



Aras Free Trade - Industrial Zone Organization

Technical and Economic Feasibility Form for Production Projects (Industrial - Agricultural)

1. Project: Production plan for various types of sponge iron.

2. Project Presentation: Inclusive of various types of sponge iron.

3. Description of the Project:

a. Necessity of the Project: The intended product serves as an intermediary commodity, primarily utilized as a raw material in the steel industry, which acts as the primary consumer for this product. Currently, the primary application of this product lies in its use as a raw material in the steel industry. Consequently, owing to the high profit margin and substantial market demand, the decision to commence production has been made.

b. Mainland Privileges (Raw Material – Market): The presence of 66% iron pellets as the primary raw material, coupled with cost-effective energy and labor resources, along with the existing potential in both domestic and international markets for sponge iron, are also taken into consideration.

c. Market Potentials: Considering the significance of producing sponge iron as a crucial raw material for the steel industry, there exists a favorable market and demand for mass production of this product.

d. Added Value: The production of sponge iron, if leveraging innovative technologies to attain optimal resource utilization, has the potential to generate substantial value-added benefits.

4. Market Feasibility; Economic – Financial:

a. Annual Demand for the Product (Domestic – Countries of the Region – World Demand): There exists a significant annual demand for this product in Iran, as well as in regional countries and worldwide, given the competitiveness of production costs.

b. Raw Materials Provision Potential (Domestic – Countries of the Region): The procurement of essential raw materials for sponge iron production is predominantly achievable domestically. However, in the event of a requirement, investors and applicants have the option to explore sourcing raw materials from international markets.

c. Local and Regional Markets: Apart from the domestic market, the target markets for these products encompass countries in the Persian Gulf region, CIS countries, and European countries.

5. FS Components:

a. Fixed Capital: 26,740,709,000,000 rials

Working Capital: 5,223,989,000,000 rials

b. PBP: 2 years

c. IRR: 44.3

d. Land Area: 50,000 m²

Built-up Area: 30,000 m²

c. Direct Employment: 140 individual

6. Technical Specs:

a. Table of Raw Materials and Estimated Consumption:

1- 66% iron pellets

2- Packaging materials

b. Table of Products and Estimated Production: Sponge iron

c. Table of Machinery and Production Line Equipment

1- Rotary kiln for reduction

2- Raw material silos

- 3- Cooling rotary kiln
- 4- Hydraulic systems
- 5- Compressed air systems
- 6- Others

d. Schematic Diagram of the Production Process:

Midrex process - HYL process - SL/RN process - Tunnel kiln process.

e. Table of Energy and Labor Costs:

Cost: 62,057,218 million IRR	
Energy:	2,129 million IRR
Work force:	553,828 million IRR

7. Risks of the Project:

a. Existing Risks in case of Losing Potential Market: Exchange rate risk, inflation risk, liquidity risk, and business risk.

b. Risk of Rising Raw Material Price:

In the event of an increase in the exchange rate, the cost of imported raw materials also rises, which directly affects the overall cost of the product.

c. Risk of Currency Fluctuations and Inflation:

Financial provision based on the national currency, Aligning liabilities or assets with a specific unit of currency, Presenting financial reports and statements in the currency without conversion, Participating in derivative market contracts, Conducting compensatory transactions, Engaging in purchase and sale contracts for products based on the national currency.