

3150

Hot performer at smelter

To call the workplace “tough” at the Hydro Aluminium smelter near Newcastle in NSW is an understatement. It’s dusty, hot and hostile – and the plant operates 24 hours a day.

Schaffer owners Toyota Material Handling (NSW)
Industry type Equipment supply and maintenance
Location Beresfield, Hunter Valley, NSW
Model Articulated loader 3150 – customised
Accessories 4-in-1 bucket
Usage Cleaning up waste under the conveyor belt at an aluminium smelter
Requirement A nimble yet robust machine to cope with the hot dusty environment in the aluminium smelter



Toyota Material Handling have a contract to supply and maintain mobile machinery at the plant, so when service co-ordinator Steven Richards needed a new machine to clean up underneath the smelter’s carbon anode butt crusher, he knew they would need muscular performer.

Steven and his team chose a Schaffer 3150 compact articulated loader – and had it customised to suit the rigorous demands of the job. Schaffer’s German factory carried out modifications to cope with the heat such as sealing all accessible electrics with a silica gel pack. Electric relays and solenoids were minimised by converting the machine to single-speed transmission (two-speed is standard) and manual auxiliary controls.

Tyres were made solid to improve heat and impact resistance, and a Murphy engine protection system was added to guard against engine overheating and low oil pressure.

“It has a non-turbo motor, which is good, because turbos don’t last long in a smelter,” Steven adds. “It’s a very robust, well-built articulated loader compared to other makes.”

“The ergonomics are great. It’s comfortable, safe, visibility is excellent and it’s easy to drive. We’ve used it non-stop with only routine maintenance and the parts back-up is excellent.”

The success of the customised Schaffer 3150 articulated loader in this challenging setting opens the way for other industrial and mining usage.

TEC SPEC

Engine V2203 Kubota – 50hp

Auxiliary hydraulic flow
60 litres/minute at 2900psi

Total width

1400mm

Bucket pivot point

2500mm

Custom options

Sealed electrics, Murphy shutdown gauges, foam-filled tyres, rubber bracing, FOPS