## **Feature Article I**

heavy duty screeners, to meet the needs of large-scale end users in the quarrying and mining sectors.

With a robust heavy duty incline screen featuring a high amplitude triple shaft screen drive, the multi-purpose Warrior 2400 has the ability to accept large feed sizes and process up to 700 tph (771 US tph). This enables screening, scalping, 2 or 3 way splitting and stockpiling materials such as aggregates, topsoil, coal, demolition waste and iron ore.

The new Powerscreen Pegson XH320SR is designed for throughputs of up to 320 tons per hour. Key features include an efficient crusher direct-drive system and a double deck grizzly feeder with underscreen and load management system to reduce material entry to the chamber. Also featured is the under pan feeder, new impact chamber with 4-bar rotor, twin-apron design, adjustment assist and hydraulic overload protection.

Also on show was the established Powerscreen Pegson XR400S, the primary jaw crushing plant, designed for medium scale operators. The Pegson XR400S has an aggressive crushing action and high swing jaw which encourages material to enter the crushing chamber. There is a hydraulic release system to protect the machine by sensing an overload and opening to release the obstruction of trapped metal or steel through the jaw without damage.

## Sandvik

Sandvik's QJ340 (previously named Extec C12+) is a track-mounted mobile jaw crusher, with a maximum feed size of 600mm, for high rates of production with good reduction ratios. It weighs 51.1t, is 4.11m high, 4.17m wide and 15.76m long. In Virginia, USA, companies such as A and G Coal, and Nicewonder, have been using Sandvik's QJ340 jaw crusher to process the overburden remaining from their surface mining operations. The processed hard rock material is then used to develop the company's road and site infrastructure. Once the overburden has been removed from the coal seam,



Sandvik's QJ340



McCloskey C40 compact jaw crusher

the hard rock is crushed into two types of specification: crushing hard rock to -75mm and -100mm, it is then transported and compacted to make the haul road.

The QJ340 jaw crusher has a feed opening of 1250 x 750mm, with a vibratory feeder, having automatic control to regulate the feed into the crusher; a hydraulic adjustment system, to regulate the product size to be crushed and reverse crushing action to assist in clearing blockages.

## McCloskey International

Based in Ontario, Canada, McCloskey has been in the screening and crushing industry since 1985. Its range of crushers start with the C50 portable jaw crusher, with a 350 hp (261kW), Cat C9 engine, and a Telsmith jaw of 1270mm x 660mm. The C50 has a gross hopper capacity of 10.2m<sup>3</sup>, is 3.4m high, 2.9m wide and 14.3m long, and weighs 48t.

The C40 jaw crusher is a more compact alternative to the C50. It has 225 hp (165kW), a Cat C6.6 engine, jaw opening of 1016mm x 610mm and a level hopper capacity of 5.4m3. It is 3.2m high, 2.5m wide and 12.7m long, weighing 31t. The feeder has a folding hardox hopper mounted over a vibrating feeder, which can be regulated manually or automatically, with integral pre-screen.

The C44 cone crusher from McCloskey has a 430 hp (320kW) Tier 3 Cat C13 engine, a Telsmith cone and a hopper capacity of 5m3. It is 3.4m high, 2.9m wide and 16.33m in length, with a weight of 45t.

Also, from McCloskey is the I-54 impactor, designed as a high production impact crusher less than 50t. It is

built around a 1200mm x 1350mm four bar impactor chamber with a 940mm x 1354mm feed opening. With 6.88m<sup>3</sup>hopper and a 1360mm wide vibrating pan feeder, the material is fed over an independently vibrating double deck pre-screen. This removes the majority of the fines before going into the crushing chamber, thereby helping to increase capacity and control product size. Crushed material is discharged from the chamber to a 1500mm x 2000mm pan feeder. The I-54 is powered by a 430 hp (328kW) Tier 3 C13 Acert Cat engine. The gross capacity of the hopper is 10.2m<sup>3</sup> with a height of 3.6m, width of 3m and length of 16.3m, it weighs an estimated 48.2t.

## MB Crusher

The Vicenza-based company, MB reported Bauma as a great success, with three exhibition areas displaying its crusher buckets.

The historical BF 90.3 model was on display with its new restyling, and two crusher buckets were put to work, the smallest one of the range, the BF 60.1 and the largest one, the BF 120.4. MB also used Bauma to introduce its latest product, the new universal quick coupling.



MB Crusher buckets