

I Production

Capacity and output

Table I-1 Top 30 manufacturers by capacity, Mar. 2009

Manufacturer	Capacity,2009,t/a		Output, 2008, tonne		Titanium ore resource	Inventory, 2008,tonne
	Rutile	Anatase	Rutile	Anatase		
Shandong Dongjia Group	████	██	████ ████	██	████	████
Henan Billions Chemicals Co., Ltd.	████ ██	██ ██	████	██ ██	████ ██	████ ██
Sichuan Lonmon Group Titanium Industry Co., Ltd.	████	█	████	██	██ ████	██
Jiangsu Zhenjiang Titanium Dioxide Co., Ltd.	█ ████	██ ██	██ ██	██ ██	██ ██	█
Nanjing Titanium Dioxide Chemical Co., Ltd.	████	████	████	██ ████	████	██
Wudi Seastar Coal Chemical Co. Ltd.	████	██	████	██ ██	████	████ ██
Gansu CNNC Huayuan Titanium Dioxide Co., Ltd.	████	█	████	██	██	████ ██
Chongqing Titanium Industry Co., Ltd. of Pangang Group	████ ██	█	██ ██	█	██	██
Henan Luohe Xingmao Titanium Industry Co., Ltd.	█ ████	████	████	██ ██	████	████ ██
Titanium Dioxide Products Company of Sichuan Panzhihua Steel Co., Ltd.	██	████	████ ██	█ ████	████	██
Panzhihua Taihai Technology Co., Ltd.	██	██	█ ████	██	████	████ ██
Panzhihua Dongfang Titanium Co., Ltd.	█ ████	████	████ ██	██	████	██
Guangxi Dahua Chemical Factory	██	█ ████	████ ██	██ ████	████	██
Jiangsu Huaian Feiyang Titanium	██	████	████	████	████	██

Dioxide Co., Ltd.						
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Source: CCM International

Table I-4 New plants under construction, Mar. 2009

Manufacturer	Capacity, t/a	Launch time
██████████	██████	██████
██████████	██████	██████
██████████	██████	██████

Source: CCM International

Feedstock supply

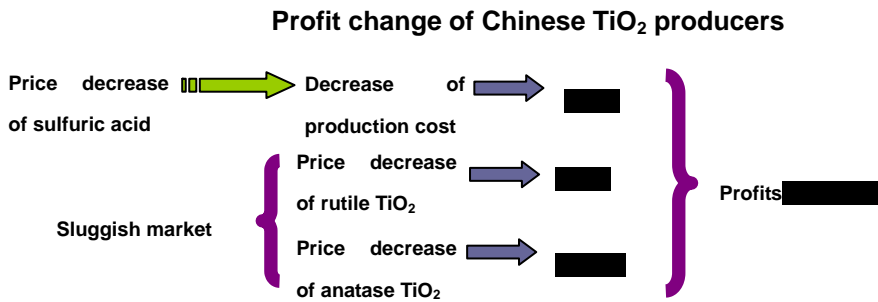
Table I-5 Import origins of titanium ore in China by share, 2006-2008

Country	Share		
	2006	2007	2008
██████	██	████	████
██████	████	████	████
████	████	████	████
██████	████	████	████
██████	████	████	████
██████	████	████	████
████	████	████	████
Others	████	████	████

Source: CCM International

██████████ remains key TiO₂ suppliers to China.

Price



II Benchmarking

Table II-2 Production cost of Jinzhou Titanium, Mar. 2009

	Item	Unit consumption, kg/kg	Price, USD/kg	Unit cost, USD/kg	Share in production cost
Raw material	Titanium slag	████	████	████	████
	Liquid chlorine	████	████	████	████
	Petrol coke	████	████	████	████
	Others①	████	████	████	████
Sub-total		████	████	████	████
Utility	Water	████	████	████	████
	Electricity	████	████	████	████
	Steam	████	████	████	████
Sub-total		████	████	████	████
Labor		████	████	████	████
Maintenance		████	████	████	████

Source: CCM International

Table II-4 Profit structure of Jinzhou Titanium, Mar. 2009

Item			Cost, USD/kg				
			Jinzhou Titanium Rutile	Panyu Titanium Rutile	Jinan Yuxing Anatase	Jinan Yuxing Rutile	Shanghai Jianghu Anatase
Production cost	Manufacturing costs	Raw materials	████	████	████	████	████
		Utilities	████	████	████	████	████
		Labor	████	████	████	████	████
		Maintenance	████	████	████	████	████
	Management costs		████	████	████	████	████
Total			████	████	████	████	████
Tax excluding profit tax			████	████	████	████	████
Total income	Sales		████	████	████	████	████
	Other income		████	████	████	████	████
Gross profit			████	████	████	████	████
Profit tax			████	████	████	████	████
Profit after			████	████	████	████	████

tax						
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Source: CCM International

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V Consumption

Coating

Table V-1 TiO₂ apparent consumption evolution, 2005-2008, tonne

Year	Output	Import	Export	Apparent consumption
2005	██████	██████	████	██████
2006	██████	██████	██████	██████
2007	██████	██████	██████	██████
2008	██████	██████	████	██████
CAGR	██████	██████	██████	████

Source: CCM International

Table V-3 TiO₂ consumption in coating, 2005~2008, tonne

Year	Architectural coating	Automobile coating	Marine coating	Special coating	Road coating	Coil coating	Wood coating	Others	Total
2005	██████	██████	██████	████	██████	████	██████	██████	██████
2006	██████	██████	████	██████	██████	████	████	██████	██████
2007	██████	██████	██████	██████	██	████	██████	██████	██████
2008	██████	██████	██████	██████	██████	██████	████	██████	██████

Source: CCM International

Table V-4 Main end users in coating industry, 2008

End user	Location	Product	TiO ₂ import volume tonne
████████████████████	██	Coil coating	████
████████████████████	██	Architectural coating, special coating, road coating, marine coating	██████
████████████████████	██████	Architectural coating, special coating, marine coating	██████
████████████████████	██	Architectural coating, wood coating,	████
████████████████████	██	Marine coating, special coating, powder coating, automobile coating	██████
████████████████████	██████	Marine coating, special coating, wood coating	██

Source: CCM International