# Metso

Nordwheeler<sup>™</sup> NW8HRC portable crusher

# Turning waste to sellable products



The Metso HRC 8™ HPGR (high pressure grinding roll) is ideal for manufacturing sand, with low energy and wear parts consumption.





## **Benefits**

- Re-locating to re-crush waste piles on different sites
- High quality sand with low energy consumption
- Safe and easy to operate and maintain

#### High quality sand with low energy consumption

In crushed aggregates production, up to 30% (rock dependent) of materials acquired from the bedrock are reduced to sizes smaller than 4 mm, meaning they end up as waste. These stockpiles are a perfect feed for the production of manufactured sand.

#### A part of Metso's Planet Positive offering

Metso HRC 8 delivers a perfectly cubical shape for concrete and asphalt sands. It also produces more fines with fewer unwanted microfines in the final product compared to other technologies in manufactured sand. It is also more efficient consuming up to 50% less power than any other technology in the same application, while obtain the same net product volume.

#### Nordwheeler portable plants are powered by electricity

NW portable plants can be set up whitout heavy concrete foundations. In many countries, the ability to relocate the entire plant means that it is easier to get crushing permits. This makes the plants a desirable choice for 1-2 years periodical crushing projects, for example in the construction of dams, airports and roads.

### Read more at metso.com/nordwheeler

Case: Hawaiian Cement, Hawaii Transforming waste into sand with HRC8

#### Challenge

• Costly outsourced concrete sand, unusable byproducts

#### Solution

• HRC<sup>™</sup> 8 high pressure grinding roll to re-crush the wet byproducts to ASTM C-33 concrete sand

#### Results

- After many trials with other technology, HRC is viable and cost-effective solution to add value to process waste fractions
- Lower maintenance costs
- Improved operational efficiency
- Minimal vibration and dust emissions
- Change product fractions without stopping the machine
- Amount of imported sand decreased from 50% to 25%



