

CASE STUDY

Product: Hardox Impact Panels
Commodity: Iron Ore
Region: Australia
Technology Groups: Screening Media
Companies: Multotec Australia



MULTOTEC

Multotec assisted Pilbara-based iron ore miners in improving service life on solid impact panels on screen decks.

Background:

Wet scrubbing plants discharge slurry from iron ore scrubbers onto scalper screen top decks with up to 3 m discharge height via a chute. They have a particle size of up to 300 mm.

Service life using solid rubber panels is typically 2-4 weeks.

Key Project Outcomes

- 4x longer screen life
- Increased MTBF
- Reduced maintenance-related downtime
- Greater plant availability
- Reduced consumables spending

Multotec's solution:

Multotec developed solid impact panels with forged plate inserts, creating a composite panel with sufficient impact resistance and energy absorption to allow a service life improvement of 12-14 weeks with panels up to 100 mm thickness.

Impact:

Panels per screen	Cost per screen	Change out per year	Number of screens	Total yearly
36	Aus\$ 7 200	14	3	Aus \$ 302 400
36	Aus\$ 9 000	4	3	Aus\$ 108 000
Parts Savings				Aus\$ 194 400

Cost per shutdown	Reduction in no. of shutdowns	Number of screens	Total yearly
Aus\$ 5 000	10	3	Aus\$ 150 000
Labour savings			Aus\$ 150 000
Total Savings			Aus\$ 344 400