

'No way you can find every lithium battery'

The rapid growth in the number of scrap fires is causing more headaches for facility operators. Torben Nørgaard of H.J. Hansen Recycling in Denmark is all too familiar with these dramatic incidents.

Torben, who at the time of publication is no longer with Hansen Recycling, showed delegates in Singapore a video of a fire at the company's yard just outside Copenhagen. Believed to have been caused by putting an e-bike containing a lithium-ion battery onto an existing scrap pile, the fire developed within minutes but took three days to extinguish. 'It was a blessing in disguise the wind blew

the smoke to open sea instead of the city,' said Torben.

A PROBLEM WE DIDN'T CREATE

Fires of this type are getting more common, said Hansen, with lithium-ion batteries representing a particular problem because of their proliferation and the impossibility of achieving 100% hand-sorting. 'There's no way

can you find them all,' he lamented. Doug Kramer of US-based Spectrum Alloys added: 'Batteries like this are ridiculously powerful and extremely dangerous. We are dealing with a problem we didn't create.'

SHRED TO ZERO?

Hansen identified three possible options to help mitigate the impact of such incidents: temperature-sensing cameras trained on scrap piles; installation of seawater pumps; and putting tubes inside scrap piles that are capable of delivering high-pressure water. Doug Kramer recommended the use of fire suppressants and, if possible, a daily practice of 'shredding to zero'

TURKEY REMAINS BIGGEST STEEL SCRAP CONSUMER

China's domestic steel scrap usage continued to grow at a rapid pace in 2018, soaring 27% to almost 188 million tonnes from close to 148 million tonnes in 2017, according to the 10th edition of 'World Steel Recycling in Figures', presented in Singapore by Rolf Willeke.

The BIR ferrous division's statistics advisor attributed this steep growth to the government's stricter pollutant emission standards which have driven basic oxygen furnace mill operators to boost their crude steel/scrap ratios to an average of around 25-30%. With many new electric furnaces either installed or planned, the overall impact will be further investment in steel scrap processing - 'especially in shredder capacity', said Willeke.

Among the many other statistical highlights, Willeke pointed out that Turkey remained the world's leading steel scrap importer last year despite a 1.5% drop in its overseas purchases to 20.6 million tonnes while the leading exporter was the EU-28 with a year-on-year increase of 6.7% to 21.4 million tonnes.

