Recycling International

October 2014, No.8

Ferrous metals:

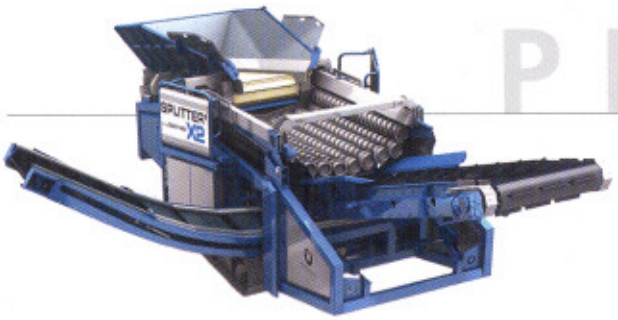
China's Sword of Damocles scenario

RWM: market falls short of matching the hype

Solving Asia's e-scrap conundrum

Fragile recovery for European steel industry

XRF technology: a flexible metals sorting friend



/ Up to difficult screening challenges

'You can't get any more mobile than this,' says Günther envirotech of its crawler-mounted Splitter X2.

Flexible as well as remote-controlled, the advanced screen makes it possible to process difficult materials thanks to the unique shape of the screen deck - all while delivering 'excellent' screening performance regardless of the material's consistency.

The Splitter X2 is promoted as the go-to solution for optimal preliminary separation of materials for downstream processes. Many conventional screens reach their limits when it comes to wet materials which contain foreign materials like stones, but clogging screens and time-consuming cleaning are no longer a problem with the self-cleaning Splitter X2, the manufacturer insists.

The tub-shaped Splitter screen deck consists of two counter-rotating screen decks which pull the material apart. The material enters the curved area of the decks and is kept in motion on the screen deck for longer so that foreign objects can be separated from the useful fraction without blockages.

'Because it can be used year-round, machine running time and availability are dramatically increased,' says Günther envirotech. The equipment can also be used with material that has not been pre-processed.

Operation of all machine components (conveyors, screen deck and crawler chassis) is achieved via the central controller: a seven-inch touch panel and remote control.

Günther envirotech
Wartenberg, Germany
Phone: +49 (0)6641 9654444
Email: info@envirotech.de
www.envirotech.de

/ POWER-S system for all types of metal scrap

Major scrap machinery manufacturer Danieli Henschel has brought more new technology through to market with its POWER-S system, developed for the company's heavy-duty CIB shear range and with cutting strengths ranging from 800 to 1600 tonnes.

Users will 'benefit from a single machine capable of treating and densifying all of the types of metal scrap present on the market: mixed or block scrap, and either heavy and thick, or voluminous', the company claims.

The POWER-S system is installed on the lateral reducer of the pre-compression box to process heterogeneous metal scrap during treatment and densify it 'to the maximum'. This innovation is based on a more versatile use of the lateral reducer activated by very high-capacity hydraulic jacks, authorising either a parallel movement or an adjustable angle movement.

The main strength of the POWER-S system lies in its 'versatile management of the movements of the lateral reducer and the lid, which can be both automatic (entirely automated working cycle) or manual, using a radio-controlled device or a control booth'.

Danieli Henschel
Chambéry, France
Phone: +33 479 6226 44
Fax: +33 479 6263 49
Email: france@danieli-henschel.com
www.danieli-centro-recycling.com

/ 'Controlled particle sizes' with Munson cutter

The University of Maine's Process Development Center (PDC) in the USA provides leading-edge research on pulp and paper as well as bioplastics and nanomaterials. And its latest innovative projects rely on Munson Machinery's SCC-10 screen classifying cutter for efficient size-reduction.

The SCC-10 cutter features a proprietary helical rotor design with dozens of cutter tips attached to a helical array of staggered holders called interconnected parallelograms. This set-up allows 'continuous shearing' of oversize materials against twin, stationary bed knives, explains group leader of engineering Mark Paradis.

At present, the PDC is using the machine to develop cellulose insulation as a replacement for fibre-glass in residential construction. 'We specified that unit because it efficiently reduces materials into uniform particle sizes with a lower energy requirement than the hammer mill,' Paradis notes. 'It proved effective at cutting hard, soft and fibrous materials into controlled particle sizes with minimal fines at high rates for post-usage.'

The rotor design is said to generate six times greater force per centimetre with each cut than conventional knife-type cutters of equivalent power, contributing to uniform size-reduction and reduced energy use.

Also, the SCC-10 cutter is configured with cutter tips along the entire shaft, with no gaps in between, thus making total contact with the product. As a result, the material is cut into uniform particles with minimal fines or imperfections, and with little to no heat generation.

Munson Machinery
Utica, USA
Phone: +1 315 797 0090
Email: info@munsonmachinery.com
www.munsonmachinery.com

/ Coming soon: Sennebogen's telescopic crawler crane

The newest addition to Sennebogen's telescopic crawler crane series is 'big, green, and yet mysterious', says the Bavarian manufacturer. It is due to unveil the machine shortly at its headquarters in Straubing, Germany.

The new crane boasts a safe working load of more than 100 tonnes and 'significantly' extends Sennebogen's product range upwards given that previous models have handled material in the 8 to 80 tonnes spectrum.

According to the company, this highly-anticipated new model will be ready for the market at the start of 2015 and will once again offer 'many advantages' for the lifting, moving and positioning of large loads. Sennebogen expects the new crane to prove 'an extremely interesting solution' for rental and construction companies.

Sennebogen
Straubing, Germany
Phone: +49 9421 5400
Email: cranes@sennebogen.de
www.sennebogen.com