



EQUIP2
PROCESSING SOLUTIONS



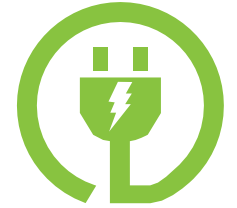
Innovation and Electric Solutions



2023 Demo Day



R3e Impact Crusher



Machine features and benefits in RAP processing

- The R3e is a fully electric machine allowing for connection to the grid or hybrid operation via the installed genset significantly reducing the running cost compared to diesel hydraulic.
- Quiet operation, no engine noise and no emissions when connected to grid. Ideal for urban environments.
- The variable rotor speed of 32 – 44m/s allows for easy reduction of small fractions present in the RAP product that typically are difficult to reduce.
- The large speed range allows the machine to be tuned to a dynamic product, important when the infeed is changeable, but the final product must remain consistent.
- Push button wear compensation adjusts the rotor speed to keep a consistent predictable reduction rate.
- Non captive blow bar retention system allows for easier blow bar replacement in RAP processing.

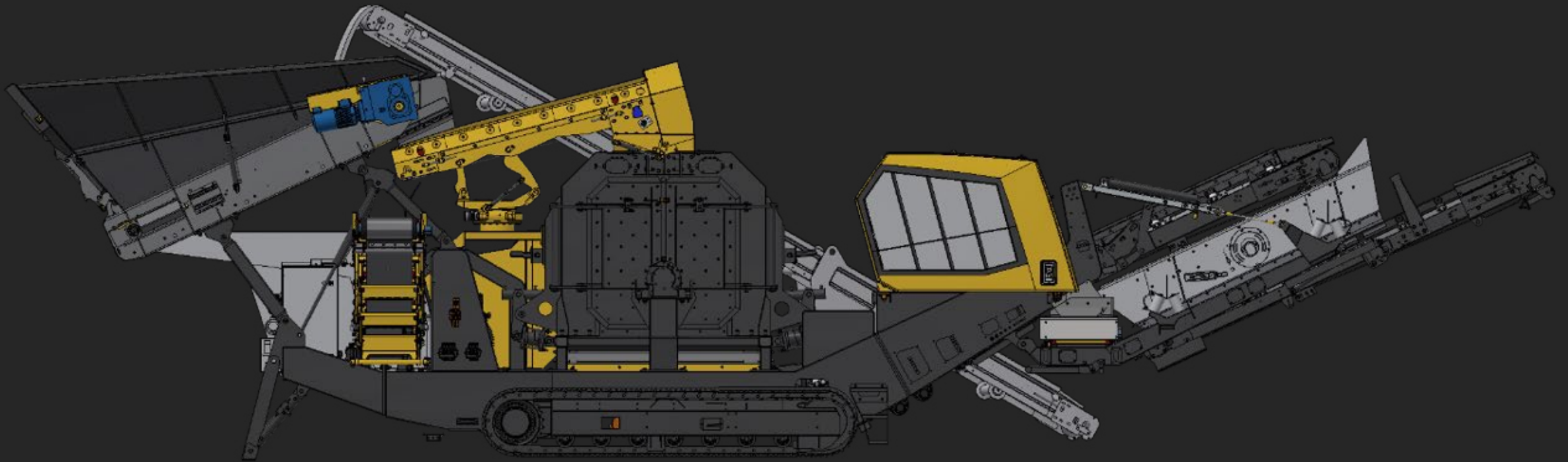
R3e Impact Crusher

1200-Hour Review by Fulton Hogan



Keestrack I4e

Introducing 'I4e' or the Reversible Impact Crusher





EQUIP23 CRUSHING IT!

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Keestrack

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How 'I4e' works

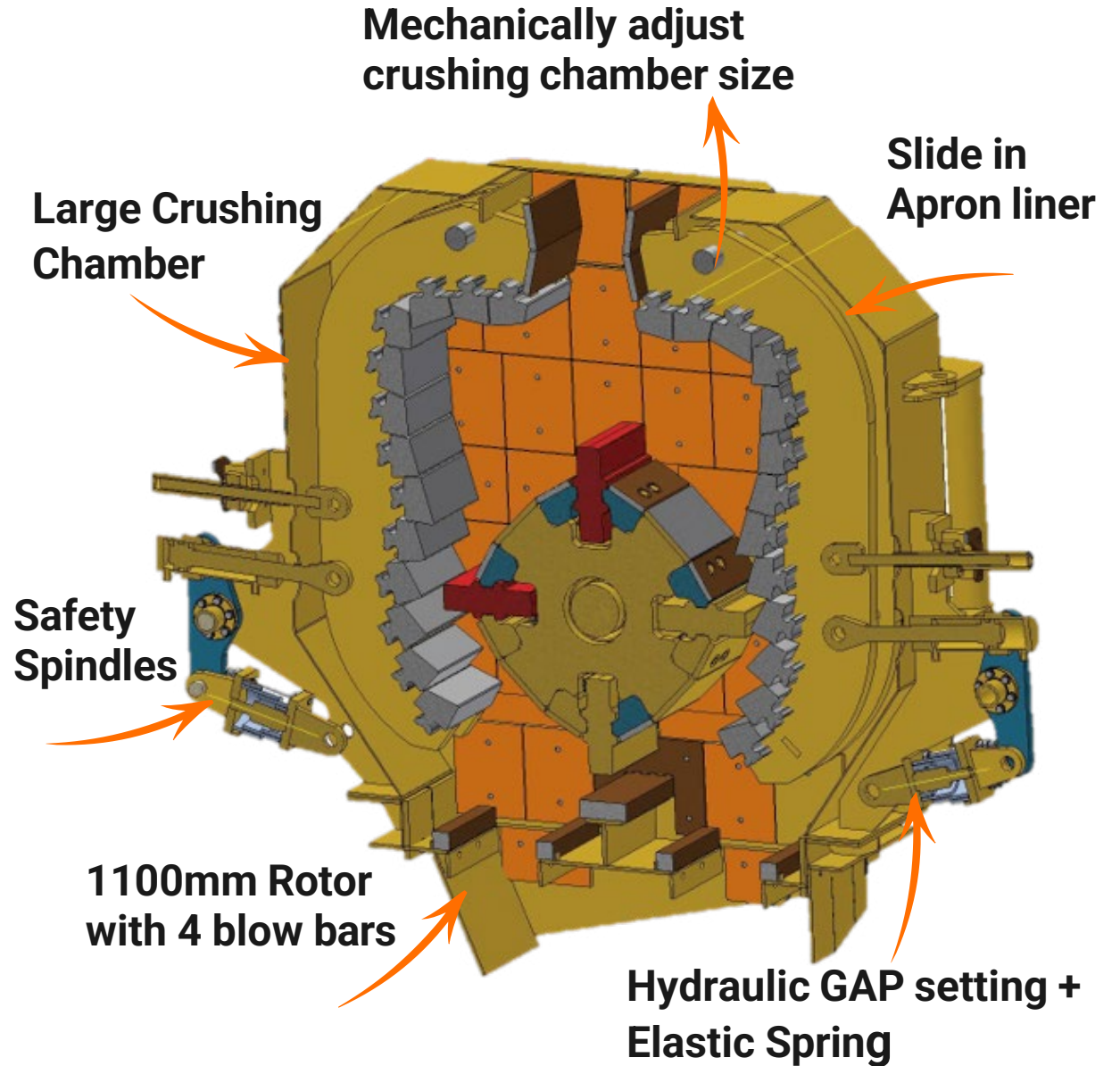
The I4e is no ordinary impact crusher, it is designed to mobilise the VSI crusher while also improving upon its weaknesses.

Keestrack's I3e features a hybrid drive for low fuel consumption, a gravity fed HIS style crushing chamber for more efficiency and better wear characteristics.

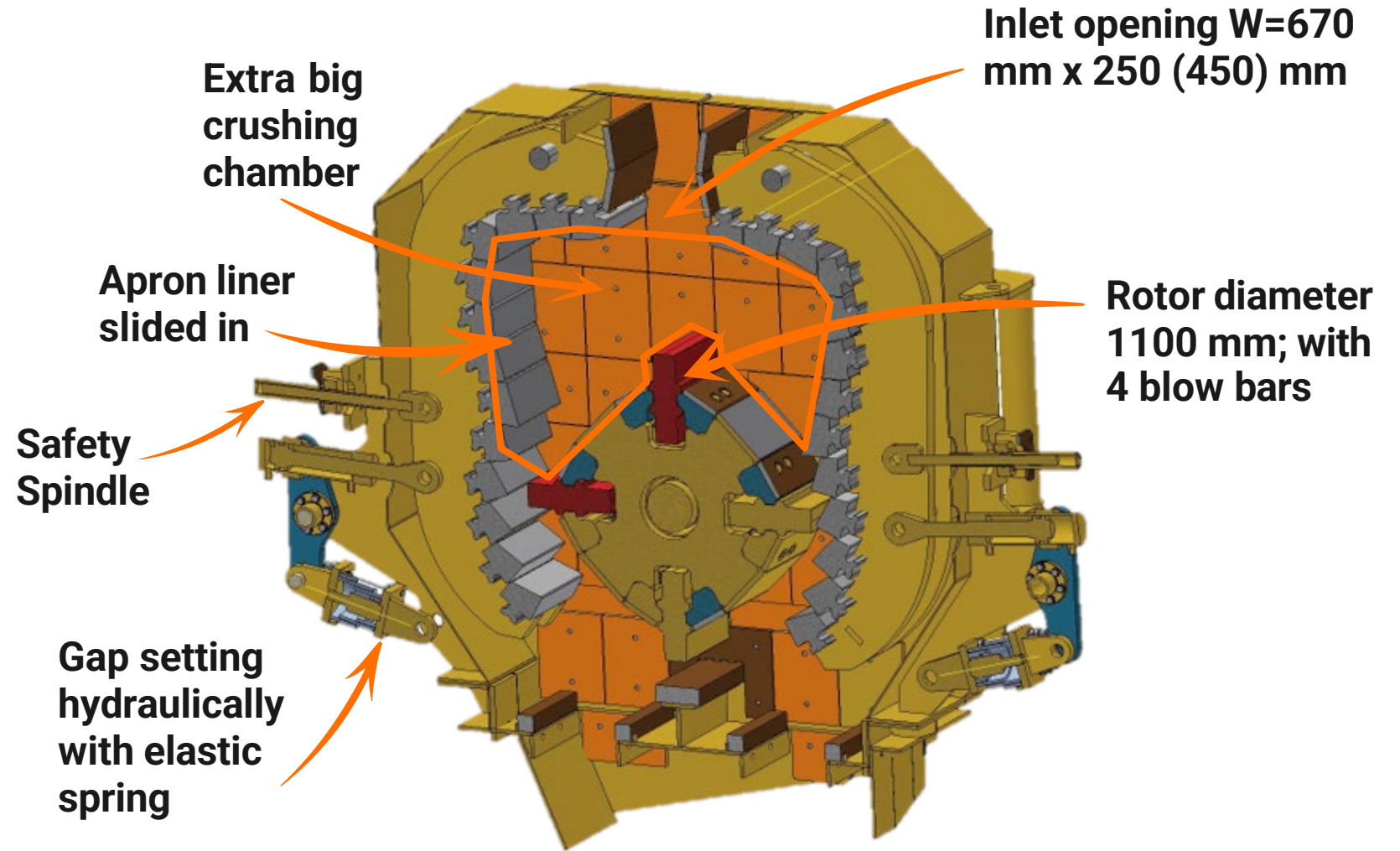
VSI Energy Consumption @ 50 tph, 0/4mm



I4e Energy Consumption @ 50 tph, 0/4mm



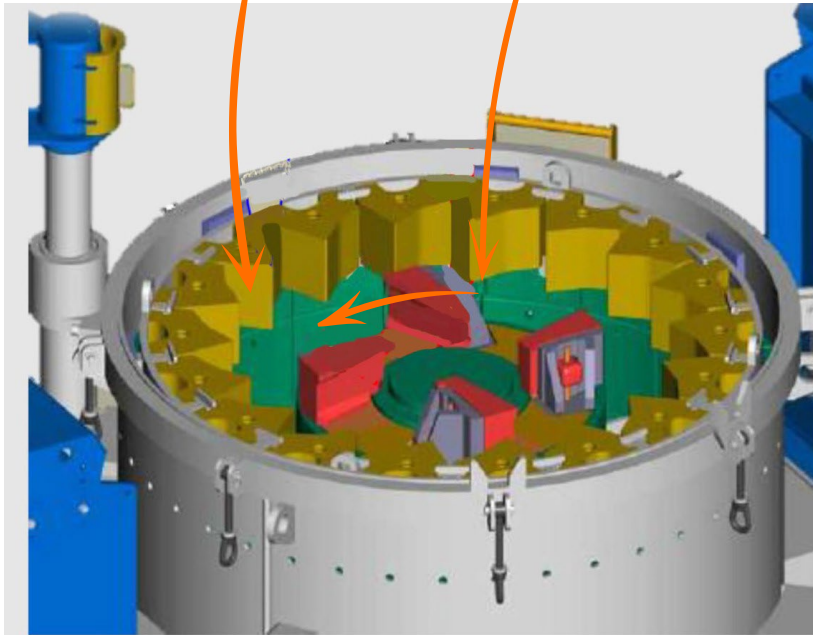
How '14e' works



Comparison System RIC/VSI:

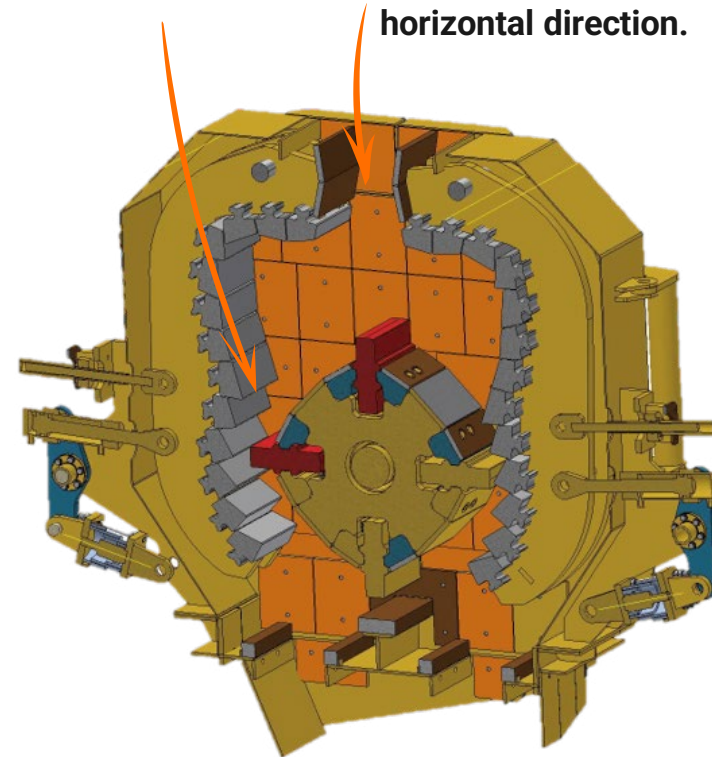
VSI: Crushing is done in horizontal direction at the anvil ring or autogenous against stone bed.

VSI: Material is entering vertically and transferred in horizontal direction. Then, the rotor has to accelerate the material, which needs high power input.



RIC: Crushing is done in vertical direction at the aprons.

RIC: Material is entering vertically and **MUST NOT BE** transferred in horizontal direction.



Conclusion: Guiding the material at the VSI from vertical to horizontal direction needs additional wear parts and always increases the danger of jamming, especially for bigger feed size.

Power is required for accelerating the material. On the RIC, the material does not need power to be transferred through the machine; it is transferred by the G-Force.

I4e Producing Chip



Wear

At a production rate of 1968 m³ (= approx. 3.350 t), the wear condition of the blow bars and apron liners have been checked. The apron liners and side liners showed nearly no wear.

So, the calculation lifetime of the blow bars gives approx. 3350 t x 3 x 2 = 20.000 t/set (4 high blow bars).

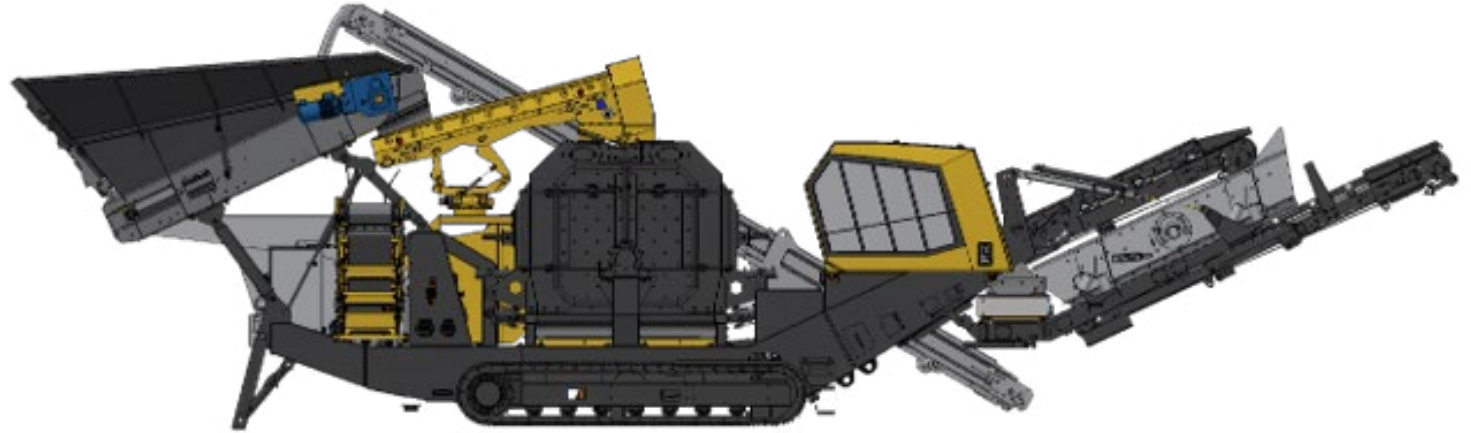
A further increase of the tonnage per set could be achieved when using 2 high 2 low blow bars.

Ratio FCO: 53%
FCO Total: 1132 m³
MPC Total: 1968 m³



Blow bar after 3.350 t

Why the I4e?



Products made Cheaper

Lower fuel usage, wear part cost, less replacement and excellent cubical shape attributes makes the I3e able to produce sand and chip metals cheaper than what we can produce them for now. Future proofing aggregates businesses.

When?

The I4e is being launched at Bauma this year.

Fuel Efficient

Keestrack's electric genset powered machinery lead the market in terms of versatility, and money saved on fuel. The I3e adds to this with it's innovative crushing chamber.



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Thank You

