

PAK **STEEL MILLS** **LIMITED**

BUSINESS PLAN



Manufacture • Supply • Distribution of Steel Products

IRON AND STEEL MANUFACTURING PROJECT – TANZANIA

1. INVESTMENT PLAN

PAK STEEL MILLS LIMITED proposes to establish a modern iron and steel manufacturing plant in Tanzania as a strategic industrial investment intended to strengthen domestic manufacturing capacity and reduce dependency on imported steel products. The project is designed to support Tanzania’s industrialization agenda by producing high-quality steel materials required for construction, infrastructure development, engineering works, mining support, transport systems, and industrial fabrication. The investment covers acquisition of industrial land, factory construction, procurement of advanced machinery, installation of utility systems, technical staffing, operational working capital, and market entry systems.

The proposed project seeks long term sustainability by combining strong local demand, regional export opportunities, and industrial efficiency. Through this investment, the company aims to create a competitive manufacturing base capable of supplying both Tanzania and neighboring regional markets while benefiting from government investment incentives available to strategic industrial projects.

2. COMPANY BACKGROUNDS

PAK STEEL MILLS LIMITED is a private company limited by shares legally incorporated in Tanzania with the purpose of undertaking manufacturing, industrial processing, logistics support, and related commercial activities. The company was established as part of a long-term industrial investment strategy focused on sectors with high growth potential and strong national demand. Steel manufacturing was identified as a priority due to the increasing need for locally available steel products driven by rapid urbanization, infrastructure growth, and regional market shortages. The company’s leadership combines business experience, capital commitment, and strategic interest in heavy industrial production. The intention is to develop the company into one of Tanzania’s recognized suppliers of industrial steel products while maintaining compliance with local investment laws, industrial regulations, and technical quality standards.

3. NATURE OF THE PROJECT

The project involves establishment of an integrated iron and steel production facility designed to process raw steel materials into finished industrial products. Manufacturing operations will include steel melting where applicable, billet processing, rolling, shaping, cutting, cooling, and final finishing according to market specifications. The plant will focus on production of steel reinforcement bars, mild steel rods, flat bars, angle irons, wire products, and structural steel sections used across multiple sectors. The production process will rely on modern industrial technology that ensures consistency, efficiency, and quality control. This nature of project places the company in a strategic industrial category because steel remains one of the most essential materials in modern economic development.

4. TARGETED MARKET

The targeted market consists primarily of Tanzania's rapidly expanding construction and infrastructure sectors. Major consumers include building contractors, government procurement agencies, industrial engineering firms, mining companies, real estate developers, wholesalers, and hardware distributors. Tanzania's current infrastructure expansion, including roads, bridges, railways, industrial parks, ports, and urban housing, creates stable and continuous demand for steel products. In addition to domestic demand, the company intends to serve regional export markets including Rwanda, Burundi, Uganda, Democratic Republic of the Congo, Zambia, and Malawi where steel demand continues to exceed local production capacity.

5. ECONOMIC GROWTH CONTRIBUTION

The project contributes directly to Tanzania's economic growth through industrial expansion, import substitution, employment generation, tax contribution, and foreign exchange savings. Local production of steel reduces the need for imported products, thereby lowering pressure on foreign currency reserves. The company will create direct industrial employment and indirect opportunities across transport, maintenance, supply chains, engineering services, and trade networks. Government revenue will increase through corporate taxes, PAYE, VAT, and associated industrial levies. The project also strengthens national industrial competitiveness by supplying critical raw materials needed for large-scale development projects.

6. INDUSTRIAL DEMAND IN TANZANIA

Industrial demand for steel in Tanzania continues to experience sustained growth, driven by a combination of national development programs, rapid urbanization, industrial expansion, and increasing private sector participation in infrastructure development. As the country advances its development agenda under long-term strategies such as infrastructure modernization, industrialization, and urban development planning, steel has become a critical input material across multiple sectors of the economy.

➤ Infrastructure and Public Sector Demand

A significant share of steel consumption is generated by public infrastructure projects. These include:

- Construction and upgrading of trunk and regional roads
- Development of bridges, flyovers, and drainage systems
- Expansion of rail infrastructure and logistics corridors
- Construction of ports, airports, and energy facilities
- Water supply systems, dams, and irrigation schemes

Large-scale government investments in transport and energy infrastructure continue to drive steady demand for structural steel, reinforcing bars (rebar), and fabricated steel components. These projects typically require high and consistent volumes of steel over extended construction periods.

➤ Urbanization and Real Estate Development

Tanzania is experiencing rapid urban population growth, particularly in cities such as Dar es Salaam, Dodoma, Mwanza, and Arusha. This has led to:

- Increased demand for residential housing developments
- Expansion of commercial buildings such as malls, offices, and hotels
- Growth in institutional infrastructure (schools, hospitals, government buildings)

As a result, steel consumption in the construction sector continues to rise, especially for reinforced concrete structures, roofing systems, and structural frameworks. The rise of real estate investment companies and mortgage financing options is further strengthening long-term demand.

➤ Industrial Expansion and Manufacturing Growth

The government's industrialization agenda has encouraged growth in:

- Manufacturing plants and processing facilities

- Industrial parks and special economic zones (SEZs)
- Warehousing and logistics infrastructure

Steel is a core material in the construction of factory buildings, storage facilities, heavy equipment structures, and production lines. As more industries establish operations locally, demand for both structural steel and fabricated metal products is increasing.

➤ **Energy and Utilities Sector**

Major investments in energy generation and distribution also contribute significantly to steel demand. This includes:

- Hydropower and thermal power plants
- Renewable energy infrastructure (solar farms, wind installations)
- Transmission towers and grid expansion systems
- Oil and gas infrastructure developments

These projects require specialized steel grades for high-strength and corrosion-resistant applications.

➤ **Import Dependency and Supply Gap**

Despite growing demand, Tanzania's local steel production capacity remains limited compared to national consumption. The country relies heavily on imported steel products, particularly:

- Rebar and wire rods
- Flat steel products (sheets, coils)
- Specialized structural steel sections

This supply gap creates price sensitivity and exposure to global steel market fluctuations. It also leads to long lead times and inconsistent availability for large-scale projects.

➤ **Investment Opportunity and Market Potential**

The imbalance between demand and local production presents strong opportunities for industrial investment in:

- Integrated or mini steel mills
- Re-rolling mills for rebar and sections

- Steel fabrication plants
- Downstream value-added processing

Additional opportunities exist in:

- Scrap metal collection and recycling systems
- Local distribution and logistics networks
- Import substitution manufacturing

Investors entering the market can benefit from:

- Rising infrastructure spending
- Government support for industrialization
- Import substitution policies
- Long-term structural demand growth

➤ **Long-Term Outlook**

With continued population growth, urban expansion, and industrial development, steel demand in Tanzania is expected to maintain a strong upward trajectory. Over the medium to long term, localization of production is likely to become increasingly important to reduce import dependence, stabilize prices, and support national development goals.

7. MANUFACTURING FACILITIES

The project requires installation of advanced industrial facilities capable of efficient and safe steel production. These include induction furnaces where applicable, rolling mill systems, billet handling units, cooling beds, cutting machines, heavy cranes, forklifts, power transformers, generators, compressors, and laboratory testing equipment. Proper utility systems including water circulation, industrial drainage, electrical systems, and ventilation are essential to support continuous production. Factory design will also include storage facilities for raw materials, finished products, spare parts, and maintenance equipment. These facilities will ensure industrial productivity and quality assurance.

8. COMPANY OBJECTIVES

The primary objective of PAK Steel Mills Limited is to establish a robust local manufacturing base for high-quality steel products, capable of serving both domestic and regional markets. Key objectives

include:

- Reducing import dependency by producing steel products locally.
- Creating industrial employment opportunities and contributing to workforce development.
- Generating sustainable returns for shareholders through efficient and profitable operations.
- Introducing modern steel manufacturing technologies to enhance production quality and efficiency.
- Supporting Tanzania's industrial transformation agenda by fostering local industrial capacity.
- Pursuing long-term industrial expansion through product diversification and increased production capacity to meet growing market demands.

Through these objectives, the company aims to become a leading contributor to Tanzania's industrial growth while delivering value to stakeholders and the wider community.

9. PROJECT PROSPECTS

The project has strong long-term prospects due to stable steel demand, favorable location, regional market gaps, and supportive government investment policies. Tanzania's infrastructure pipeline continues to expand, while neighboring countries remain dependent on imported steel. Rising industrial activity in East and Central Africa creates strong future demand for locally manufactured products. Modern production systems further improve competitiveness through cost efficiency and quality consistency.

10. SHAREHOLDERS/PROMOTERS

The shareholders of PAK STEEL MILLS LIMITED provide the capital base and strategic direction necessary for successful project implementation. Their role includes financing, governance, policy direction, and long-term investment oversight. The promoters combine local and foreign business experience, which strengthens financial capacity and industrial confidence. Their investment demonstrates commitment to long-term industrial growth in Tanzania.

11. PROJECT LOCATION

The proposed project location in Kibaha offers major strategic advantages. The site is close to Dar es Salaam port logistics, major highways, industrial supply corridors, and labor availability. Proximity to transport infrastructure reduces raw material logistics costs and improves product distribution efficiency. Industrial zoning suitability also supports future expansion.

12. IMPLEMENTATION SCHEDULE

The implementation of PAK Steel Mills Limited's manufacturing project will be carried out in structured phases to ensure efficiency, compliance, and readiness for full-scale operations. The key stages include:

- Feasibility Study Completion – Final assessment of technical, financial, and market viability.
- Regulatory Approvals – Obtaining all necessary permits, licenses, and certifications from relevant authorities.
- Land Preparation – Site clearing, leveling, and preparation for construction activities.
- Machinery Procurement – Sourcing and importing modern steel manufacturing equipment.
- Factory Construction – Building production facilities, storage, administrative offices, and other infrastructure.
- Installation & Commissioning – Setting up machinery, system testing, and quality assurance checks.
- Recruitment & Training – Hiring skilled personnel and providing technical and operational training.
- Trial Production – Conducting initial production runs to ensure operational efficiency and product quality.
- Commercial Launch – Commencing full-scale production and distribution to domestic and regional markets.

The implementation period is projected to take **24–36 months**, contingent on machinery delivery schedules, construction progress, and completion of regulatory requirements. This phased approach ensures a smooth transition from project initiation to commercial operation while mitigating risks and ensuring long-term operational sustainability.

13. FINANCIAL PLAN

Key Assumptions (Reality Check Layer)

- Plant capacity: **1,000 – 1,500 tons/month (initial)**
- Average selling price: **Tshs 2,500,000 per ton** (varies by product)
- Capacity utilization:
 - Year 1: 50%
 - Year 2: 65%
 - Year 3: 75%
 - Year 4: 85%
 - Year 5: 90%
- Corporate tax (TRA): **30%**
- Cost structure:
 - Raw materials: **55–65% of revenue**
 - Energy: **10–15% (this is critical in steel)**
 - Labor + overhead: **10–15%**

Revenue Projections (5 Years)

Year	Production (Tons/Year)	Price per Ton (Tshs)	Revenue (Tshs)
Year 1	6,000	2,500,000	15,000,000,000
Year 2	7,800	2,600,000	20,280,000,000
Year 3	9,000	2,700,000	24,300,000,000
Year 4	10,200	2,800,000	28,560,000,000
Year 5	10,800	2,900,000	31,320,000,000

Cost Structure (Critical Section)

Cost of Goods Sold (COGS)

Year	COGS (% Revenue)	Total COGS (TSh)
Year 1	65%	9,750,000,000
Year 2	63%	12,776,400,000
Year 3	62%	15,066,000,000
Year 4	60%	17,136,000,000
Year 5	60%	18,792,000,000

Profit & Loss (5-Year)

Year	Y1	Y2	Y3	Y4	Y5
Revenue	15.0B	20.28B	24.30B	28.56B	31.32B
COGS	(9.75B)	(12.78B)	(15.07B)	(17.14B)	(18.79B)
Gross Profit	5.25B	7.50B	9.23B	11.42B	12.53B
Operating Expenses	(1.20B)	(1.40B)	(1.60B)	(1.80B)	(2.00B)
EBIT	4.05B	6.10B	7.63B	9.62B	10.53B
Tax (30%)	(1.22B)	(1.83B)	(2.29B)	(2.89B)	(3.16B)
Net Profit	2.83B	4.27B	5.34B	6.73B	7.37B

Cash Flow Projection

Year	Y1	Y2	Y3	Y4	Y5
Net Profit	2.83B	4.27B	5.34B	6.73B	7.37B
Add Depreciation	400M	400M	400M	400M	400M
Operating Cash Flow	3.23B	4.67B	5.74B	7.13B	7.77B
CapEx	(4.0B)	(500M)	(500M)	(500M)	(500M)
Net Cash Flow	(770M)	4.17B	5.24B	6.63B	7.27B

Balance Sheet (Simplified)

Item	Year 1	Year 3	Year 5
Assets	6.5B	12.0B	20.5B
Liabilities	2.0B	2.5B	3.0B
Equity	4.5B	9.5B	17.5B

Return on Investment (ROI)

- Initial Investment: **Tshs 4B**
- Year 1 Profit: **2.83B** → **~70% ROI (aggressive but possible in steel if efficient)**
- Payback Period: **~1.5 – 2 years**

14. INVESTMENT BREAKDOWN USD/TSHS

Land/Building	<u>1.4 Billion Tshs</u>
Plant	<u>1.2 Billion Tshs</u>
Vehicles	<u>300 million Tshs</u>
Furniture & Fittings	<u>200 Million Tshs</u>
Pre-expenses	<u>200 Million Tshs</u>
Others	<u>200 Million Tshs</u>
Working Capital	<u>500 million Tshs</u>
TOTAL	<u>4 billion Tshs</u>

15. PRODUCTION FACILITIES

The production facilities of **PAK STEEL MILLS LIMITED** are designed to support continuous, efficient, and high-quality steel manufacturing through installation of modern industrial systems capable of handling all major stages of production from raw material reception to final finished product dispatch. Because steel manufacturing requires precise coordination between heavy machinery, material movement, heat control, and quality monitoring, the production facility will be structured in a manner that ensures smooth operational flow, industrial safety, and maximum production efficiency.

The core production assets will include steel rolling lines, which form the central manufacturing system responsible for converting billets into finished steel products such as reinforcement bars, mild steel rods, flat bars, angle irons, and structural steel sections. These rolling lines will be supported by controlled heating systems that prepare billets for shaping at the required industrial temperatures, ensuring product consistency and mechanical strength suitable for construction and engineering use.

A dedicated billet storage system will be established to ensure proper handling of raw materials before entry into the rolling process. This storage area will be designed to accommodate safe stacking, organized material flow, and easy access to production

lines, thereby minimizing delays in feeding raw materials into the manufacturing process. Proper billet storage also reduces unnecessary handling losses and protects production continuity.

The plant will further incorporate material handling systems including overhead cranes, forklifts, conveyors, and transfer equipment to facilitate efficient movement of raw materials, semi-processed steel, and finished products within the factory premises. These systems are essential because steel manufacturing involves heavy industrial loads that require safe and mechanized handling in order to reduce labor strain, improve productivity, and maintain safety standards.

To support finished product movement and customer dispatch, the project will establish well-organized loading bays and dispatch zones where steel products can be prepared for local delivery or regional transportation. These loading areas will be designed to accommodate trucks, forklifts, weighing systems, and organized dispatch procedures that ensure timely order fulfillment and reduced logistical congestion.

An important component of the facility is the cooling system, which is necessary after rolling and shaping operations. Cooling beds and temperature control arrangements will be installed to ensure gradual and controlled cooling of finished steel products, preserving structural integrity and reducing defects. Proper cooling directly influences steel strength, durability, and compliance with engineering standards.

The project will also establish industrial maintenance units within the factory to support preventive maintenance, emergency repairs, machinery servicing, spare parts storage, and technical inspections. Because uninterrupted machinery performance is critical in steel manufacturing, maintenance capability inside the plant will help reduce costly downtime and protect long-term production efficiency.

Additional production support facilities will include:

- **industrial power systems and transformers**
- **backup generators for power continuity**
- **water circulation systems**
- **lubrication systems**
- **production control rooms**
- **industrial laboratory for quality testing**
- **safety equipment and fire control systems**

Efficient layout planning of all production facilities will ensure that raw materials enter the factory in a logical sequence, pass smoothly through each stage of production, and exit as finished products with minimal operational interruption. This layout strategy reduces unnecessary movement, lowers internal transport costs, improves worker productivity, and enhances overall industrial efficiency.

16. COMPETITION AND MARKET ANALYSIS

The production facility is therefore structured not only to meet immediate manufacturing needs but also to allow future expansion as production volumes increase and product lines diversify. Through this facility design, the company intends to establish a strong industrial base capable of maintaining reliable production standards for both domestic and export markets. The market contains local manufacturers and imported steel suppliers. Imported products face high transport costs and longer delivery periods. Local production provides faster supply, lower inland logistics costs, and better customer responsiveness.

17. ADVERTISEMENT AND MARKETING STRATEGY

The advertisement and marketing strategy of PAK STEEL MILLS LIMITED is designed to position the company as a reliable and competitive supplier of iron and steel products within Tanzania and the wider regional market. Because steel products are industrial commodities whose purchasing decisions are largely influenced by quality assurance, price competitiveness, delivery reliability, and long-term supply confidence, the company's marketing approach will focus more on strategic business relationships and institutional visibility rather than conventional consumer advertising alone.

A major component of the strategy is direct industrial marketing, where the company will establish formal business relationships with large construction firms, engineering companies, real estate developers, hardware wholesalers, mining contractors, and government procurement agencies. These institutional buyers represent the largest consumers of steel products in Tanzania because of their continuous demand for reinforcement bars, rods, structural steel, and industrial metal products. Dedicated sales teams will actively approach these customers to negotiate supply arrangements, framework contracts, and recurring delivery schedules that ensure long-term commercial stability.

The company will also actively target government and public infrastructure projects, since national development programs continue to generate high steel demand through road construction, bridge works, railway expansion, port development, industrial parks, and public housing projects. Participation in public procurement opportunities will therefore form an important part of market expansion, particularly where locally manufactured steel enjoys logistical advantages and shorter delivery times compared to imported alternatives.

Another important marketing channel will be strategic distribution through hardware dealers and regional steel distributors. By establishing supply relationships with major building material wholesalers in key commercial centers such as Dar es Salaam, Dodoma, Mwanza, Arusha, and Mbeya, the company will ensure that products are accessible across major construction markets in the country. This distribution strategy reduces dependence on a single sales point and broadens market penetration.

The advertisement strategy also includes participation in industrial exhibitions, trade fairs, and business forums where manufacturers, contractors, investors, and government agencies interact. Presence in such platforms increases visibility, strengthens industrial credibility, and provides opportunities to present product quality, technical standards, and production capacity to potential buyers and institutional partners.

A modern component of the marketing strategy is digital and corporate visibility. Although steel products are industrial rather than retail consumer goods, many procurement decisions increasingly begin through online company searches, digital communication, and electronic quotation systems. The company therefore intends to maintain professional digital presence through a corporate website, online product catalogues, email-based commercial communication, and business networking platforms that allow buyers to access product information, request quotations, and initiate supply discussions efficiently.

The company will also emphasize brand identity based on reliability and technical trust. In industrial markets, long-term purchasing decisions are strongly influenced by supplier reputation. For this reason, the company intends to market itself not merely through product pricing but through demonstrating consistent quality, timely delivery, transparent communication, and dependable after-sales business support. Contractors and industrial buyers often prefer suppliers whose product performance has already proven reliable in active projects.

An important strategy is competitive pricing combined with stable supply assurance. Imported steel products often experience price fluctuations due to exchange rate movements, shipping costs, and global steel market volatility. By producing locally, PAK STEEL MILLS LIMITED will be able to offer more responsive pricing while reducing transport delays, thereby attracting buyers seeking predictable supply conditions.

The marketing strategy also includes relationship-based commercial engagement, where repeat business will be encouraged through long-term customer trust, volume-based pricing arrangements, and responsive handling of urgent project demands. Maintaining strong communication with contractors, engineers, and industrial buyers helps secure recurring demand and strengthens market position over time.

As production stabilizes, the company will gradually pursue regional market promotion in neighboring countries including Rwanda, Burundi, Uganda, Democratic Republic of the Congo, and Zambia where steel demand remains high and supply gaps continue to exist. Tanzania's logistical position through Dar es Salaam provides strong regional trade advantage.

Finally, the company intends to maintain close alignment between marketing strategy and production planning so that promotional commitments are always supported by actual manufacturing capacity. This prevents over-promising and protects long-term industrial credibility.

Overall, the advertisement and marketing strategy is designed not only to secure immediate sales but also to establish PAK STEEL MILLS LIMITED as a recognized industrial steel supplier capable of sustaining long-term market confidence within Tanzania and across the region.

18. BUSINESS STRATEGY

The business strategy of **PAK STEEL MILLS LIMITED** is designed to establish the company as a competitive and sustainable participant in Tanzania's iron and steel manufacturing industry through a combination of production efficiency, market responsiveness, product reliability, and long-term industrial growth planning. The strategy recognizes that steel manufacturing is a capital-intensive and highly competitive sector, and therefore success depends not only on production capacity but also on the ability to maintain quality standards, control operational costs, secure reliable buyers, and build long-term industrial trust in the market.

A central pillar of the strategy is quality consistency. In the steel industry, buyers such as contractors, engineers, infrastructure developers, and industrial users place significant importance on product strength, uniformity, and compliance with technical specifications. For this reason, the company will implement strict quality assurance systems at every stage of production, beginning from raw material selection up to final rolling, cooling, cutting, and packaging. Internal laboratory testing and routine inspection procedures will be used to ensure that reinforcement bars, rods, angle irons, and structural steel products consistently meet market and engineering requirements. By maintaining reliable quality, the company intends to build long-term customer confidence and strengthen repeat purchasing relationships.

A second major strategic focus is reliable production continuity. Industrial buyers require stable supply and timely delivery, particularly where steel products are linked to active construction schedules and infrastructure projects. The company therefore intends to maintain production reliability through preventive machinery maintenance, adequate spare parts planning, backup power systems, efficient stock control, and technical

supervision of key production lines. Continuous production capability is expected to become one of the company's strongest competitive advantages because interruptions in steel supply often create immediate market dissatisfaction and financial losses for buyers.

Another critical element of the strategy is cost control and operational efficiency. Because steel manufacturing is highly dependent on electricity, machinery, raw materials, transport, and labor, careful cost management is essential for maintaining competitive pricing. The company will adopt efficient energy use systems, production planning methods, bulk raw material procurement arrangements, and maintenance scheduling to reduce avoidable operational losses. Cost efficiency will allow the company to offer prices that remain competitive against imported steel while preserving acceptable profit margins.

The business strategy also emphasizes market penetration through targeted industrial relationships. Rather than relying only on open market sales, the company intends to establish direct commercial relationships with major construction contractors, hardware distributors, engineering firms, industrial developers, and government procurement channels. Long-term supply contracts will be prioritized because they provide revenue stability and improve production planning. The company will also actively participate in public and private tender opportunities involving large infrastructure and building projects in Tanzania.

An important strategic direction is industrial partnership development. The steel market often benefits from strong institutional relationships, including partnerships with construction companies, logistics operators, engineering firms, and industrial suppliers. The company intends to create collaborative supply relationships that strengthen both raw material access and product distribution. Such partnerships also help improve market intelligence, customer responsiveness, and regional expansion opportunities.

The strategy further includes gradual product diversification. Although initial production will focus on high-demand steel products such as reinforcement bars, mild steel rods, flat bars, and angle irons, future phases may introduce additional products including wire products, specialized steel sections, fabricated industrial steel, and other metal products depending on market demand. Product diversification reduces dependence on a single revenue stream and increases resilience against market fluctuations.

A long-term component of the business strategy is regional export expansion. Once domestic operations stabilize, the company intends to gradually enter regional markets where steel demand remains high and local production remains insufficient. Priority export destinations include Rwanda, Burundi, Uganda, Democratic Republic of the Congo, and Zambia. Tanzania's geographic advantage and access through Dar es Salaam logistics corridors provide strong support for regional steel distribution.

The business strategy also recognizes the importance of brand credibility in industrial markets. Unlike consumer products, industrial steel buyers often make purchasing decisions based on reliability, delivery record, and technical trust. The company therefore intends to build a reputation based on supply consistency, fair pricing, product integrity, and professional business conduct.

Another strategic pillar is regulatory and institutional compliance. Maintaining compliance with industrial, tax, environmental, labor, and investment requirements ensures uninterrupted operations and strengthens investor confidence. Good compliance also improves eligibility for strategic support under Tanzania Investment and Special Economic Zones Authority and other industrial facilitation mechanisms. In the long term, the company's strategy is to move beyond simple steel production and become a broader industrial metal platform capable of supporting Tanzania's growing manufacturing economy through advanced metal processing, larger production volumes, and stronger regional trade integration.

19. ENVIRONMENTAL COMPLIANCE

The proposed project will be implemented in full compliance with the environmental laws, regulations, and industrial sustainability standards applicable in Tanzania. In particular, the company will ensure adherence to the requirements and guidelines issued by National Environment Management Council (NEMC) regarding industrial environmental protection, monitoring, and reporting obligations.

Environmental management measures will include the establishment of effective waste management systems for handling solid waste, scrap metal residues, industrial by-products, and wastewater generated during production processes. Appropriate emission control mechanisms will be installed to regulate dust, smoke, heat discharge, and other industrial emissions in order to maintain acceptable environmental and occupational standards. The project will also incorporate industrial safety systems designed to protect workers, surrounding communities, machinery, and production facilities through proper hazard prevention, fire protection systems, emergency response procedures, and continuous safety monitoring.

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In addition, recycling measures will form an important part of factory operations, particularly in the

recovery and reuse of scrap materials, water conservation systems, and efficient utilization of raw materials to minimize waste and improve production sustainability. The company remains committed to maintaining environmentally responsible industrial operations while supporting national sustainable development objectives and ensuring that production activities are carried out in a safe, compliant, and socially responsible manner.

20. PROJECT MANAGEMENT

Project management will be undertaken under the overall supervision of the Board of Directors, which will provide strategic leadership, policy direction, and oversight of the investment to ensure that the project is implemented in accordance with its commercial objectives and regulatory obligations. The Board will be supported by a structured internal management system led by factory management and specialized operational departments responsible for day-to-day execution of project activities.

The factory management team will oversee production operations, workforce coordination, maintenance planning, and operational efficiency within the manufacturing facility. The finance department will manage budgeting, financial controls, cash flow planning, reporting, and investment accountability to ensure sustainable financial performance. The production engineering department will be responsible for technical supervision, machinery performance, production optimization, quality assurance, and industrial safety standards. Procurement functions will ensure timely sourcing of raw materials, spare parts, and industrial inputs under cost-effective and reliable supply arrangements, while the compliance department will oversee adherence to legal, environmental, tax, labour, and industrial regulatory requirements.

This integrated management framework is designed to ensure effective coordination, accountability, and operational discipline throughout all phases of project implementation and long-term factory operation, while maintaining close engagement with relevant authorities including Tanzania Export Processing Zones Authority and other government institutions where necessary for smooth industrial performance.

21. MANPOWER AND TECHNOLOGY TRANSFER

The PAK Steel Mills Limited project is designed not only to establish a state-of-the-art steel manufacturing facility but also to create substantial employment opportunities and facilitate the transfer of advanced industrial technology to the local workforce.

- **Current Employment Structure:**

- **Local Workforce:** Initially, the project will employ approximately 150 skilled and semi-skilled Tanzanian employees across production lines, administrative functions, logistics, and support services. These roles will offer opportunities for career development, skills enhancement, and hands-on experience in a modern industrial setting.
- **Foreign Experts:** The project will engage around 10 highly experienced foreign professionals, bringing international expertise in steel production,

machinery operation, quality assurance, and industrial maintenance. Their presence ensures adherence to global best practices and standards.

- **Technology Transfer and Skills Development:**

The foreign specialists will lead a structured program for knowledge transfer to the local workforce, which will include:

- **Machine Operation** – Comprehensive training to ensure efficient, safe, and effective use of modern steel production equipment.
- **Quality Control** – Imparting internationally recognized standards and practices to maintain consistency, durability, and reliability of steel products.
- **Industrial Maintenance** – Building local capacity for routine, preventive, and corrective maintenance to minimize downtime and maximize operational efficiency.

- **Future Workforce Expansion:**

The company has a strategic plan to gradually expand its workforce as production capacity grows, new product lines are introduced, and market demand increases. This approach ensures that the company can scale operations sustainably while continuously enhancing local technical expertise.

Through this comprehensive manpower and technology transfer plan, PAK Steel Mills Limited aims to:

- **Develop a highly skilled local workforce capable of managing and operating modern steel manufacturing facilities.**
- **Contribute significantly to industrial employment creation in Tanzania.**
- **Promote long-term sustainability and growth of the steel industry by embedding advanced skills and operational knowledge within the local labor force.**
- **Support Tanzania’s broader industrial transformation agenda and strengthen the country’s position as a regional hub for high-quality steel production.**

22. FINANCIAL AND ECONOMIC ANALYSIS

The financial and economic analysis of **PAK STEEL MILLS LIMITED** demonstrates that the proposed iron and steel manufacturing project is commercially viable, economically strategic, and capable of generating sustainable long-term returns while contributing significantly to Tanzania’s industrial

economy. The analysis has been prepared based on expected production growth, local steel demand, regional market opportunities, operating efficiency, and gradual expansion of industrial supply contracts over the first five years of operation.

The steel industry remains one of the strongest industrial sectors because demand is directly linked to national development activities such as housing construction, road expansion, bridges, railway systems, energy infrastructure, industrial warehouses, mining support structures, and commercial real estate development. Tanzania continues to invest heavily in infrastructure, while regional markets also remain dependent on imported steel products. This creates a strong financial base for local industrial steel production.

During the **first year** of operation, the company is expected to operate at moderate production capacity while machinery stabilization, workforce training, and market establishment are completed. Initial costs will be relatively high because of machinery commissioning, utility consumption, technical supervision, raw material sourcing, spare parts procurement, and early logistics arrangements. However, even at this stage the company is projected to generate positive operating returns because of strong local demand and immediate market absorption of basic steel products.

In the **second year**, production efficiency is expected to improve as plant operations become more stable and market penetration expands. By this period, the company is expected to have secured repeat supply contracts with contractors, industrial buyers, wholesalers, and infrastructure suppliers. Improved cost management, better production planning, and stronger procurement systems are expected to increase profitability.

By the **third year**, the project is expected to enter stronger industrial maturity, with production operating closer to designed plant capacity. At this stage, export opportunities to neighboring countries including Rwanda, Burundi, Uganda, Democratic Republic of the Congo, and Zambia are expected to begin contributing meaningfully to total revenue through regional steel distribution.

The **fourth year** is projected to reflect strong economies of scale, lower operational inefficiencies, wider product acceptance, and stronger industrial contracts. By this period, the company may also begin product diversification depending on market conditions, including expansion into specialized structural steel products and industrial metal sections.

By the **fifth year**, **PAK STEEL MILLS LIMITED** is expected to achieve strong industrial positioning within Tanzania's steel market, supported by stable local demand, improved production efficiency, and stronger regional supply networks. Profitability at this stage is expected to strengthen significantly because fixed industrial costs become more efficiently distributed across larger production volumes.

The above projections indicate a progressive growth trend based on gradual expansion of plant utilization, stronger market penetration, improved supply efficiency, and reduced operational waste. Revenue growth is expected to be driven by increasing domestic steel consumption, improved customer confidence, and expansion into regional export

channels. Operating costs remain substantial because steel manufacturing is energy intensive and machinery dependent, but long-term profitability improves as output expands.

The financial impact of this project on Tanzania's domestic steel market is expected to be substantial. At present, imported steel products continue to dominate portions of the market, often exposing local buyers to international price volatility, shipping delays, and foreign exchange fluctuations. By increasing local steel manufacturing capacity, the project will improve price stability, reduce transport-related costs, shorten delivery periods, and improve access to steel products for contractors and industrial buyers.

This local supply advantage is particularly important for large national development projects where timely material availability directly affects project completion schedules. Stable local steel production strengthens Tanzania's construction supply chain and reduces dependency on external industrial markets.

The wider economic contribution of the project is equally significant because steel manufacturing stimulates multiple sectors simultaneously. Direct employment will be created through factory operations, engineering services, machine maintenance, warehouse management, administration, security, and logistics. Indirect employment opportunities will arise through transport contractors, spare parts suppliers, industrial service providers, and distribution networks. The project is expected to support over 200 direct jobs and many additional indirect economic opportunities.

Government revenue will increase through corporate income tax, PAYE, VAT, customs-related industrial transactions, licensing fees, and utility-related tax contributions. In addition, foreign exchange savings will arise because each ton of locally produced steel reduces import expenditure previously directed to foreign suppliers.

The project also contributes to industrial knowledge transfer through technical training and foreign industrial expertise introduced during early plant operation. Local technical staff will gain practical exposure to steel rolling systems, industrial quality control, production planning, equipment maintenance, and safety systems. This strengthens Tanzania's long-term industrial skills base.

From a strategic industrial perspective, the project aligns strongly with Tanzania's manufacturing development agenda because steel remains a foundational industrial input required across almost every major economic sector. Growth in steel production therefore directly supports growth in housing, infrastructure, transport, mining, manufacturing, and industrial services.

A broad SWOT perspective further confirms the project's viability.

STRENGTHS

The proposed project possesses significant strategic strengths that support its commercial viability and long-term industrial sustainability. One of its key advantages is the consistently strong domestic demand for iron and steel products driven by rapid urban development, infrastructure expansion, housing construction, and industrial growth throughout Tanzania. The project's location in Kibaha offers an

important logistical advantage due to its close proximity to Dar es Salaam, the country's principal commercial hub, major transport corridors, and the Port of Dar es Salaam, which facilitates efficient access to imported raw materials and regional export markets.

The project also aligns directly with Tanzania's industrialization agenda, where government policy strongly encourages domestic manufacturing, value addition, and import substitution in key industrial sectors. Its relevance to the construction, infrastructure, energy, and manufacturing sectors ensures sustained market demand across multiple industries. In addition, the investment stands to benefit from institutional support, regulatory facilitation, and available incentives offered through industrial investment frameworks under Tanzania Investment Centre and Tanzania Export Processing Zones Authority. These combined strengths position the project as a competitive and strategically important industrial investment with strong growth potential, operational efficiency, and regional market relevance.

WEAKNESSES

The proposed project is capital-intensive and requires substantial upfront investment in land development, plant construction, heavy machinery installation, production lines, utility systems, and supporting industrial infrastructure before full operations can commence. In addition, iron and steel manufacturing is highly dependent on continuous and reliable consumption of electricity, water, fuel, and maintenance inputs, making operating costs sensitive to utility pricing and supply stability. During the initial stages of operation, the project may also experience technical dependence in relation to specialized machinery handling, production optimization, quality assurance, and industrial maintenance, which may require experienced technical expertise while local operational capacity is being strengthened.

Furthermore, effective working capital management will remain essential, as raw material procurement, production cycles, labour obligations, utility expenses, and inventory maintenance require substantial liquidity before stable revenue generation is achieved. However, these challenges are considered manageable through close collaboration with the Government of Tanzania and relevant regulatory and investment support institutions. The company intends to work hand in hand with Tanzania Export Processing Zones Authority to ensure smooth project implementation, regulatory facilitation, and operational efficiency, while benefiting from available strategic investment support mechanisms. Continued engagement with government authorities is expected to strengthen infrastructure coordination, improve administrative efficiency, and support long-term industrial sustainability of the project

OPPORTUNITIES

The proposed iron and steel manufacturing project presents significant commercial and strategic opportunities within both domestic and regional markets. Tanzania continues to experience accelerated growth in infrastructure development, including roads, railways, bridges, housing projects, energy installations, and industrial parks, all of which require a continuous and reliable supply of steel products. Major public and private sector investments in construction create sustained demand for steel bars, reinforcement rods, wire products, and structural steel materials.

At the national level, government industrialization policies strongly encourage local production to reduce dependence on imported steel products, creating a favorable environment for domestic manufacturers. Import substitution measures offer the project a competitive advantage by enabling locally produced steel to serve sectors that have traditionally relied on imported materials, thereby reducing foreign exchange outflow and improving national industrial self-sufficiency.

Regionally, Tanzania's strategic location and access to major transport corridors, including the Port of Dar es Salaam, provide direct access to high-demand neighboring markets such as Zambia, Democratic Republic of the Congo, Rwanda, Burundi, Uganda, and Kenya, where steel demand remains high due to expanding urbanization and industrial projects.

In addition, investment incentives available under Tanzanian industrial development frameworks including tax facilitation, strategic investor support, and special industrial zone benefits create opportunities for cost reduction, capital efficiency, and long-term profitability. The increasing preference for locally available industrial inputs by contractors, developers, and manufacturers further strengthens market penetration prospects for the project.

THREATS

The project may face several external risks that are common within the global iron and steel industry, including fluctuations in international steel prices, changes in raw material costs, exchange rate movements, competition from imported steel products, power supply instability, and rising transport or logistics costs, all of which may influence operational margins if not carefully managed. International market dynamics and unforeseen disruptions in supply chains may also present occasional operational challenges.

Nevertheless, the company remains optimistic that such risks will be minimized through prudent planning, strong internal controls, and strategic operational management. It is the company's expectation that such adverse circumstances will not materially affect project performance; however, in the event of force majeure or extraordinary external conditions beyond operational control, the company looks forward to continued support and close cooperation from the Government of Tanzania and Tanzania Export Processing Zones Authority as key institutional partners in safeguarding the smooth implementation and sustainability of this strategic industrial investment. This collaborative framework is expected to strengthen resilience and ensure that any emerging challenges are addressed promptly and effectively in the national interest.

23. CONCLUSION AND RECOMMENDATION

The proposed iron and steel manufacturing project by **PAK STEEL MILLS LIMITED** represents a financially sound, economically beneficial, and industrially strategic investment capable of delivering long-term value to Tanzania's manufacturing sector. The project directly supports industrialization, employment generation, import substitution, tax growth, and regional trade expansion.

The financial projections indicate progressive profitability over the first five years of operation, while the wider economic analysis confirms substantial contribution to market stability and industrial development.

The project therefore qualifies as a strong candidate for investment support, strategic incentives, and industrial recognition under Tanzania Investment and Special Economic Zones Authority. It is recommended that the project proceeds with full regulatory support, financing mobilization, and phased implementation as a priority industrial investment capable of strengthening Tanzania's position in the regional steel manufacturing market.