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Article

Why resilience must lead in steel onshoring

Santiago Jaramillo • November 26, 2025

Tariffs, geopolitics, and supply chain shocks have reignited the drive to bring steel production back onshore. But as the furnaces fire up, a bigger question looms: are we ready?

Many steel manufacturers are reactivating old plants, scaling up production and racing to meet domestic demand. But beneath the surface of this industrial revival lies a complex web of risk.

Numerous facilities haven't seen appropriate maintenance in decades. Others are being retrofitted with new tech layered over aging infrastructure legacy systems.

These facilities weren't built for today's challenges – climate volatility, cyber threats or global supply chain disruption, or the kind of geopolitical pressure we're now seeing.

Old machines, new risks

Steel production relies on critical equipment – furnaces, continuous casters, rolling mills, and transformers. These are bottleneck assets; if one fails, the whole operation can stall. Replacement parts for these systems can take months or even years to source, especially for legacy equipment. That's not just downtime it's a cascade of costly failures. Add to that the risk of poor retrofitting, contractor delays and fire protection systems that struggle in high-temperature environments, and you've got a recipe for costly, cascading failures.

Steel, energy and the rising tide

Many steel and energy facilities sit near ports – ideal for fuel access but increasingly exposed to flooding and sea level rise. These locations were chosen for logistics, now they're potential liabilities. On top of this, modern sites are built with resilience in mind, but the older ones aren't. And as climate risks intensify, the cost of ignoring environmental liability exposure will only grow.

Cyber risk isn't just digital – it's physical

Steel plants are becoming smarter. SCADA systems[1], PLCs[2] , IoT sensors[3] – are all part of the new industrial toolkit. But with connectivity comes vulnerability. Cyber threats extend far beyond the pervasive crime of stolen data and span manipulated process controls, disabled safety systems and physical damage.

People matter, but where are they?

You can't run a steel plant without skilled people but right now, there's a shortage. Experienced engineers, technicians, and risk managers are in high demand and short supply, while existing personnel are ageing out of the workforce. Without them, the risk of human error, poor maintenance and delayed response skyrockets. Larger operators may have the frameworks in place; smaller ones often don't. And as steel production ramps up to reshore quickly, those without the right people in place are exposed to longer downtimes and higher safety risks.

Steel is strong. But resilience is stronger

Too often, insurance is treated as a safety net for poor planning. But it shouldn't be. Resilience starts before the policy is written, which means asking hard questions:

- Have you completed all the right risk assessments?
- Can your infrastructure handle increased output?
- Is your workforce ready?
- Are you investing in inspections and maintenance, not just production?
- Are you prepared for the environmental, cyber, and geopolitical risks that come with reshoring?

And these questions aren't just good practice, they're essential. Ones that reputable, quality insurance partners will require clear answers and evidence for.

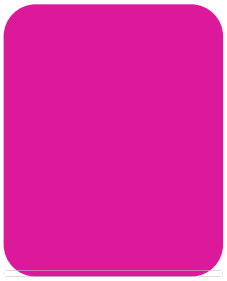
Insurance that powers steel's next chapter

Reshoring steel production is a chance to rebuild with intent. But doing that well means thinking differently about risk by thinking about insurance as a tool for progress. When resilience is built into the foundations – from infrastructure upgrades to workforce planning to cyber protection – insurance needn't just cover the fallout, it can help shape the future. It can give steel manufacturers the confidence to invest, expand, and adapt, knowing they're prepared for what's possible.

How Beazley can support you

Modernizing an aging steel plant comes with unique challenges - from outdated infrastructure to complex machinery upgrades. Our underwriting solutions address these risks with coverage tailored to the realities of each project and your operational needs. With financial protection against unforeseen property damage, equipment

breakdown, we help keep your modernization on track.



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Home

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