



Powerscreen Premiertrak 450 Jaw Crusher delivers a cleaner limestone product

Northern Perth Quarry, Western Australia

310

tonnes/hour throughput

+100

TPH vs previous setup

\$1,500

daily savings estimated

The Challenge

The customer needed to process 0-500mm limestone feed into a 75mm minus all-in product. The challenge was achieving a cleaner, more consistent product shape without relying on a separate screening stage.

The Solution

We supplied a Powerscreen Premiertrak 450 jaw crusher configured at a 75mm CSS. The machine delivered the required product directly from the jaw, simplifying the process while improving output and efficiency.

The improvement came down to more than just tonnes per hour. The previous set-up allowed too much slabby and oversize material through when the jaw operated without a screen. The Powerscreen unit produced a better-shaped product that met the required 75mm all-in specification without needing that extra screening step.

CLOSED SIDE SETTING
75mm CSS

FUEL CONSUMPTION
17.16 L/hr

FUEL SAVINGS
-12 L/hr



Compared with the previous jaw-and-screen arrangement, the Premiertrak 450 delivered around 100 TPH more production while using approximately 12 litres less fuel per hour. Over a 10-hour shift, the customer estimated savings of roughly \$1,500 per day.

Key Machine Features

Heavy-Duty Feed Hopper

Wear-resistant design handles tough limestone material

Hydraulic Conveyor

Raise and lower for maintenance access and transport

Self-Cleaning Grizzly Feeder

Regulates material flow into the crushing chamber

Powerscreen Pulse Telemetry

Standard data monitoring for performance tracking

Hydraulic CSS Adjustment

Easy adjustment to suit required output

Australian Standards Safety

Custom guards, lanyards, fire extinguishers fitted

A BETTER OUTCOME

By producing the desired material with one machine, the Premiertrak 450 helped reduce fuel use, improve throughput, and lower daily operating costs. The site team can now focus on output and delivery rather than managing out-of-spec material.

Backed by Our After-Sales Support

For regional customers in Western Australia, reliable support is critical. Through our local team and wider national support network, we help maintain machine availability, respond to service needs, and provide practical guidance when conditions change. The customer now has a crushing solution that is not only performing strongly on site but also supported for the long term.