

World Steel Dynamics (WSD) is a leading steel information service in Englewood Cliffs, N.J. WSD's steel experience, steel database and availability of steel statistics are the principles for performing steel forecasts, studies and analysis for international clients. WSD seeks to understand how the "pricing power" of steel companies the world over will be impacted by changes in the steel industry's structure. To submit your questions for WSD, e-mail WSD@aist.org.



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Q: As the global steel industry enters what appears to be a prolonged period of overcapacity, how does WSD anticipate industry structure will change in the upcoming decade?

A: Now that the steel industry has entered a down cycle, the "urge to merge phenomena" from 2003 to mid-2008 is not over – not by a long shot. Although it may be in abeyance for the moment, the depressed market conditions will expose the vulnerabilities of the weaker companies and make them ripe for takeover.

Down cycles for the industry typically lead to conditions of stress and crisis that are suffered to a far greater extent by the weaker players. These steel mills are not able to cope with the sharply swinging prices for steel on the world market, old and poorly located equipment, weak balance sheets and stronger competitors. Because "catch-up" is difficult to achieve, losers will seek to sell out to their stronger competitors.

Characteristics that would make a steel company a highly desirable acquisition prize include: good EBITDA; ownership of steelmakers' raw materials; low debt; a relatively low valuation; and an "inside" group that owns a sizable block of the stock.

Overall, M&A activity seems sure to resume post-2010 at a high rate. Our expectation is that, by 2018, there will be five to 10 companies with a capacity range of 50–150 million tonnes.

- *If the profit environment of 2004–2008 returns, many steel companies will, once again, have the cash flows to make substantial capital outlays and still be acquisitive.*

There is still a strong incentive to acquire plants rather than to build them. Why take five to seven years to build and start up a major new integrated steel plant when, instead, one can be purchased that has: (a) good equipment, (b) few environmental problems, (c) a solid supporting infrastructure, (d) a strong customer base and (e) an experienced workforce?

- *If the shake-out environment lingers, with steel prices dropping for a while to the marginal cost of the average-cost producer, the cost to acquire steel companies presumably will be much lower.*

Outside of China, stronger mills will be able to gobble up the weaker ones at bargain prices – although probably nowhere near the bargain-basement values that prevailed in 1998–2003.

In China, the larger, government-owned steel companies are being encouraged to merge with smaller companies in their industry. Most recently, the Shandong Steel Group, a government-owned 20-mtpy steelmaker, incorporated Shandong Rizhao Steel, a private, 8-mtpy steelmaker.

Chinese steel mills are outstanding acquisition or merger candidates. WSD believes that, in a few years, Chinese central government policymakers will change their minds and permit some of the leading Chinese mills to merge with their offshore competitors.

Indian steelmakers, particularly Tata-Corus Steel, SAIL and Essar, but also some others, are also a highly desirable part of the M&A mix. Steel companies in this region will benefit in the years ahead from an improving economy, abundant and low-cost iron ore, low wage costs for skilled workers, and sizable expansions of their plants. Indian steel companies are already among the lowest-cost producers in the world.

The table on the following page provides details regarding current possibilities for consolidations in the industry.

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Do you have a question for World Steel Dynamics?

Submit it today to WSD@aist.org.

The Urge to Merge 2009 (shipments in millions of tonnes)

Consolidators (principal locations noted)	Million tonnes	
ArcelorMittal (Global)	117	☆
Nippon Steel (Japan)	36	☆
JFE (Japan)	34	☆
POSCO (S. Korea)	31	☆
Baosteel (China)	29	☆
Tata-Corus (India, EU)	27	☆
Tangshan Iron & Steel (China)	23	
U. S. Steel (USA, Eastern Europe)	22	☆
Nucor (USA)	20	☆
Gerdau (Brazil, USA, Canada)	19	☆
Severstal (Russia, USA)	17	☆
ThyssenKrupp (Germany)	17	☆
Commercial Metals (USA)	6	☆
Total	397	

☆ World-class steelmaker as designated by WSD.

Acquirees	Million tonnes	
Anshan-Benxi (China)	24	☆
Jiangsu Shagang (China)	23	☆
Wuhan (China)	20	☆
Riva (Italy)	18	
Evraz Holding (Russia)	16	☆
Maanshan (China)	16	☆
SAIL (India)	14	☆
Sumitomo Metals (Japan)	14	
Magnitogorsk (Russia)	13	☆
Ternium (Latin Amer.)	13	☆
Shagang (China)	13	☆
Jinan (China)	12	
Laiwu (China)	12	
Valin (China)	11	
China Steel (Taiwan)	11	☆
IMIDRO (Iran)	10	
Hyundai Steel (S. Korea)	10	
Novolipetsk (Russia)	10	☆
Taiyuan (China)	9	
Metinvest Holdings (Ukraine)	9	
Anyan (China)	9	
Baotou Iron & Steel (China)	9	
Usiminas (Brazil)	9	
Handan (China)	8	
Celsa (United Kingdom)	8	
Kobe Steel (Japan)	7	
Tangshan-Jianlong (China)	8	
Essar (India)	8	☆
Jiuquan (China)	7	
Salzgitter (Germany)	7	
Ilyich (Ukraine)	7	
Voest Alpine (Austria)	7	☆
BlueScope (Australia)	7	☆
Panzhuhua (China)	7	
JSW Steel (India)	7	☆
Metalloinvest	6	
Beitei (China)	6	
Azovstal (Ukraine)	6	
Duferco (Germany)	6	
Rizhao Steel (China)	6	
SSAB (Sweden)	6	☆
Mechel (Russia)	6	
Nanjing Steel (China)	6	
AK Steel (USA)	6	☆
Guangxi Liuzhou (China)	6	
Ezz (Egypt)	6	☆
CSN (Brazil)	5	☆
Erdemir (Turkey)	5	
Steel Dynamics (USA)	5	☆
HADEED	5	
Zaporizhstahl	5	
Rautaruukki (Finland)	5	
Schnitzer (USA)	5	
Ahmsa (Mexico)	4	
Tokyo Steel (Japan)	4	
Vizag	3	☆
California Steel Ind. (USA)	3	
OneSteel (Australia)	3	
Total	511	

THE RACE TO BE KING

7 Theoretical Combinations	Million tonnes
ArcelorMittal, Wuhan, SAIL, Valin, Panzhihua, Erdemir, HADEED, Ahmsa	182
Baosteel, Nucor, Severstal, Riva, Maanshan, Ternium, Hyundai, Anyan, Baotou, Kobe, Beitei, Rautaruukki	160
JFE, Tata-Corus, CMC, Evraz, China Steel, Celsa, Azovstal, Duferco, SSAB, AK Steel, CSN, CSI	134
Nippon Steel, POSCO, Magnitogorsk, Salzgitter, Tangshan-Jianlong, Jiuquan, Ilyich, BlueScope, SDI	121
U. S. Steel, Sumitomo Metals, Shougang, Jinan, Laiwu, Taiyuan, Metinvest, Usiminas, Rizhao, Mechel	112
Tangshan, ThyssenKrupp, Anshan-Benxi, IMIDRO, Novolipetsk, Handan, JSW, Metalloinvest, Zaporizhstahl	110
Gerdau, Jiangsu Shagang, Essar, Voest Alpine, Nanjing, Guangxi Liuzhou, Ezz, Schnitzer, Tokyo Steel, Vizag, One Steel	89
Total	908
Total global shipments	1,242

Notes: In this "think piece," the confusion between consolidators and acquirees is intentional.

The Chinese major mills are likely acquirers of mid-sized mills in their country.