6063 extrusion	9,850	11,150	1300
	Tense	Recoverable content 88%-90%	9,750	10,450	700
	UBC Baled	--	8,600	9,400	800
	Durable Goods	--	8,100	9,200	1100
	Aluminum Turning	Domestic, Recoverable content 85%-87%	8,200	9,300	1100
	Aluminum Scrap-printing Paper Plate	--	10,400	11,700	1300
Taizhou (Zhejiang)	Clean Tapping Aluminum Wire	surface clean, non-oxidation	11,450	12,850	1400
	Extrusion	Domestic 6063 extrusion	9,900	11,200	1300
	Tense	Recoverable content 93%-94%	10,350	11,450	1100
Changge (Henan)	Clean Tapping Aluminum Wire	surface clean, non-oxidation	11,300	12,700	1400
	Extrusion	Domestic 6063 extrusion	9,850	11,150	1300
	Tense	Recoverable content 83%-85%	9,050	9,750	700
Tianjin	Clean Tapping Aluminum Wire	surface clean, non-oxidation	11,500	12,900	1400
	Extrusion	Domestic 6063 extrusion	9,950	11,250	1300
	Tense	Recoverable content 93%-94%	10,450	11,150	700
	Aluminum Radiator	Domestic/imported, Recoverable content 80%-85%	9,100	10,200	1100
Chongqing	Tense	Recoverable content 90%-91%	10,500	11,500	1000
	Tense	Recoverable content 83%-85%	9,800	10,800	1000
Baoding (Hebei)	Tense	Recoverable content 88%-90%	10,450	11,500	1050
	Tense	Recoverable content 93-95%	9,600	10,300	700

Source: SMM

Note: the above scrap aluminum prices are based on the average mainstream traded price, not excluding all traded prices.

## FRP

## Aluminum Plate/Sheet, Strip and Foil Demand Remains Strong in October

SMM's survey of 47 domestic aluminum plate/sheet, strip and foil producers showed their average operating rate was 62.47% in October, up 0.71 percentage point MoM. The operating rate increased to 67.41% at large producers, but fell back at SMEs because rising aluminum prices reduced orders at SMEs. Operating rate dropped 3.77 percentage points MoM to 37.74% at small producers and slid 0.74 percentage point MoM to 47.07% at medium producers.

Demand remained strong in October. Aluminum plate/sheet and strip producers with diverse product portfolio, including Henan Mingtai Aluminum and Chalco Ruimin, reported ample orders from construction, transportation and 3C sectors. Sales at Henan Mingtai Aluminum refreshed record high of over 50,000 mt in October.

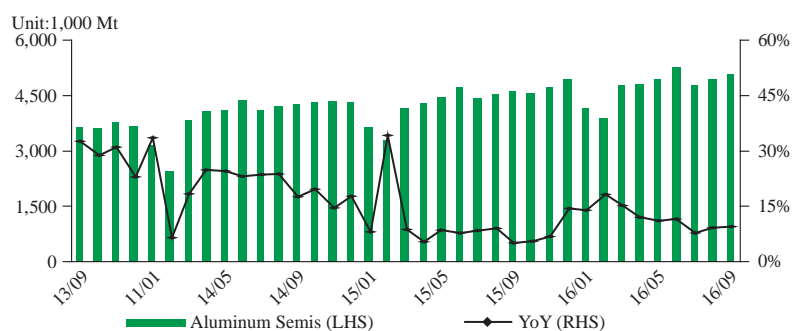
The 2017 Chinese New Year holiday will fall in late January, which is earlier than usual, and weather in north China will get cold. So, property developers in north China need to complete construction before the end of November, while distributors and construction companies need to finish stock building before the end of October. This allowed construction curtain wall plate producers to maintain high operating rates in October. The fourth quarter is peak production and sales season for automobile industry. China's automobile production was up 2.2% MoM and 17.6% YoY to 2.59 million units in October and sales were up 3.6% MoM and 18.7% YoY to 2.65 million units. New energy vehicle production rose 14.3% YoY to 49,000 units in October, and sales increased 8.1% YoY to 44,000 units. Booming automobile industry boosted orders at aluminum plate/sheet, strip and foil producers. For example, producers of plate/sheet, strip and foil used for making car radiators, including Granges Aluminum and Huafo Aluminum, said orders grew steadily in Q4, and such companies were little affected by high aluminum prices in November because of high value-added of their products. Can stock producers kept operating rates stable in October. Orders dropped from producers of cans that contain popular drinks in summer, while orders grew from producers of cans that contain food and drinks as gifts. Overall, orders for can stock fell in Q4. One large can stock producer expects its output to fall around 2,000 mt in November, citing the off-season.

The average operating rate was 70.69% at domestic aluminum foil producers in October, little changed from September. Orders from air-conditioner industry were stable in October. According to askci.com, China's air-conditioner output was 12.35 million sets in September, up 15.2% YoY, and totaled 121.83 million sets during the first nine months of this year, down 0.9% YoY. Air-conditioner producers succeeded in destocking this year. SMM had expected earlier that air-conditioner producers would cut purchases in Q4 after stockpiling raw materials in advance. But, it turned out that air-conditioner producers did not cut purchases in October. Based on orders at aluminum foil producers, SMM expects operating rate to slide at domestic aluminum foil producers in November.

In November, aluminum prices fluctuated widely at highs, which discouraged end-users from placing orders and deterred aluminum plate/sheet, strip and foil producers from taking orders. Export-oriented aluminum processors reported big fall in operating rates. Current SHFE/LME aluminum price ratio leaves aluminum semis exports in losses. Aluminum processors with good ability in risk control and hedging have an advantage amid big swing in aluminum prices. Aluminum processors who settle prices based on monthly average aluminum price were less affected than those who settle prices based on aluminum prices that were 3 or 5 days prior to shipment. Aluminum plate/sheet, strip and foil producers showed low interest in raw material purchases in November against sharply rising aluminum prices. Raw material inventory/output ratio was 6.95% at aluminum plate/sheet, strip and foil producers in November, down 2.67 percentage points MoM.

To sum up, SMM expects operating rate to decline to 58% at aluminum plate/sheet and strip producers in November and to drop to 68% at aluminum foil producers.

### China Aluminum Semis Monthly Output



Sources: CNIA, SMM



## China Aluminum Semis Imports and Exports by Product

Unit: Mt

	HS Code	2015	2016 Apr.	2016 May	2016 Jun.	2016 Jul.	2016 Aug.	2016 Sep.
<b>Exports</b>								
Aluminum powders and flakes	7603	10,339	996	918	822	1,049	968	662
Aluminum bars, rods and profiles	7604	1,189,135	106,909	101,923	100,598	104,666	106,025	115,318
Aluminum wires	7605	25,058	2,007	2,044	1,938	2,115	2,064	1,752
Aluminum plates, sheets and strips	7606	1,871,025	142,775	155,271	135,572	141,380	152,114	132,795
Aluminum foil	7607	952,220	93,356	102,442	90,578	91,341	98,273	87,311
Aluminum tubes and pipes(include fittings)	7608-7609	147,495	10,957	11,554	11,158	10,681	10,837	10,148
Aluminum semis	7603-7609	4,195,272	356,999	374,152	340,666	351,233	370,280	347,986
<b>Imports</b>								
Aluminum powders and flakes	7603	1,230	197	95	125	102	98	93
Aluminum bars, rods and profiles	7604	69,147	5,122	5,111	4,133	4,582	4,626	5,784
Aluminum wires	7605	8,618	839	861	1,169	1,167	1,116	945
Aluminum plates, sheets and strips	7606	325,463	17,127	20,827	20,770	21,613	23,103	19,888
Aluminum foil	7607	56,461	4,813	4,875	5,326	5,077	5,533	5,216
Aluminum tubes and pipes(include fittings)	7608-7609	11,174	684	724	797	630	762	719
Aluminum semis	7603-7609	472,093	28,781	32,493	32,319	33,170	35,237	32,645

Sources: SMM, China Customs

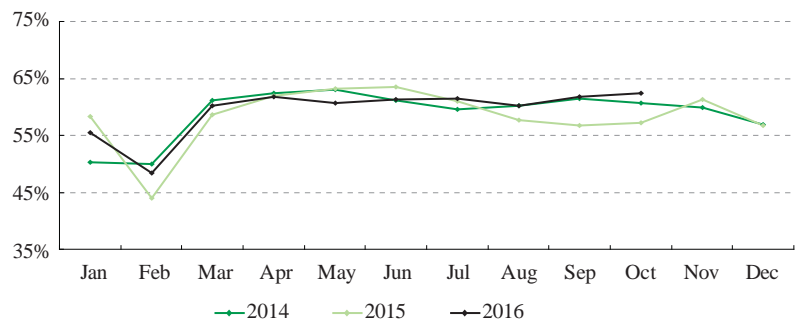
## Average Monthly Operating Rates - FRP

Unit: 1,000 mt/yr

Capacity Range	Number	Total Capacity	Sep.	Oct.	Nov. (E)
≥100	18	4420	66.22%	67.41%	64%
<100 and ≥30	25	1370	47.81%	47.07%	45%
<30	4	47	41.51%	37.74%	35%
<b>Total</b>	<b>47</b>	<b>5837</b>	<b>61.76%</b>	<b>62.47%</b>	<b>59%</b>

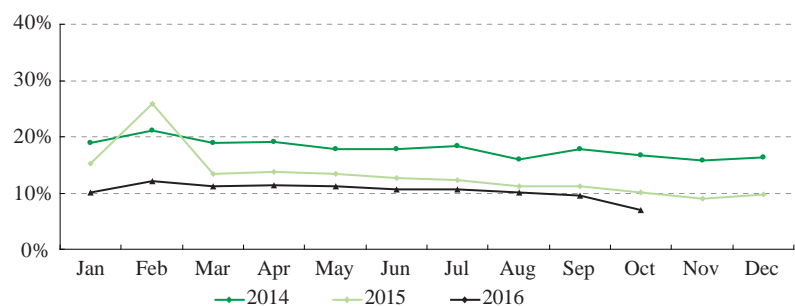
Source: SMM

## Operating Rates at China Aluminum FRP Enterprises 2014-2016



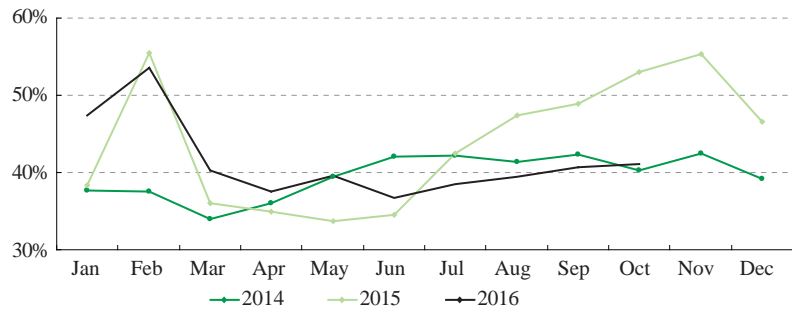
Source: SMM

## Raw Material Inventory Ratio at Aluminum FRP Enterprises 2014-2016



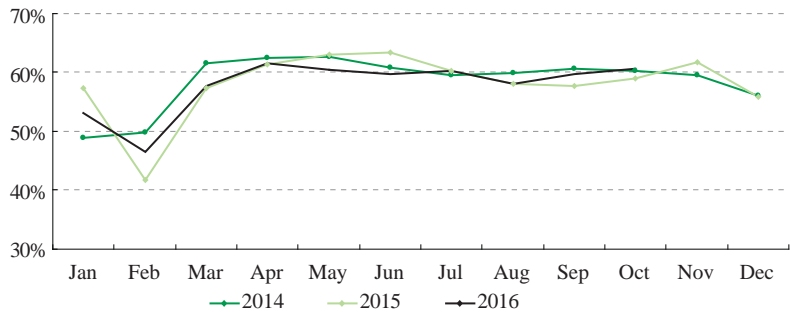
Source: SMM raw material inventory Ratio=raw material inventory/aluminum semis output for the month.

### Finished Product Inventory Ratio at Aluminum FRP Enterprises 2014-2016



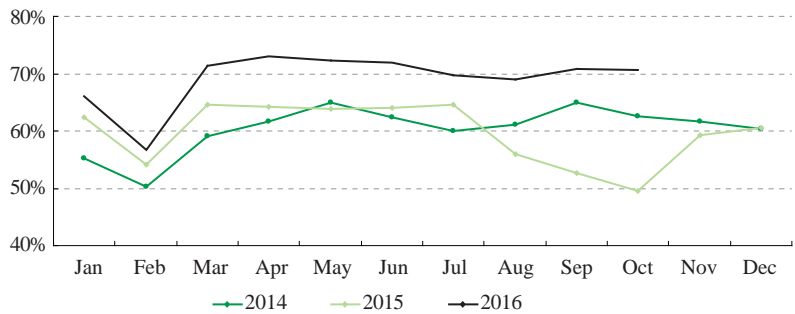
Source: SMM finished product inventory Ratio=finished product inventory/aluminum semis output for the month.

### Operating Rates at Aluminum Plate, Sheet and Strip Enterprises 2014-2016



Source: SMM

### Operating Rates at Aluminum Foil Enterprises 2014-2016



Source: SMM

### Comparison of Operating Rates at Aluminum Foil and Aluminum Plate, Sheet & Strip Producers

Enterprise	Oct.	Nov. (E)
Aluminum foil	70.69%	68%
Aluminum plate, sheet and strip	60.65%	58%

Source: SMM

## Aluminum Extrusion

### Orders at Chinese Aluminum Extruders Miss Forecast in October on Soaring Aluminum Prices

SMM's survey of 30 domestic aluminum extruders showed their average operating rate was 52.65% in October, up slightly from September. The operating rate increased 0.67 percentage point MoM to 60.71% at large producers, was unchanged at medium producers, and dropped 2.34 percentage points MoM at small producers. The operating rate increased to 69.23% at industrial aluminum extrusion segment and rose to 50.78% in construction aluminum extrusion segment.

Unlike aluminum plate/sheet, strip and foil producers, whose delivery period usually lasts for 20-30 days, delivery period is usually 7-12 days for aluminum extruders. As such, aluminum extruders are more significantly affected than aluminum plate/sheet, strip and foil producers when aluminum prices swing wildly. While the fourth quarter is a peak demand season for building material and home decoration market, operating rates at aluminum extruders were lower than expected in October. This is because steadily rising aluminum prices reduced orders at SMEs and home buying restrictions in many cities left distributors hesitant about making purchases in Q4. Large aluminum extruders kept high operating rates, though, due to stable customers. Aluminum extruders in Guangdong reported much bigger increase in orders than their rivals in north China, such as Shandong and Hebei. With weather getting colder in north China after entering November, the differences in orders at aluminum extruders in south and north China will expand further.

In construction aluminum extrusion market, producers' profit shrank severely as processing fees kept falling. In response, many large producers began adding surface treatment business, which was done mainly by SMEs over the past years.

In industrial aluminum extrusion market, growing demand from rail transport, automobile, PV and lamp sectors boosted production at SMEs. Guangdong Fenglu Aluminium and Guangdong Haomei Aluminium, two leaders in construction aluminum extrusion industry, are planning to add industrial aluminum extrusion machines this year.

Steadily rising aluminum prices significantly cooled down aluminum extruders' interest in raw material purchases. The price spread between Guangdong and Shanghai expanded to nearly RMB 500/mt around mid-November, triggering strong wait-and-see sentiment among aluminum extruders in Guangdong. Raw material inventory/output ratio was 10.14% at aluminum extruders in October, down 2.13 percentage points MoM.

SMM expects operating rate to increase 1 percentage point MoM at domestic aluminum extruders in November, with 70% in industrial aluminum extrusion segment and 51% in construction aluminum extrusion segment.

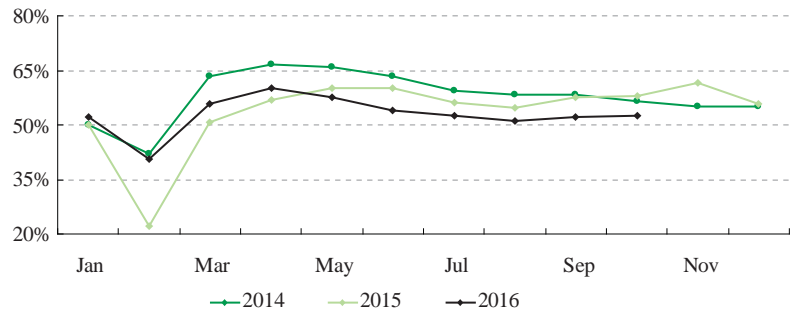
#### Average Monthly Operating Rates - Extrusion

Unit: 1,000 mt/yr

Capacity Range	Number	Total Capacity	Sep.	Oct.	Nov. (E)
≥50	7	1400	60.04%	60.71%	62%
<50 and ≥10	18	925	41.44%	41.44%	42%
<10	5	81	30.67%	28.33%	27%
<b>Total</b>	<b>30</b>	<b>2406</b>	<b>52.28%</b>	<b>52.65%</b>	<b>53%</b>

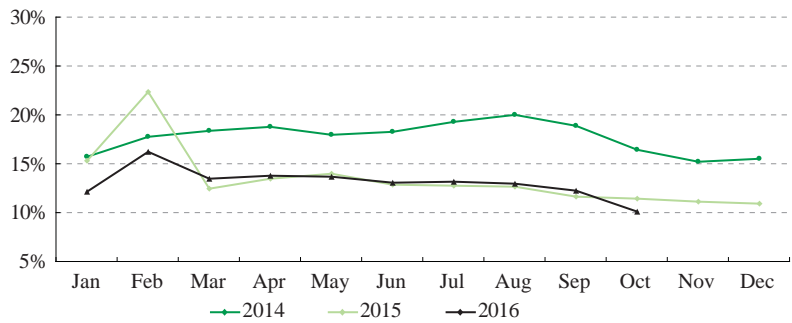
Source: SMM

Operating Rates at China Aluminum Extrusion Enterprises 2014-2016



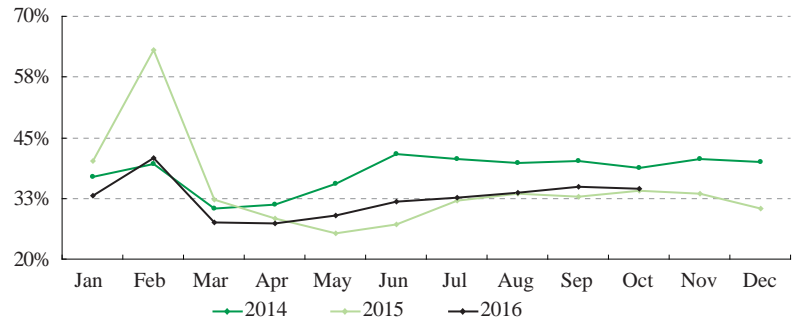
Source: SMM

Raw Material Inventory Ratio at Aluminum Extrusion Enterprises 2014-2016



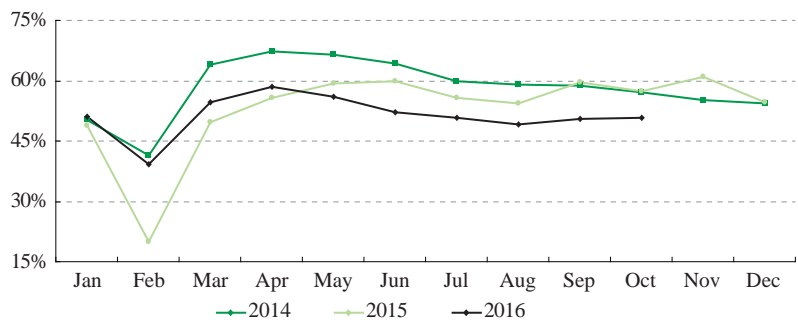
Source: SMM raw material inventory Ratio=raw material inventory/aluminum semis output for the month.

Finished Product Inventory Ratio at Aluminum Extrusion Enterprises 2014-2016



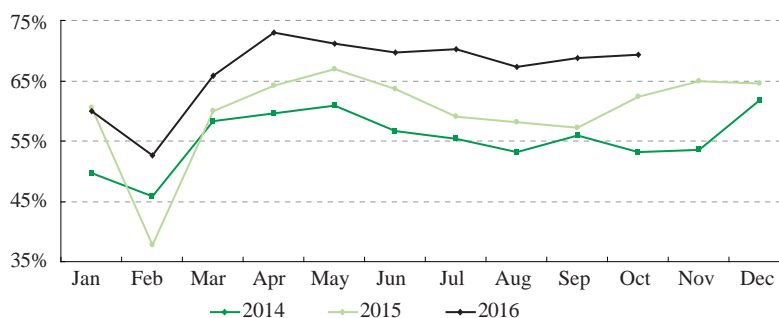
Source: SMM finished product inventory Ratio=finished product inventory/aluminum semis output for the month.

Operating Rates at Construction Aluminum Extrusion Enterprises 2014-2016



Source: SMM

### Operating Rates at Industrial Aluminum Extrusion Enterprises 2014-2016



Source: SMM

### Comparison of Operating Rates at Industrial and Construction Aluminum Extrusion Producers

Enterprise	Oct.	Nov. (E)
Industrial aluminum extrusion	69.23%	70%
Construction aluminum extrusion	50.78%	51%

Source: SMM

## Aluminum Wire & Cable

### Operating Rates Fall Sharply at Chinese Aluminum Wire & Cable Producers in October on Big Losses

SMM's survey of 23 domestic aluminum wire & cable producers showed their average operating rate was 66.2% in October, down 3 percentage points MoM and nearly 2 percentage points lower than expected. Aluminum prices kept rising in October, gaining as much as RMB 1,590/mt in the last week of October to nearly RMB 15,000/mt. Most wire & cable producers signed contracts with buyers several months ago when aluminum prices were less than RMB 12,500/mt. For contracts signed with State Grid, aluminum prices were finalized in advance. Aluminum prices were based on market prices only for contracts signed with provincial power companies. As such, most wire & cable producers suffered big losses, forcing them to try to postpone production. Operating rate at large producers was just 1 percentage point lower than September's level and forecast. This is because large producers needed to deliver goods to UHV projects and hedging operations in futures market helped reduce their losses. Operating rate at medium producers fell as much as 4 percentage points MoM and was 3 percentage points lower than expected. Almost half of medium producers who did not have hedging operations in futures market chose to postpone production against high aluminum prices. Operating rate at small producers was 49.13%, which was 2 percentage points lower than September's level and expected. Small producers signed contracts mainly with power companies, with short goods delivery period. Aluminum prices were already quite high when contracts were signed, so losses were relatively small at small producers.

SMM expects operating rate to fall 6 percentage points MoM to 60% at domestic aluminum wire & cable producers in November, citing two reasons. First, delivery for just one UHV project is still under way in November, while delivery for other UHV projects has been completed. Several producers said their output fell about 2,000 mt as delivery for UHV projects has ended. Second, most producers are trying to delay production against high aluminum prices. For projects in north China that will not begin construction until after the 2017 Chinese New Year holiday, producers were required to complete just 10% of orders before the year's end. Those who originally planned to fulfill all orders in November now decide to fulfill just 10% of orders in December.

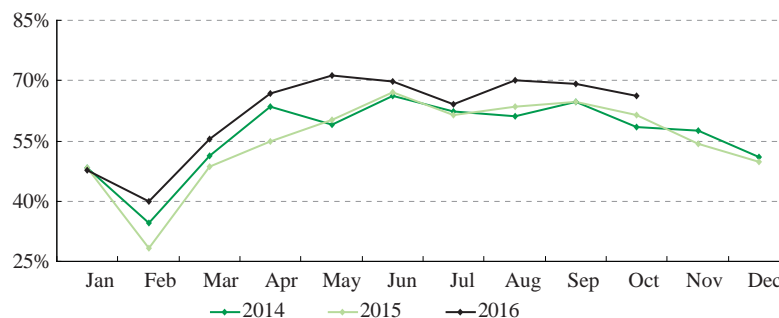
## Average Monthly Operating Rates - Wire &amp; Cable

Unit: 1,000 mt/yr

Capacity Range	Number	Total Capacity	Sep.	Oct.	Nov. (E)
≥100	5	644	66.88%	65.45%	59%
<100 and ≥30	14	703	72.80%	68.26%	62%
<30	4	60	51.23%	49.13%	48%
<b>Total</b>	<b>23</b>	<b>1407</b>	<b>69.24%</b>	<b>66.19%</b>	<b>60%</b>

Source: SMM

## Operating Rates at China Aluminum Wire &amp; Cable Enterprises



Source: SMM

## Wire &amp; Cable Bidding Solicitation Volumes by State Grid for Power Distribution Fall Sharply

On October 31, State Grid issued its third round of bid to buy wire & cable for power distribution, including 45,000 mt of steel-cored aluminum stranded wire, down 13.5% YoY, 921,000 km of overhead insulated conductor, down 7.4% YoY, and 22,000 km of cluster insulated conductor, down 29.0% YoY. So far this year, bids issued by State Grid include 92,000 mt of steel-cored aluminum stranded wire, down 28.7% YoY, 2.07 million km of overhead insulated conductor, down 14.1% YoY, and 76,000 km of cluster insulated conductor, down 16.4% YoY.

## Second Round of Bid Invitation for Power Distribution Lines by State Grid at Provincial Levels in 2016

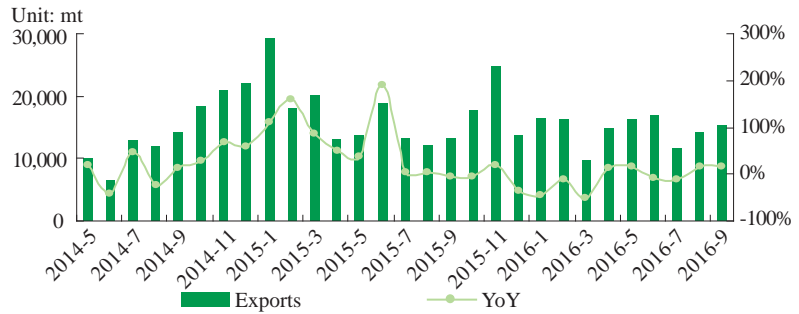
	Steel-cored aluminum stranded wire		Overhead insulated conductor		Cluster insulated conductor	
	Amount (1,000 mt)	YoY	Length (1,000 km)	YoY	Length (1,000 km)	YoY
third round	17	-72.58%	260	-74.88%	5	-87.8%
2016	92	-13.5%	2072	-7.4%	76	-29%

Sources: State Grid, SMM

## China Aluminum Wire &amp; Cable Exports Rise to 15,391 mt in September

China exported 15,391 mt of aluminum wire & cable in September, up 16.05% YoY and 9.04% MoM. Power grid in Africa lags behind because of backward economy, offering opportunities for China's aluminum wire & cable exports. Wire & cable demand in South Africa is stronger than in other African countries. Countries covered by the Belt & Road Initiative will become new markets for China's aluminum wire & cable exports.

## China Exports of Steel-Cored Aluminum Stranded Wire 2013-2016



Source: SMM

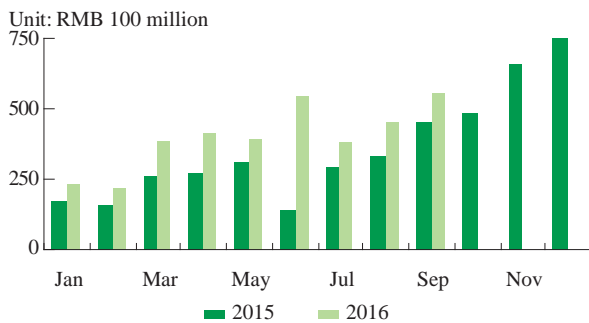
## Aluminum Rod Processing Fees Tumble on Soaring Aluminum Prices

Processing fees for electrical round aluminum rod fluctuated along with aluminum prices during October 17-24, with processing fees for aluminum rod in Shandong ranging RMB 200-300/mt. Truck transport costs increased about 30% after introduction of new transport regulations. Aluminum rod producers in Inner Mongolia, which is far from consumer markets in Henan and Hebei, are at disadvantage over their competitors in Shandong and Hebei in terms of transport costs. In order to maintain market share, the biggest aluminum rod producer in Inner Mongolia, who produces both aluminum liquid and aluminum rod, cut offers of processing fees to less than RMB 100/mt. In Henan, Jiaozuo Wanfang Aluminum will not return to full production until the year's end. This has restricted raw material supply to two local aluminum rod producers, who mainly fulfill long-term orders.

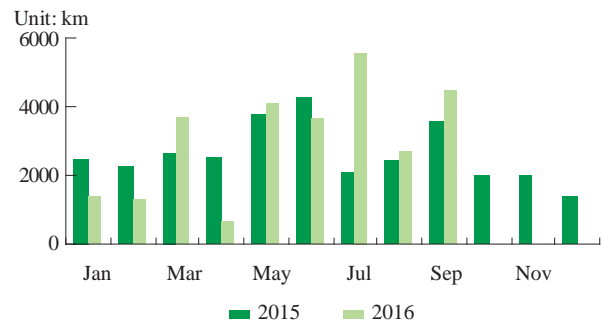
Aluminum prices soared to RMB 15,400/mt after October 24. Shandong Xinfu Group, who produces both aluminum liquid and aluminum rod, cut aluminum rod processing fees all the way down and even offered aluminum rod at discounts over aluminum prices. As of November 14, Shandong Xinfu Group offered ex-works prices for aluminum rod at RMB 200/mt below Shanghai spot aluminum prices. Other aluminum rod producers in Shandong, who need to buy aluminum liquid, lowered aluminum rod processing fees to RMB 150/mt, with no room for further cuts. Inner Mongolia's biggest aluminum rod producer followed Shandong Xinfu Group in cutting aluminum rod processing fees, but the cut only targeted regular customers. Aluminum rod producers in Henan only supplied regular customers and kept offers of aluminum rod processing fees at RMB 340/mt. One aluminum rod producer in Henan reduced the number of production lines in operation from 5 in October to 2 in November.

Processing fees for 6-series and 8-series aluminum alloy were stable during mid-October and mid-November.

## Investment in Power Grid Construction 2015-2016



## Length of New Power Transmission Lines (≥220 Kv) 2015-2016



Source: NEA

## Secondary Aluminum Alloy Ingot

SMM's survey showed production at domestic secondary aluminum alloy producers grew significantly in October from September. Downstream producers stepped up purchases due to robust end-user demand and relatively low raw material prices, boosting production at secondary aluminum alloy producers.

SMM's survey of 45 domestic secondary aluminum alloy producers showed their average operating rate increased to 64.45% in October. China's automobile production rose 2.2% YoY to 2.59 million units in October, boosting secondary aluminum alloy demand and production. The increase in operating rate was limited partly because of the Chinese National Day holiday in early October. Besides, soaring aluminum prices drove many buyers to the sidelines, also curtailing growth in operating rate.

Operating rate at domestic secondary aluminum alloy producers is expected to climb to 66% in November since downstream producers will gradually accept high secondary aluminum alloy prices.

Die-casters purchased normally in early October when aluminum prices were relatively steady. However, many die-casters chose to work through stocks on hand and only some die-casters bought as needed in late October and early November as aluminum prices kept rising.

Scrap aluminum suppliers showed low willingness to sell after scrap aluminum prices rose. Tightening scrap aluminum supply pushed secondary aluminum alloy prices up. Prices for ADC12 secondary aluminum alloy gained RMB 1,350/mt over the past month and surged RMB 1,900/mt in Southwest China, where scrap aluminum was in severe shortage. As of mid-November, mainstream traded prices for ADC12 secondary aluminum alloy were RMB 15,200-15,400/mt in East China, RMB 15,100-15,300/mt in South China and Southwest China.

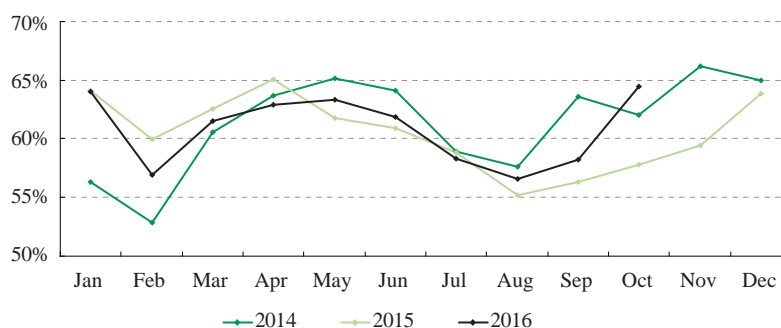
Average Monthly Operating Rates - Secondary Aluminum Alloy Ingot

Unit: 1,000 mt/yr

Capacity Range	Number	Total Capacity	Sep.	Oct.	Nov. (E)
≥50	24	2910	60.27%	67.56%	69%
<50 and ≥30	15	698	43.51%	55.32%	57%
<30	6	159	35.88%	45.23%	47%
<b>Total</b>	<b>45</b>	<b>3767</b>	<b>58.19%</b>	<b>64.45%</b>	<b>66%</b>

Source: SMM

Operating Rates at China Aluminum Alloy Ingot Enterprises



Source: SMM



## Chinese A356 Aluminum Alloy Producers Maintain High Operating Rate in October on Strong Demand

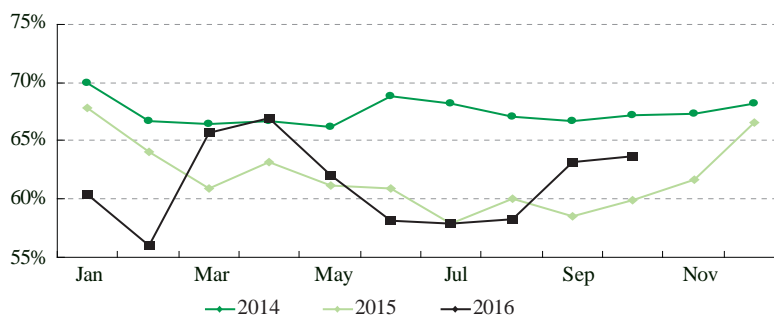
SMM's survey of 15 domestic A356 aluminum alloy producers showed their average operating rate was 63.72% in October. Operating rate stayed high in October after big growth in September, supported by strong demand from automobile industry. China's automobile output rose 2.2% YoY in October. Aluminum alloy wheel rim producers said export orders did not weak in October, despite rising aluminum prices. However, export orders for aluminum alloy wheel rim were delayed in November as aluminum prices increased significantly.

China's aluminum alloy wheel exports increased 1.3% YoY to 75,100 mt in September, but export value dropped 3.7% YoY to USD 343 million, with the average export price at USD 4.57/kg. During January-September, China exported 615,300 mt of aluminum alloy wheels, up 4.1% YoY, but export value slid 2.7% YoY to USD 2.85 billion, with the average export price at USD 4.64/kg. The number of aluminum alloy wheel exporters was 1,164 during January-September, with export value at the top 40 exporters at USD 2.38 billion, accounting for 83.3% of total export value, and export value at the top 100 exporters was USD 2.73 billion, accounting for 95.6% of total export value.

According to the China Association of Automobile Manufacturers (CAAM), China's automobile production was 2.59 million units in October, up 2.20% MoM and 17.63% YoY, and sales were 2.65 million units, up 3.35% MoM and 18.65% YoY. Of them, production of passenger vehicles was 2.29 million units, up 2.49% MoM and 19.77% YoY, and sales were 2.34 million units, up 3.34% MoM and 20.29% YoY; production of commercial vehicles was 299,200 units, up 0.04% MoM and 3.53% YoY, and sales were 305,800 units, up 3.38% MoM and 7.40% YoY.

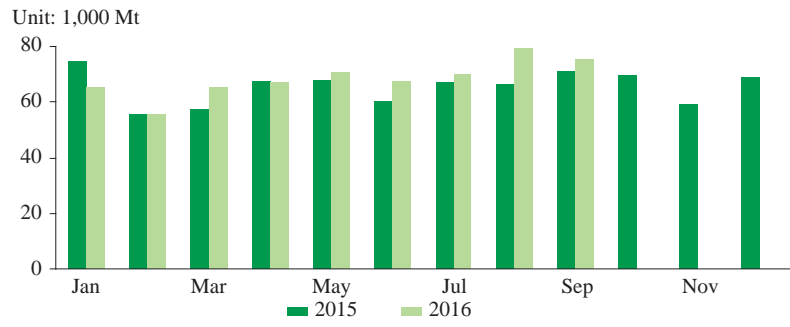
China's automobile production rose 13.79% YoY to 22.02 million units during January-October, and sales increased 13.83% YoY to 22.02 million units, with the growth up 13.77 percentage points and 12.32 percentage points, respectively, from a year ago. Of them, passenger vehicle production rose 15.27% YoY to 19.11 million units and sales were up 15.40% YoY to 19.1 million units; commercial vehicle production grew 4.93% YoY to 2.91 million units and sales were up 4.58% YoY to 2.92 million units.

### Monthly Operating Rate at Chinese A356 Producers



Source: SMM

## China Aluminum Wheel Rim Exports by Month 2015-2016



Sources: SMM, China Customs

## SMM also provides

### SMM Regular Report (weekly & monthly)

#### Non-ferrous Metals Reports

China Base Metal Briefing (weekly)

China Metal Briefing (weekly)

China Copper Weekly

China Aluminum Industry Chain Weekly Report

China Zinc Weekly

China Lead Weekly

China Steel Briefing

China Iron Ore Weekly Monitor

China Copper Monthly

China Aluminum Monthly

China Nickel Monthly

China Manganese Monthly

China Silicon Metal Market Monthly

China Rare Earth Quarterly

China Iron Ore Monthly Monitor

China Steel PMI Monthly

### SMM Annual Reports & Special Study

#### Non-ferrous Metals Reports

China Copper Industry Chain Annual Report, 2016-2019

China Aluminum Industry Chain Annual Report, 2016-2020

China Nickel Industry Chain Annual Report, 2016-2019

China Lead Industry Chain Annual Report, 2016-2018

China Zinc Industry Chain Annual Report, 2016-2019

China Rare Earth Industry Chain Annual Report, 2016-2019

China EMM Industry Chain Annual Report, 2016-2019

China Steel Industry Chain Annual Report, 2016-2020

China Nickel, Cobalt and Lithium Industry Annual Report 2016

#### SMM Research Team

**Hotline:** +86-21-5155-0322

**Fax:** +86-21-5155-0345

**Email:** [service.en@smm.cn](mailto:service.en@smm.cn)

**Add:** 8th FL in North Section, Building 9, Lujiazui Software Park, No. 20, Lane 91, E'Shan Road, Pudong New Area, Shanghai, 200127, China.

**Web:** <http://www.metal.com>

This report is an original work and/or a compilation by SMM, which holds the copyright thereto and is entitled to copyright protection under the Copyright Law of the People's Republic of China and applicable international treaties. Without the prior written permission of SMM, neither this report nor its contents, in part or in whole, may be reproduced, revised, sold, transferred, displayed, translated, compiled, or otherwise disseminated.

The contents of this report, including, but not limited to, any and all information, articles, data, tables, charts, photographs, audio and/or video recordings, logos, advertisements, trademarks, trade names, domain names, layout designs, are subject to protection under China's Copyright, Trademark, and Unfair Competition laws, as well as applicable international treaties pertaining to the legal protection of copyrights, trademarks, domain names, commercial data, and other forms of intellectual property, and are owned and held by SMM, its rights and assigns. Without the prior written permission of SMM, neither this report nor its contents, in part or in whole, may be reproduced, revised, sold, transferred, displayed, translated, compiled, or otherwise disseminated.

The views expressed in this report are based on a comprehensive assessment of available market information by SMM Research as of the date of publication. This report is provided for reference only. Reliance on the contents hereof is as your own risk.