ZINC

By a Special Contributor

Having spent the first half of 2003 trading in a relatively erratic manner, zinc prices advanced strongly in early July, driven by the growing realisation that there might be an increasing tightness in the output of refined metal and concentrate later on in the year. A flurry of supply-side announcements hit the market, driving prices higher, before a correction set in and moved prices sharply lower as the crises abated. Prices then embarked on a much more sustainable uptrend, which saw them end the year on a cash basis at US$1,008/t (US$0.46/lb) representing a 33-month high as the ever-growing prospect of a rise in supply disruptions continued.

Trading in the early part of 2003 was dominated by developments on the supply-side, and any mildly bullish news concerning a refinery shutdown, or drop in output was sufficient to trigger a price surge. However, as so often happens with zinc, each time the furore surrounding such news died down, so prices would fall back towards the previous price-support level. On a quarterly basis, cash prices averaged US$774/t in the first quarter, US$821/t in the second, US$929/t in the third and US$1,071/t in the final quarter, the first time that they had been over US$1,000/t since the first quarter of 2001. The average price for the year was 6.4% higher than in 2002, at US$828/t. Demand-side factors were largely ignored by the market until the end of 2003.

Despite the numerous supply-disruptions during 2003, both actual and potential, LME stocks rose to close the year 61,350 t higher, at about 740,000 t. The increase was consistent with the forecasts of a market surplus although such forecasts had anticipated a stronger level of demand than was the case. Had demand been more robust, the price advance would have been far stronger. It was certainly the case that the zinc market was in need of a supply-side correction: International Lead and Zinc Study Group (ILZSG) data show that the Western market was in surplus by 261,000 t in 2001 and by 300,000 t in 2002, a situation that could not continue. The supply curtailments and shutdowns that were seen during 2003, combined with the modest growth in demand, helped to reduce the Western supply/demand balance to a surplus of 197,000 t.

Consumer stocks in Europe, the US and Japan, registered a decline of 1,000 t over the course of the year to close at 114,000 t. Stocks held by producers increased by 20,000 t to 334,000 t.

Mixed demand

Data from the ILZSG show that world demand in 2003 rose by 6.7% to 7.31 Mt. However, Western demand grew by only 0.1%, to 7.12 Mt, hence it is easy to see that the driving force behind the rally in prices in 2003 was driven

by the supply side and the growth in non-Western demand. Throughout the course of the year there was very little positive news about the outlook for zinc demand, with only the Far East region showing significant growth (up 9.2% to 4.53 Mt). Demand for zinc in galvanised steel sheet in China, for example, was particularly strong, and was driven by the phenomenal growth in demand from China's construction, automobile and air-conditioning sectors. In illustration of this rise in demand for galvanised steel sheet, Japanese exports showed double-digit growth with a similar story being recorded for Taiwan, both of whom have very strong links with Chinese economic growth on an export basis.

Of more concern, however, was the fall in US consumption last year, with ILZSG data showing a fall of 5.7% to 1.15 Mt. The fall was largely due to an over-supply in galvanised sheet production in North America, which forced steel mills to cut production, thereby reducing their zinc requirements. By year-end there was some encouragement. Demand strengthened and most US-based galvanisers were reporting strong order books for the 2004 first quarter.

Demand in Europe was slightly stronger over the course of the year and ILZSG data show that refined metal consumption increased by 1.2% to around 2.8 Mt. Although the ILZSG data cover both Western Europe and Eastern Europe, it should be noted that demand in the big five EU economies (Germany, France, Italy, Spain and the UK) registered year-on-year growth of just 0.7% to 1.61 Mt. For Europe as a whole though, demand was driven higher by the decline in refined metal stocks as exports to the Middle East, North Africa and China grew, and by firm demand from galvanisers who had reduced their stocks significantly during 2002.

Premiums for refined zinc varied considerably. In the US, premiums for high-grade zinc slumped in mid-year but, aided by a recovery in demand, they closed the year at a high of US$0.35/lb as demand prospects improved, having fallen to a low of US$0.28/lb at one stage. In Europe, quoted SHG, duty-paid premiums in Rotterdam rose from US$0.63/lb in January to US$0.83/lb by year end on firmer demand and weaker production capacity, which forced consumers to turn to the LME for their needs. Finally, in Asia, premiums for SHG material in Taiwan jumped from an opening quote of US$0.33/lb, to close the year at US$0.48/lb. The higher premiums were in response to stronger Asian demand and reduced Chinese exports, both of which served to reduce inventories held in warehouses within the region.

Production

According to the ILZSG, global refined metal output in 2003 rose by 1.5% to 9.86 Mt. In China, output grew by 6.4% to 2.29 Mt, but Western output stagnated at around 6.66 Mt as production cutbacks took their toll during the second half. As noted previously, fear of a supply shortage was a key factor in driving the market, and this was evident from a very early stage, with

concerns over the future of Metaleurop's Noyelles-Godault smelter in France arising in January. However, the full impact of the permanent closures of the Avonmouth, Noyelles-Godault and Cockle Creek smelters, the major production cutbacks at Kidd Creek and Porto Vesme, and the temporary closure of Balen, was not felt in the market until the second half of the year. It is noteworthy that most of these smelters used Imperial Smelting Furnace (ISF) technology, which is relatively inefficient when compared with electrolytic technology.

The slowdown in refined metal output was not really apparent until the second quarter of the year. Early in the third quarter, Glencore's Portovesme smelter/refinery complex in Sardinia was closed. The complex, comprising a 110,000 t/y electrolytic plant and an 85,000 t/y ISF smelter, was shutdown indefinitely.

Some of the producers also had to deal with a strengthening of their countries' currencies against the dollar, and as the (dollar-denominated) prices for their product in 2002 and the first half of 2003 were relatively low, several were effectively not making any profit and had to rely increasingly on their creditors. There was also a geographical shift in the supply base: Australian producers, for example, were no longer able to rely on the weakness in the Australian dollar to shield them from weaker zinc prices on the international market. In July/August the first currency-related casualty emerged when Western Metals collapsed under the weight of its financial burden.

Apart from the relative 'weakness' in the zinc market in 2001 and 2002, closures were also a result of producers' attempts to balance supply and demand. This led to a growing tightness in the concentrate market over the course of the year. Output at Canadian mines fell by 13.9% to 788,000 t, US production was down by 2.0% to 768,000 t and in Australia output stagnated at 1.44 Mt. Western concentrate production, overall, rose by just 3.9% to 6.73 Mt. The tightness in the concentrate market during 2003 is evident if the annual data are viewed on a six-month basis. In the first half of the year production amounted to 3.38 Mt, whereas in the second half it had fallen to of the year output had fallen to 3.35 Mt. Although this may not seem like a major shortfall it was sufficient to panic the smelters, who, despite having reasonable stocks of metal in the inventory pipeline, were concerned that any further rapid tightening in metal availability would quickly impact on stocks.

Chinese

China had a bullish influence on the zinc market in 2003. Domestic demand jumped by almost 17% to 2.05 Mt on the back of strong demand from the galvanising sector and this, in turn, resulted in exports of refined zinc being reduced by some 21,000 t, to 451,000 t. The lower exports helped reduce the Western market surplus significantly. Towards the end of the year, exports began to rise as smelters rushed to move metal out of the country before the government cut the VAT rebate on exports to 11% from 17% on January 11,

2004. For November and December, exports reached 116,000 t, representing almost 30-35% of the annual total.

Some of this exported metal was excess material diverted from stocks, which had built up because of a slowdown in construction activity and the consequent reduced demand for coated steels. However, to a large extent this fall was offset by strong demand in the electro-galvanised coil (ELG) market where a mid-year localised shortage in southern China, helped to check any growth in the level of exports.

Future

Zinc prices registered further gains in the first quarter of 2004, will likely follow the broad LME trend which will see them soften as the prospects for further economic growth in the main consuming economies comes under closer scrutiny. However, prices will close the year higher on an annual average basis as demand will inevitably be more buoyant than in 2003 as even moderate economic growth will send consumers scrabbling for metal as they seek to refill their inventory pipelines and satisfy increased consumer demand for their products. Coupled with this will be the supply hang-over which will see global supply constrained by the cutbacks and closures noted in 2003.

The cloud on the horizon will be the prospects of a Chinese economic slowdown, although this must be seen in context with 'slowdown' still potentially equating to 15% growth in economic output. However, the very fear of any form of Chinese slowdown will pray on the minds of the zinc industry.

Table following page.

Western zinc supply/demand balance ('000 t)					
	1999	**2000**	**2001**	**2002**	**2003**
Conc production (Zn content)	**5,899**	**6,323**	**6,618**	**6,469**	**6,727**
Europe	593	706	695	553	668
Canada	1,021	1,002	1,065	916	788
Mexico	363	393	429	446	475
Peru	900	910	1,056	1,219	1,369
US	852	852	842	784	768
Australia	1,110	1,379	1,476	1,444	1,444
Other Countries	1060	1081	1,055	1,107	1,215
Net exports to (-)/ Imports from (+) Eastern countries	**-158**	**-233**	**-257**	**-458**	**-514**
Direct use for zinc oxide	**4**	**4**	**4**	**4**	**4**
Balance available for Western smelting/refining	**5,737**	**6,086**	**6357**	**6,007**	**6,209**
Slab zinc production					
Primary	**5279**	**5,548**	**5,669**	**6,042**	**6070**
Secondary	**552**	**592**	**613**	**618**	**593**
Total	**5831**	**6,140**	**6,282**	**6,661**	**6663**
Europe	2,168	2,219	2,319	2,360	2,194
Canada	777	780	661	793	761
US	372	371	329	344	353
Japan	633	654	644	640	651
Australia	344	494	556	567	553
Other countries	1538	1,622	1,773	1,957	2151
Consumption	**6,818**	**7,142**	**6,896**	**7,117**	**7,125**
Europe	2,333	2408	2,393	2,343	2,337
US	1,342	1,348	1,179	1,222	1,154
Japan	634	676	633	603	619
Other countries	2,510	2,710	2,690	2,949	3,014
Net exports to (-)/ imports from (+) Eastern countries	**827**	**868**	**851**	**754**	**654**
US stockpile disposals	**0**	**39**	**23**	**3**	**7**
Metal balance	**-137**	**-94**	**261**	**300**	**197**
Reported metal stocks (at year-end)					
Producers	312	325	377	314	334
Consumers	128	127	120	115	114
Merchants	17	15	16	14	12
LME	279	195	433	651	740
Total	**736**	**662**	**946**	**1,094**	**1,200**
Stocks ratio (weeks' supply)	**6**	**5**	**7**	**8**	**9**
LME cash price (US$/t)	**1,077**	**1128**	**886**	**779**	**828**