The long reach of unwanted intervention

In some parts of the world, the ferrous scrap community has been forced to operate in an environment of mounting pessimism, austerity programmes and low consumption, it was noted in Shanghai. On the upside, however, delegates heard of the possibility that China will significantly increase its scrap usage over the coming years.

he impact of government intervention on the smooth running of commercial enterprises was one of the major themes to emerge from the BIR Ferrous Division meeting in Shanghai. For example, Zain Nathani of the Nathani Group reported that India's ferrous scrap imports have been growing strongly - with latest forecasts indicating an increase from the record level of 6.03 million tonnes in the 2011/12 financial year to perhaps as much as 7.5 million tonnes in 2012/13. However, he added, the flow of incoming material could be compromised at least in part by the Indian government's 'surprising' decision in early May to increase the basic customs duty on iron and steel scrap imports from 0% to 2.5%. BIR and the Metal Recycling Association of India would continue to fight this 'regressive' step, he insisted to delegates.

'Unofficial' ban

Furthermore, Andrey Moiseenko of Ukrmet reported that an 'unofficial' scrap export ban

in Ukraine has combined with low prices and payment delays from domestic steel mills to force most professional companies to limit or even halt their scrap activities. The ban has taken the form of a strangled supply of export quotas, he explained.

And then in his US and Pacific Rim market report, Blake Kelley of Sims Metal Management pointed to an announcement by the South African government of its intention to 'establish limits' on scrap exports - a move which would have a potential impact on consumers in South East Asia, he said.

BIR Ferrous Division president Christian Rubach of TSR Recycling in Germany commented: 'In economically difficult times, as we face now, national protectionism is growing.' He highlighted a call for mandatory certification of non-EU recycling plants receiving secondary raw materials from the EU - a move

China a key factor in scrap input fall

Scrap usage in world steel production was broadly unchanged last year at around 570 million tonnes whereas world crude steel output climbed 1.2%. As a result, the proportion of scrap used in crude steel production fell from 37.3% in 2011 to 36.8% the following year, according to the latest edition of 'World Steel Recycling in Figures', which was launched at the



Rolf Willeke stated that steel scrap purchases by teelworks were around 370 million tonnes in 2011 and 2012.

Last year also brought no change in own arisings (circulating scrap) at 200 million tonnes. The proportion of own

BIR Convention in Shanghai.

arisings used in crude steel production dropped from 13.1% to 12.9% 'as a result of mills' efforts to improve yields through the wider use of continuous casting and of near-net-shape casting', pointed out BIR Ferrous Division's statistics advisor Rolf Willeke. For 2012, he adds, steel scrap purchases by steelworks mirrored the previous year's total of around 370 million tonnes. One of the main reasons why global steel scrap use did not mirror the increase in

world steel output last year was China. Even though Willeke's figures differ slightly from those presented by Ferrous Division guest speaker Jason Sun, the underlying trend is the same: the former maintained that the Chinese steel industry reduced its scrap usage by 12.3% last year to 79.8 million tonnes - despite the fact that the country's crude steel production advanced 3.7%.

In contrast, US steel scrap use jumped 9.4% to 61.7 million tonnes in 2012 whereas domestic crude steel production edged only 2.7% higher. 'A possible explanation for higher steel scrap usage in the USA is the increased use of lower-quality grades by integrated plants as they make use of their ability to dilute residuals in these lesser grades of scrap,' ventured Willeke. Covering the five-year period from 2008 to 2012, 'World Steel Recycling in Figures' highlights 'the importance of scrap as a global raw material for the world's steelworks and foundries' and 'the need for a free raw materials market', according to BIR Ferrous Division president Christian Rubach. He added: 'Our industry lives from free trade worldwide, enabling us to bridge the global imbalance between net scrap exporters and net scrap importers.'





which, he said, 'would have a tremendous impact on our industry not only in Europe but worldwide'. And he insisted: 'It's about nothing else but protectionism.'

'Difficulty making sales'

As the box on the previous page confirms, trends in China are identified as a key reason why world steel scrap consumption failed to match crude steel production growth last year. But Ferrous Division guest speaker Jason Sun, general manager at Sinosteel Raw Materials in China, provided grounds for greater optimism. He reckoned that China had consumed 84 million tonnes of scrap in its steel production last year (-7.7% versus 2011). However, there was usage growth of 6.6% to 22.7 million tonnes in the first quarter of 2013 and the annual figure is expected to exceed 100 million tonnes within the next five years. Over the same period,

Chinese steel output should climb from 716.5 million tonnes in 2012 to more than 800 million tonnes, Sun noted.

Earlier, Kelley had quoted reports that, despite existing 'difficulty making sales' and elevated stocks of unsold finished steel, China would add more than 40 million tonnes of new steelmaking capacity this year for a total annual capability approaching 950 million tonnes. Divisional guest speaker Peter Marcus, managing partner of US-based World Steel Dynamics, expressed the view that Chinese steel demand was 'in the process of hitting the Great Wall' although he also voiced his belief that the global steel environment could improve significantly from 2015 onwards. Fellow guest Stefan Schilbe, senior chief economist of HSBC Trinkhaus & Burkhardt in Germany, also concluded his presentation on a positive note by suggesting that the scope for steel-using infrastructure developments in China remains mas-

'Worsening the market'

For the moment, however, China's finished steel products have been overflowing into other parts of Asia and thus 'worsening the market', observed Hisatoshi Kojo of Metz



Zain Nathani warned that India's flow of incoming scrap might be 'compromised' because of government measures.

Corporation in Japan. However, the speaker did not anticipate a sharp decline in Japanese scrap prices below current levels.

According to the European report submitted by EFR president Tom Bird, scrap prices had continued to weaken during May and further

'In such economically difficult times, national protectionism is growing.'

reductions were anticipated across the board for June. 'As always in a market such as this, what appears to be a distress sale today turns out to be a good deal tomorrow,' he told delegates. 'We are seeing prices continue to soften into both Turkey and Spain, driving the EU market down.'



Christian Rubach advocated mandatory certification of non-EU recycling plants receiving secondary raw materials from the EU.



China is expected to add over 40 million tonnes of new steelmaking capacity this year, said

Shredder turns disappointment into success

In Shanghai, a case study complete with a healthy measure of solid data revealed how a simple investment in a shredder can transform business fortunes.

Marion Andres Albuja Rivadeneira general manager of the Adelca steel



Chinese steel demand is 'in the process of hitting the Great Wall', claimed Peter

in Quito, Ecuador - told the BIR Shredder Committee gathering in Shanghai that its original scrap mix of mainly pressed & sheared, bundles and oxycut material had resulted in 'disappointing' operational statistics. In a bid to improve its melt shop performance, the company decided in early 2010 to exchange its 25 MVA furnace transformer to one of 42 MVA and to buy a 4000 HP shredder from The Shredder Company of Texas, USA. Both of the new additions were started up in April 2011.

With 85% of its input now 'high-density, high-purity' shredded scrap,

Adelca's productivity has almost doubled from 19.54 tons to 36.8 tons per hour, energy consumption has been trimmed from 580 kWh to 445 kWh per ton, and yield has climbed from 85% to 92% - 'a great success', commented the Shredder Committee's quest speaker.

In his conclusions, Rivadeneira noted the 'strong impact' of the shredding process in steelmaking, calculating cost reductions related to shredded scrap use at US\$ 35-40 per billet ton. BIR Shredder Committee chairman Jens Hempel-Hansen of H.J. Hansen Recycling Industry of Denmark welcomed these figures as they supported the argument that the premium attracted by shredded scrap 'is not always high enough'.

Manuel Burnand, chairman of EFR's European Shredder Group, updated delegates on work in the EU towards a best available techniques reference document (or BREF) for shredders. Coverage includes emissions to air and water as well as noise, vibration and energy efficiency. The document is to be circulated among EFR's Shredder Group for final edits prior to publication