



Rehabilitation
Reclamation
Recovery

TAILINGS PELLETISING



1300 936 261
info@xr3services.com

Pelletising | An Innovative Solution for Tailings Management

In the ever-evolving mining industry, sustainability and efficiency have become paramount.

Our solution is the pelletising of tailings—a process that not only helps mitigate environmental impact but also transforms waste into a valuable resource.

Pelletising is revolutionising tailings management in mining, and we are making it happen.



Understanding Tailings

Tailings is the fine waste material left over after the extraction of desired minerals from the ore. Traditionally this is discarded into large storage dams which are costly to build and are an ongoing environmental liability. However, with our tailings reprocessing and reclamation technology, these materials can be reclaimed and transformed into valuable economic resources.

What is Pelletising?

Pelletising is a process used to transform fine tailings into competent, solid pellets. The pelletised product has improved handleability allowing it to be transported and used elsewhere in the value chain or on-sold as a salable product.

The pellets pictured above were formed from coal tailings with testwork confirming they are suitable to supplement a raw coal feed for power generation.



The Benefits of Pelletising

01 Resource Recovery



Pelletising tailings allows businesses to recover valuable material that may have been discarded during the initial extraction process. This can lead to new revenue streams and a more efficient use of resources.

02 Environmental Benefit



By converting tailings into pellets, mining operations can significantly reduce the volume of waste stored in tailings dams.

03 Strength of Material



Testwork to simulate materials handling showed minimal breakage of the pellets once formed. Flexible to accept a broad range of feed moisture, with minimal impact on pellet strength or breakage.

Why XR3?

01 Modular Design



We offer a modular design of equipment for simple site establishment and rapid scale-up.

02 Full Turnkey Solution



We are able to deliver a unique full turnkey solution tailored to your business' tailings reclamation needs.



The Equipment

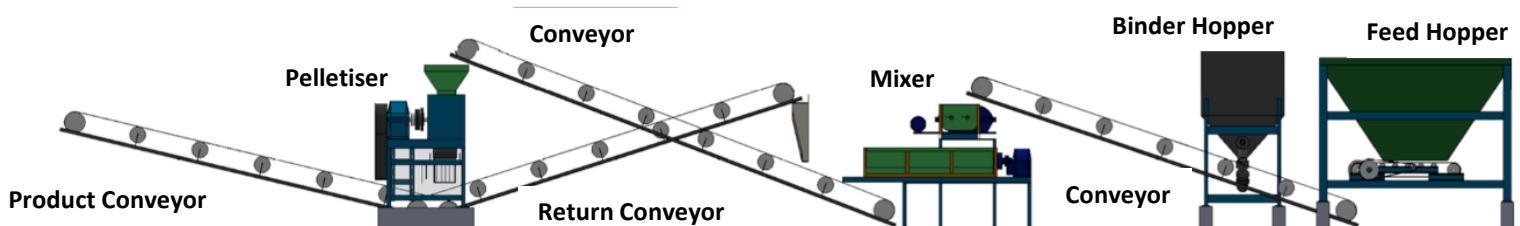
- Fully compliant guarding, electrical and signage
- Constructed to Australian Standards with RPEQ design, inspection and sign-off
- Pellet size and shape can be customised to suit product requirements

- Integrated instrumentation and control to allow accurate production reporting and control of binder and water addition.
- Parallel units allow for consistent running during maintenance periods
- Fines recirculation for maximum pelletising efficiency



The Process

- Reclaimed tailings or process tailings are mixed with binders and water (if required), and fed into the pelletising unit.
- The pellets are compressed and discharged to a fines screen which recovers any non-pelletised material that is returned to the process.
- Formed pellets are discharged and processed according to the client's requirements.





If you're looking to experience innovation and excellence at your business, get in touch with us today.

Contact Us

PH 1300 936 261

E info@xr3services.com

Visit Our Website

www.xr3services.com