



CCM Data & Business
Intelligence

Survey of Titanium Dioxide in China

The Tenth Edition

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Researched & Prepared by:

Kcomber Inc.

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1. Introduction

Survey of Titanium Dioxide in China, finished in November 2021, is CCM's tenth edition report on titanium dioxide industry. This intelligent report attaches importance to the following parts:

- ✓ Titanium dioxide production in China, 2018–2020
- ✓ Titanium dioxide and raw material prices in China, 2018–H1 2021
- ✓ Import and export analysis, 2018–2020
- ✓ Titanium dioxide consumption situation in China, 2018–2021

2. Approach for this report

The report is drafted by diverse methods as follows:

1) Desk research

The sources of desk research are various, including published magazines, journals, government statistics, industrial statistics, customs statistics, association seminars as well as information from the Internet. A lot of work has gone into compilation and analysis of the obtained information. Where necessary, checks have been made with Chinese suppliers regarding market information such as key producers, key end users, production, export and demand and so on.

2) Telephone interview

- Key producers
- Key end users
- Key traders
- Material suppliers
- Some associations
- Experts

Data compilation and crosscheck

The data from various sources have been combined and cross-checked to make this report as precise and scientific as possible.

3. Executive summary

Recent years, China's TiO₂ industry tended to develop steadily. The period of 2018–2020 saw consecutive growth of TiO₂ output in China, while fluctuation in the capacity. In 2020, domestic TiO₂ capacity grew to XXX million t/a and the output came to XXX million tonnes. With increasing concentration of the industry and manufacturers to obtain better production technology, it is estimated that TiO₂ production capacity in China will exceed XXX million t/a by 2025 and the output will grow to about XXX million tonnes.

So far, chloride process is fast developing in China, while sulfate process still dominates. Although some major domestic manufacturers have already built or are building chloride process titanium dioxide projects, technical barriers, product quality and high cost of related facilities make the process unreachable to most producers. The upgrading of China's titanium dioxide production techniques still has a long way to go.

The domestic price curve of TiO₂ in 2018–H1 2021 generally showed a "down-up" pattern. The price generally went down from Jan. 2018 to July 2020, and then went all the way up to June 2021.

With high foreign demand and the continuous improvement in quality of domestic TiO₂, TiO₂ exports continued to be strong in 2018–2020, while imports declined in general. China exported XXX tonnes of TiO₂ in 2020, expanding at a CAGR of XXX% during 2018–2020, while imported XXX tonnes, down from XXX tonnes in 2018.

As one of the largest consumers of titanium dioxide worldwide, China sees growing consumption of titanium dioxide. In 2018–2020, domestic TiO₂ consumption increased from XXX tonnes to XXX tonnes, with a CAGR of XXX. Coating, plastics and papermaking industries remain the largest downstream markets, accounting for XXX, XXX and XXX of the total in 2020. It is expected that in the next five years, these three industries will continue to lead the way in titanium dioxide consumption.

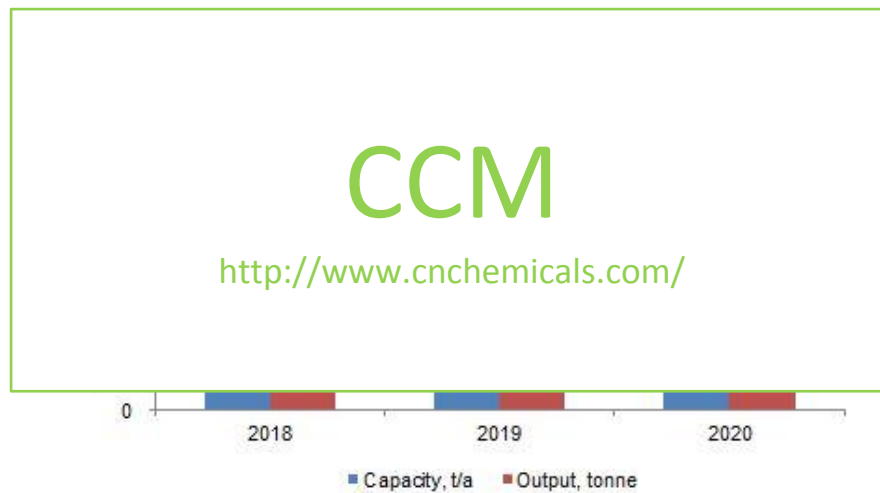
4. What is in the report?

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1.1 Titanium dioxide production, 2018 – 2020

The period of 2018–2020 saw consecutive growth of TiO₂ output in China, while fluctuation in the capacity.

Figure 1.1-1 Capacity and output of titanium dioxide in China, 2018–2020



Source: CCM

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1.2 Top 40 titanium dioxide manufacturers, 2018–2020

In 2018, of all the domestic full-process TiO₂ manufacturers that maintained normal production, XXX manufacturers achieved XXX tonne-above output, with Yunnan Dahutong Industrial & Trade Co., Ltd. as the new comer. The output of these XXX enterprises altogether reached nearly XXX million tonnes, accounting for almost XXX of the total output. In particular, the output of LB Group Co., Ltd. (LB Group) was XXX tonnes, over XXX of the total.

...

In 2020, all the production activities worldwide were somehow affected by COVID-19. However, with China outperforming other countries in response to this public health incident, Chinese TiO₂ manufacturers were able to maintain normal production throughout the year in general...

Table 1.2-2 Production information of the top 40 titanium dioxide manufacturers in China, 2020

No.	Manufacturer	Location	2020			Note
			Status	Capacity, t/a	Output, tonne	
1	LB Group Co., Ltd.	Henan	Active	XXX	XXX	Chloride process TiO ₂ capacity: XXX t/a
2	CNNC Hua Yuan Titanium Dioxide Co., Ltd.	Gansu	Active	XXX	XXX	/
3	XXX	XXX	XXX	XXX	XXX	/
...	XXX	XXX	/
Total				XXX	XXX	/

Source: CCM

...

1.3 Titanium dioxide production distribution, 2020

Domestic TiO₂ manufacturers are mainly distributed in XXX provinces, municipalities and autonomous regions. In particular, many TiO₂ manufacturers congregated in Sichuan, Guangxi, Shandong and Jiangsu. The largest TiO₂ producer in China is headquartered in Henan Province, having production bases in both Sichuan and Hubei.

Table 1.3-1 Distribution of top 40 titanium dioxide manufacturers by province/municipality/autonomous region in China, 2020

Province/Municipality/Autonomous Region	Capacity, t/a	Company Number
Sichuan	XXX	XXX
Henan	XXX	XXX
Shandong	XXX	XXX
XXX	XXX	XXX
...
Total	XXX	XXX

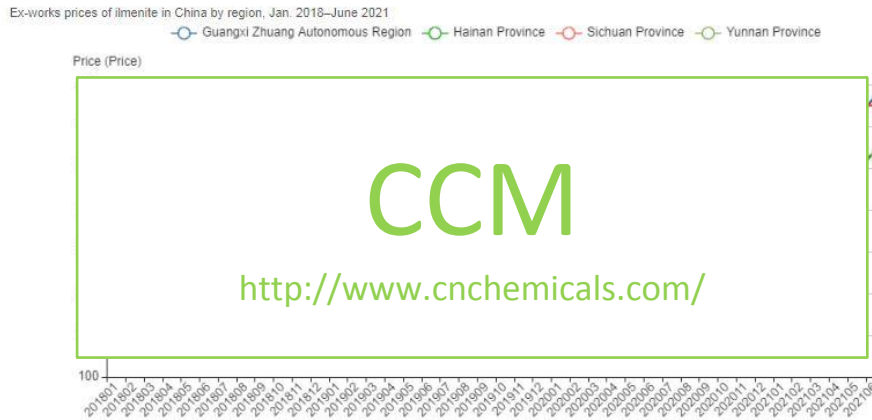
Source: CCM

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2.1 Raw material price, 2018–H1 2021

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Figure 2.1-1 Ex-works prices of ilmenite in China by region, Jan. 2018–June 2021



Source: CCM

Source: CCM

Figure 2.1-2 Ex-works prices of titanium slag (92%) in China by region, Jan. 2018–June 2021



Source: CCM

Source: CCM

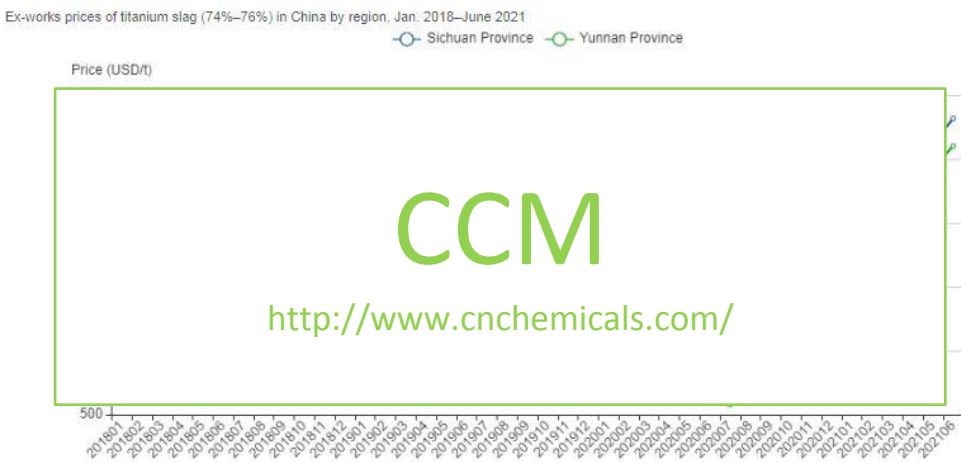
Figure 2.1-3 Ex-works prices of titanium slag (90%) in China by region, Jan. 2018–June 2021



Source: CCM

Source: CCM

Figure 2.1-4 Ex-works prices of titanium slag (74%–76%) in China by region, Jan. 2018–June 2021



Source: CCM

Source: CCM

2.2 TiO₂ price, 2018–H1 2021

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Figure 2.2-1 Monthly ex-works prices of rutile titanium dioxide in China by region, Jan. 2018–June 2021



Source: CCM

Source: CCM

Figure 2.2-2 Monthly ex-works prices of anatase titanium dioxide in China by region, Jan. 2018–June 2021



Source: CCM

Source: CCM

3 Mainstream titanium dioxide manufacturer, 2018–2020

3.1 Overview

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Table 3.1-1 List of domestic titanium dioxide producers with more than 100,000 tonnes output, 2020

No.	Producers	Note
1	LB Group Co., Ltd.	XXX
2	CNNC Hua Yuan Titanium Dioxide Co., Ltd.	XXX
3	Pangang Group Vanadium & Titanium Resources Co., Ltd.	XXX
4	XXX	XXX
...
12	XXX	XXX

Source: CCM

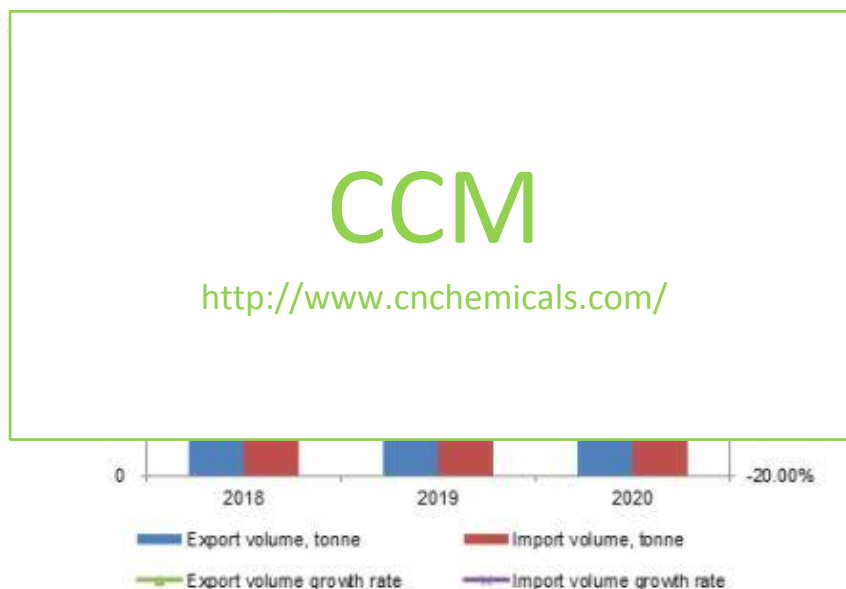
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5 Import and export analysis

5.1 Overview 2018–2020

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Figure 5.1-1 China's import and export volume of titanium dioxide, 2018–2020

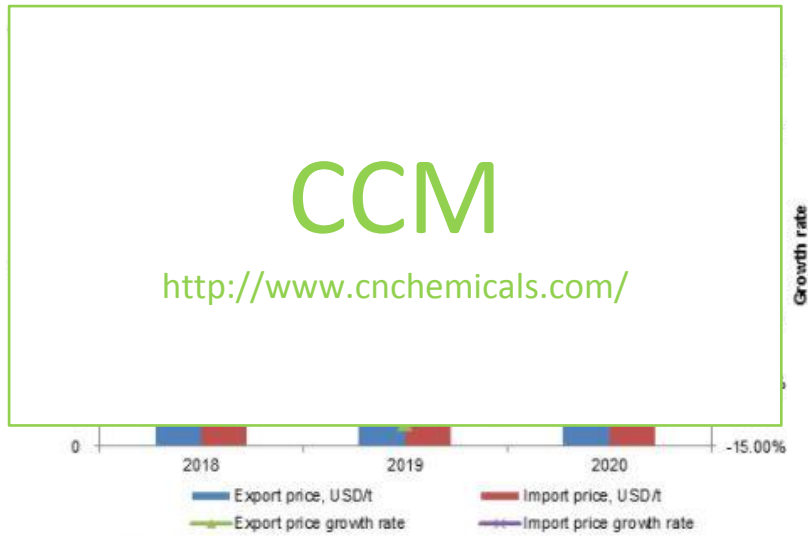


Source: CCM & China Customs

Source: CCM & China Customs

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Figure 5.1-2 China's import and export prices of titanium dioxide, 2018–2020



Source: CCM & China Customs

Source: CCM & China Customs

5.2 Import analysis 2018–2020

...

Figure 5.2-1 Import volume and price of titanium dioxide, Jan. 2018–Dec. 2020



Source: CCM & China Customs

Source: CCM & China Customs

5.3 Export analysis 2018 – 2020

...

Table 5.3-1 China's export destinations of titanium dioxide, 2018–2020

No.	Country	2018		2019		2020	
		Quantity, tonne	Price, USD/t	Quantity, tonne	Price, USD/t	Quantity, tonne	Price, USD/t
1	India	XXX	XXX	XXX	XXX	XXX	XXX
2	Brazil	XXX	XXX	XXX	XXX	XXX	XXX
3	South Korea	XXX	XXX	XXX	XXX	XXX	XXX
4	...	XXX	XXX	XXX	XXX	XXX	XXX
10	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Others		XXX	XXX	XXX	XXX	XXX	XXX
Total/Average		XXX	XXX	XXX	XXX	XXX	XXX

Source: CCM & China Customs

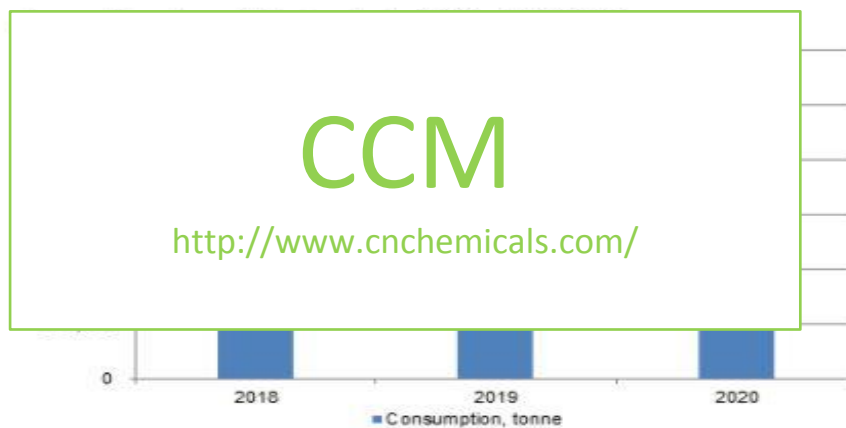
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6.1 Chinese titanium dioxide consumption situation

China, as an industrial power, is not only a producing powerhouse, but also a big consumer of TiO₂. In 2018–2020, domestic consumption volumes of titanium dioxide were XXX tonnes, XXX tonnes and XXX tonnes respectively, increasing with a CAGR of XXX.

Downstream application fields of TiO₂ are mainly coating, plastics, papermaking and chemical fiber, occupying the top four positions in China's TiO₂ consumption fields. In 2020, about XXX of China's TiO₂ was used in coating, followed by plastics and papermaking, accounting for XXX and XXX of the total respectively.

Figure 6.1-1 Consumption volume of titanium dioxide in China, 2018–2020



Source: CCM

Source: CCM

Table 6.1-1 Consumption volume of titanium dioxide by major end use segment in China, 2018–2020

Industry	Consumption volume, tonne		
	2018	2019	2020
Coating	XXX	XXX	XXX
Plastics	XXX	XXX	XXX
XXX	XXX	XXX	XXX
...	XXX	XXX	XXX
Others	XXX	XXX	XXX
Total	XXX	XXX	XXX

Source: CCM

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