### Mintap White Paper- Jan 2019

#### Key Points:

- Over 50 Installations Worldwide covering all sizes of Cones, Gyratorys and Jaw Crushers;
- Excellent feedback from Clients stating improvement in safety and production;
- Dedicated South/Central American & African agents improving Client interaction;
- Becoming the accepted method for measuring the CSS by major players.

Mintap is the official Worldwide distributor of the C-Gap closed side setting measurement tool for mining and quarrying clients with dedicated South/Central American and African agents.

C-Gap enables operators to measure the closed side setting (CSS) of gyratory, jaw and cone crushers, to improve safety standards, production levels and costs. The C-Gap allows for the measurement of CSS's between 6 mm and 250 mm on hoses which vary in length between 3 m and 30 m.

# Crusher closed side setting monitor for the mining industry

Mintap offers C-Gap technology, a German designed and manufactured system in a carrycase that can be easily transported across mine sites to monitor a broad range of crushers. The set contains rubber bulbs, hoses and a console. A selected hollow rubber bulb is attached to a hose and placed between the fixed and moving plates of a crusher. The bulb is squeezed by the crusher with an increase in pressure correlating to distance (CSS). This can be calibrated ensuring accurate and repetitive readings.

The C-Gap system is supplied with a selection of measurement bulbs ranging from 6 mm to 250 mm, with an accuracy of 1 mm. The colour-coded bulbs are made from tough rubber for high wear-resistance.

Cable lengths are available in up to 30 m, so the system can be used for even large, gyratory crusher units.

Operations are managed via the lightweight, handheld console. The battery-powered device is both splashproof and dustproof for continued use at mine sites, and can be calibrated using lead weights or manual measurement for optimum accuracy.

### Safe and reliable ore crushing solutions

The C-Gap effectively replaces the need to use lead weights on a continual basis or any other rudimentary methods such as aluminium foil balls, clay, 44 gal drums or used oil filters.

Operators and maintenance personnel stand in a safe position above the entry to the crusher passing the bulb down through the crusher chute to the nip point for the measurement. There is no longer the need to send personnel under the crusher to manually measure the CSS.

### Increased production and ore processing

As CSS gaps can be monitored quickly, with all measurements taken within five minutes, C-Gap supports site production and keeps downtime to a minimum.

A few minutes checking the closed gap at the start of each shift ensures greater consistency and problem-free working during uptime. It also affects a crusher's overall condition and service life, as optimum feed sizes can be maintained and wear parts monitored.

C-Gap reduces the need to use lead weights when processing ore, and is so simple that it only requires one worker to operate it.

C-Gap is certified according to AS/NZS CISPR 22: 2009.

### Installations, Trials and Feedback

The C-Gap is in operation at over 50 mining and quarrying sites globally.



#### Newmont Phoenix Mine-

"We have it set up very nice and easy to use.....The C-Gap will help us on the throughput to the crushers also the safety of it is a big plus!!!!"

#### Citic Pacific Mine-

"The device was easy to use and provide a number of benefits to the processing staff who normally measure the CSS on the crushers, the time required to prepare the crusher was significantly reduces resulting in better availability of the machine, the C-Gap also improved the safety of the operators conduction the measuring and provides a much more accurate measurement than other methods trailed"

### CSI Crushing-

"We found the device to be extremely accurate, easy, simple and safe to use"

### Argyle Diamonds-

"Argyle Diamond mine has been using the C Gap hand held unit since 2015 in this time we have had great success in reducing crusher downtime and improving our ability to monitor and control the gap set point to both our underground gyratory crushers due to the unit's ease of use while performing daily gap checks"

#### Hanson Quarry-

"All in all we found it pretty accurate against the lead - no more than 1mm difference"





## About Mintap

Mintap delivers innovative technologies that improve operations in the mining and quarrying industries. The company was established in 2012 to connect businesses with tools that are proven to positively affect their efficiency, production and safety.

The Mintap Founder, Brant Tapley graduated as a metallurgist from the Western Australian School of Mines (WASM) in 2004 and consults globally specialising in gold, base metals and magnetite.

