

TRANSFORMING SUCCESS







A GAME CHANGER IN THE FOUNDRY INDUSTRY A GREEN & LOW CARBON FOOTPRINT PRODUCER





THE HISTORY



THE MISSION

FOUNDED IN 2009

Owner and Managing Director - Shaun Lou

Previously worked in Australia for Crushing and Mining Equipment (CME)

2015

Invested in a manganese foundry where all manganese liners were made in compliance with TEMPUS quality standards and procedures.

2020

TEMPUS foundry completed with annual capacity of 10,000 tons for manganese, chrome moly, high chrome and composite materials.

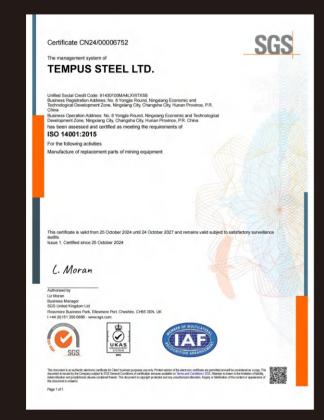
TEMPUS is driven by a mission to create values for;

- The industry we are setting an example by running a sustainable and low-carbon footprint foundry doing the right thing, the right way, at the right time
- Our customers we supply innovative and reliable products and services to reduce production costs per ton; we provide cost-effective and quality focused procurement & supply chain management services to our partners.
- Our employees we provide a safe and comfortable workplace



ACCREDITATIONS





Environment Management



Occupational Health & Safety



Quality Management



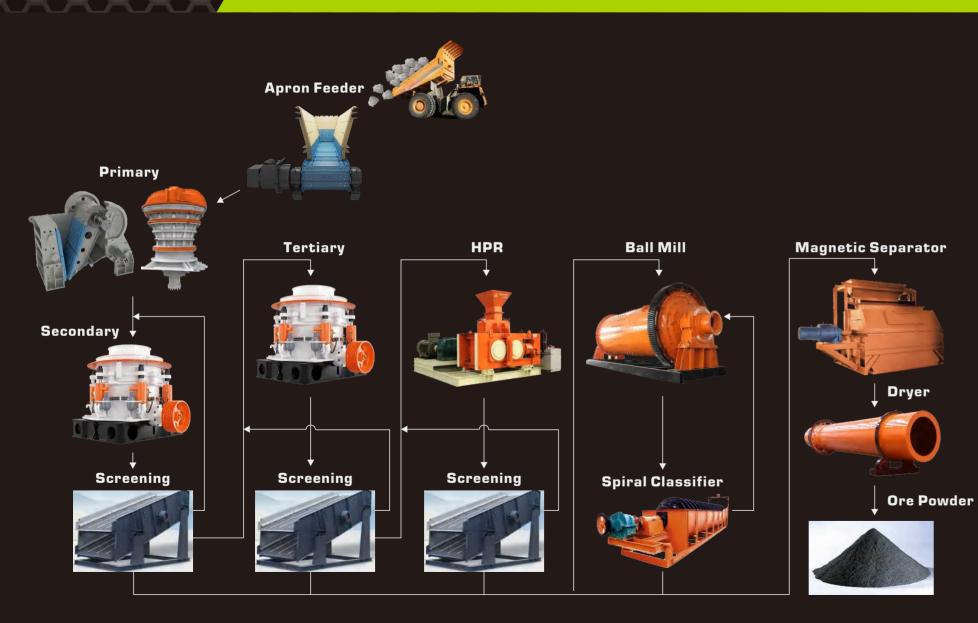
DESIGNING • CASTING • MACHINING • ASSEMBLY • WEAR SOLUTION PACKAGE



PARTS, LINERS & WEAR PACKAGE SOLUTIONS



MAIN PRODUCTS









Apron Feeder Pans





IMTUFF[®] Composite Materials



- We respect customer IP, including drawings, designs, and new technology, and maintain stringent protocols to protect them
- We use fully licensed versions of all software
- We have developed an integrated and customised ERP system
- We have recently launched the on-line Order & Product Status
 Tracking System

- 📘 Located in Ningxiang, Hunan
- Bullet train access to Guangzhou (3h) and Shanghai (5h)
- Direct flights to Hong Kong, Guangzhou, Shanghai, and Beijing



















GREEN FOUNDRY





GREEN FOUNDRY

We are 100% committed to reducing environmental impact, striving to improve efficiency, reduce waste, and recycle materials wherever possible

Minimal Sand Consumption

■ Sand consumption 1/20 of the industrial average

Water Recycling

No wastewater discharge

5S rules SGS Accreditations ERP Process Controls

Recycled Steel

Scrap steel makes up 85% of raw materials

Green Electricity

■ Adequate green energy for day-time operations
■ Electric energy storage system



UNIQUE SAND & RECLAMATION SYSTEM





DUST & SMOKE CONTROL

- Foundries consume large volumes of sand for moulding. In general, a 1000kg casting requires up to 5000 kg of sand, depending on the moulding box design
- Common types of sand for moulding include Silica, Olivine and Chrome sand
- At TEMPUS we use ceramic sand for moulding and the sand consumption is about 1/20 of the industrial average
 - Unique reclamation system achieving a recovery rate of 98.5%
 - **■** Customised moulding box design

Actual Sand Consumption for 10,000 tons of liners			
Traditional	Industrial Average	TEMPUS	
30000 - 50000 T	8000 - 12000 T	700 T	



MELTING



SAND DROPPING



POURING



FETTLING





GREEN POWER





OCCUPATIONAL HEALTH & SAFETY

- Adequate green electricity for the foundry day-time operations
- An electric energy storage system provides emergency power, replacing conventional in-house diesel generator





- At TEMPUS, labor safety practices and zero harm approach are fundamental requirements
- The foundry operates under the 5S rules, which refer to Sorting, Shining, Sustaining, Storing, and Standardisation in an operational environment
- **At TEMPUS**, the 5S rules translate to being tidy, organised, efficient, and ultimately cost-effective















SAFE & CLEAN WORKPLACE





UNIQUE TECHNOLOGY OF MAKING PREMIUM MANGANESE

- A "safe & clean" workplace culture is shaping at TEMPUS. People enjoy working in a safe, clean, and organised environment, and they take pride in maintaining it
- We are regarded as one of the best companies to work for in the local community







Chemistry accuracy	Top class PMT electro spectrometers(ARL3460)
Rapid cooling	Quenching water kept below 18°C year-round
Fitment guarantee	3D scanning for finished product inspection
Full traceability	Customised ERP and full process control system



MANGANESE CRUSHER LINERS



TIM INSERT LINERS

■ TEMPUS offers mining grade manganese liners to suit heavy duty crushing and material transferring applications.

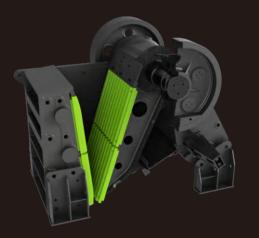
Material	• X14 / X18 / X22 / X24 or special design to suit a specific application.	Rapid cooling	• Quenching water kept below 18°C year-round
Low Carbon Footprint	Sand consumption is 1/20 of the industrial average Green photovoltaic electricity is used for day-time operation	Fitment guarantee	• 3D scanning for finished product inspection
Chemistry accuracy	• Top class PMT electro spectrometers(ARL3460)	Full traceability	Customised ERP and full process control system



Cone Crusher Concaves & Mantles



Gyratory Cruysher Mantles & Concave Segments



Jaw Crusher Jaw Plates

The IMTUFF® insert manganese liners offer extended wear life without affecting the closed side setting (CSS):

- Various grade of inserts from 52 to 62 HRC are used to suit primary, secondary and tertiary crushing applications
- Inserts are pre-treated to have good metallurgical bonding with manganese
- Inserts transfers energy to manganese underneath which helps with work hardening;
- Inserts are evenly 10mm under the surface, so manganese is fully work hardened before reaching the inserts;
- Paralleled crushing zones of bowl liners and mantles are fully machined;
- Inserts act the same as internal cold metal and help with steel solidification to have finer microstructure;



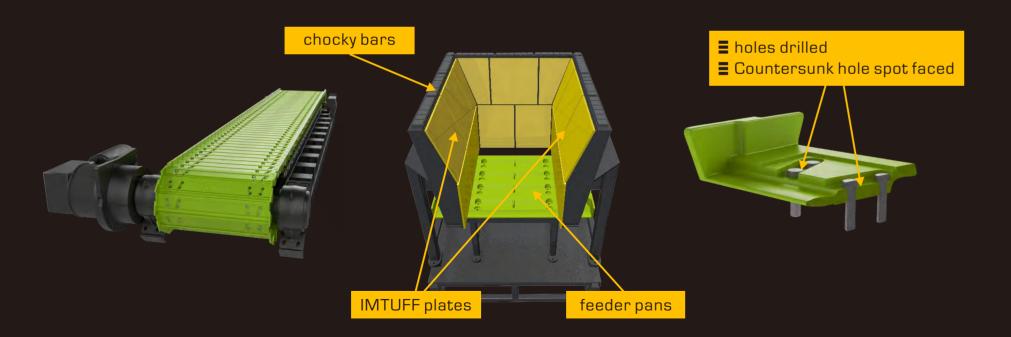
52-62 HRC 8-10mm under surface Paralleled crushing zone fully machined



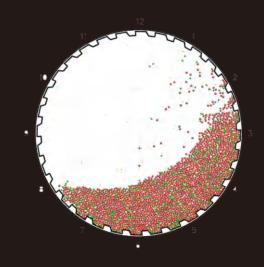


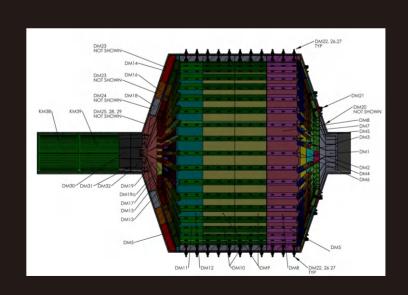


We have dedicated production facilities for apron feeder pans, including automated moulding lines, heat treatment ovens, hydraulic pressers, CNC milling and drilling machines, and patented trial assembly tools to ensure manufacturing integrity and fitment



- **E** Chrome-moly
- **≡** High-chrome
- Wear Tracking Report (WTR) based on Faro scanning









FUSED COMPOSITE PLATES



BONDED COMPOSITE BLOCKS & BARS

- Ultra-hard high-chrome iron fused onto a mild steel plate
- = HRC66+, wear-resistant to extreme impact and abrasion
- Can be welded, studded or bolted on through tapered or countersunk holes
- No size restriction available in sheets (600mmx3000mm or 1000mmx3000mm)

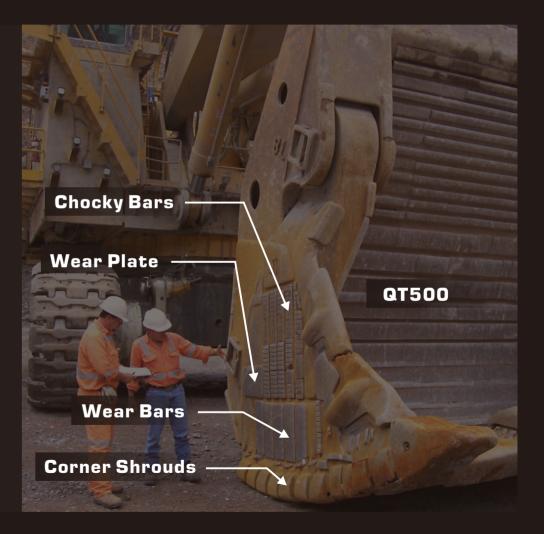






- High-chrome cast iron bonded onto a mild steel backing plate
 HRC61+, excellent impact and abrasion wear resistance
- Can be welded, studded, or bolted on
- Maximum size: 600mm x 600mm





■ TEMPUS high-quality crusher parts ensure compliance with material, performance, and dimensional requirements, making them a perfect alternative to OEM parts





- **Stringent chemistry controls**
- **ERP-based process controls (from TP1 to TP7)**
- **≡** 3D scanning to guarantee fitment
- Full traceability and online access for customers



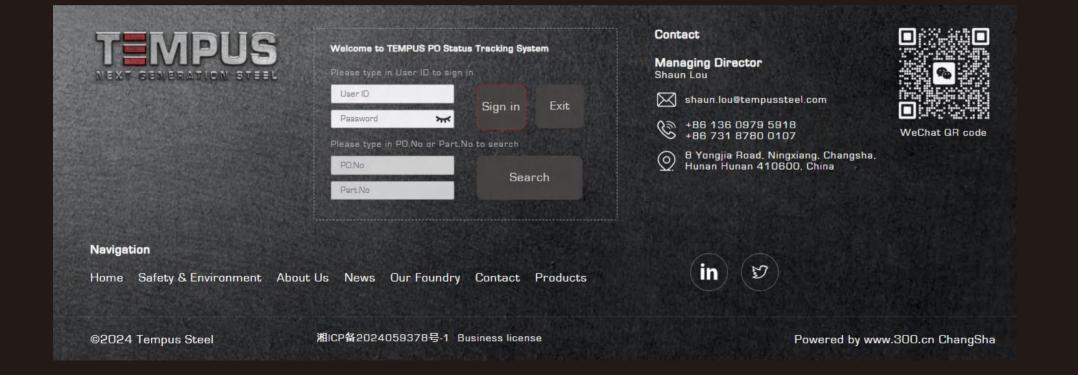


ON-LINE ORDER & PRODUCT STATUS TRACKING



PARTNERING FOR EXCELLENCE

The tracking system saves all parties significant time for order related information from TEMPUS. The system is available 24/7 to our customers.



Despite various challenges in recent years, our partners have continued to work with us. By providing products that meet the highest quality standards—whether it's a cone liner we've produced hundreds of times or a one-time request to meet a unique challenge—we enable our partners to consistently exceed their customers' expectations.

" At Unified, our screening, crushing, and wear parts perform so well on the job because they are inspired by real onthe-job situations. We work closely with our customers to solve their problems and help them maximize production.

We choose partners who help us serve our customers by providing products that meet the highest quality standards. Whether it's a cone liner they've produced hundreds of times or a one-time request to meet a unique challenge, TEMPUS enables our team at Unified to consistently exceed customer expectations.

We are proud to partner with TEMPUS." ___ Unified Screening & Crushing



















