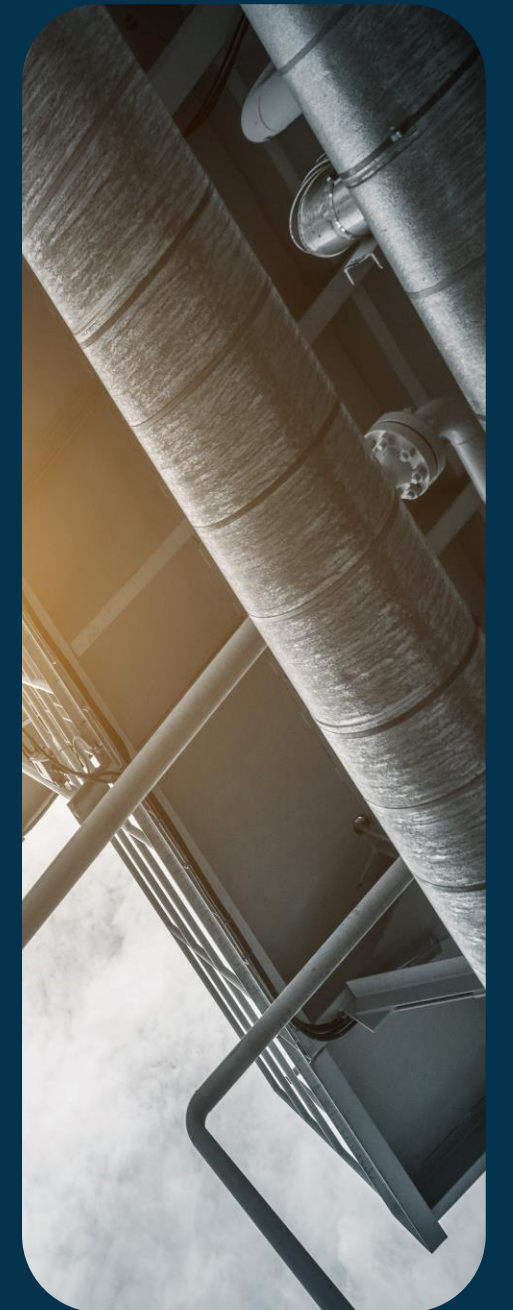# Unlock Efficiencies in 2025: Why You Need to Optimise People, Process, & Products with AI

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Fero Labs is process optimisation
software built for steelmakers

Fero AI helps factories fix production
issues faster and optimise process
efficiencies to drive Profitable
Sustainability.

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To Optimise People, Processes, & Products with AI You Need:

▶▶ AI that enables metallurgists and engineers to execute their entire workflow faster, easier, and smarter.

AI that drives greater process efficiencies so you're improving yield and throughput.

AI that enables you to streamline costs whilst maintaining premium product quality to remain competitive.

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Steel's Triple Challenge in 2025

People
Skills gap, knowledge transfer issues, resource-intensive solutions

Processes
Increasing complexities and variability

Products
Demanding quality requirements and sustainability pressures

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Limitations of Traditional Methods

Traditional Methods	Modern Challenges
Rigid statistical models	Complex, non-linear relationships
Manual data analysis	Real-time decision needs
Siloed information	Interconnected processes
Experience-based decisions	Data-driven optimization

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Your Potential Using AI

- ✓ Diagnose the root cause of continuous caster breakouts in minutes, not days.
- ✓ Minimise product risks and costs on *every* heat to eliminate over-design
- ✓ Formulate flexible slag optimisation recipes rather than one-size-fits-all
- ✓ Reclassify products in real-time to avoid pour-backs
- ✓ Avoid downgrading and slashing margins
- ✓ Create dynamic scrap mix formulas for *every* heat
- ✓ Reduce your environmental impact without compromising quality

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People Optimisation

Case Study: Knowledge transfer, increased speed to solution

Challenge: Retiring workforce with decades of experience

Solution: Fero's explainable AI captures expert knowledge

Results:

- 85% of expert decisions accurately modeled

- 45% faster onboarding of new engineers & operators

- 68% reduction in operator decision variability

- 60% reduction in after-hour phone calls

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Process Optimisation

Case Study: Flexible slag optimisation recipes

Challenge: Traditional models fail to account for raw material variations

Solution: Fero Live Production using adaptive ML models

Results:

- 22% reduction in processing time

- 17% energy savings

- 3.8% yield improvement

- 80% reduction in dedicated worker time

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Product Optimisation

Case Study: Dynamic recipe adjustment for quality improvement and cost minimisation

Challenge: Meeting variable product specifications with minimal resources

Solution: Fero's predictive quality modeling

Results:

- 38% reduction in quality deviations
- 42% decrease in downgraded product
- 15% reduction in alloy usage

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Winning in 2025 requires AI for people, process, and product optimization so your experts are driving the fastest car in the race.

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Together we'll build a sustainable tomorrow

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Thank you

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