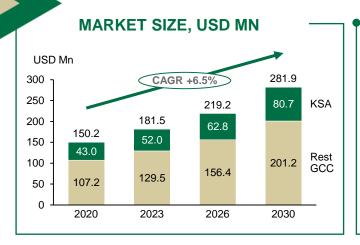


MINING & METALS DUCTILE IRON PIPE

OPPORTUNITY'S DESCRIPTION: Opportunity to setup a 200 KT capacity manufacturing plant to produce Ductile Iron Pipe (DIP) to cater local and regional demand

- DEMAND



INVESTMENT HIGHLIGHTS

- Expected investment size of USD 58.5 Mn
- Plant capacity: 200 KT
- Expected IRR: 10%
- Payback period: 9.3 years

INVESTMENT OVERVIEW

VALUE PROPOSITION

- KSA's geographical advantage and trade agreements with neighboring countries make exporting favorable
- Mining Industry set to become the "third pillar" of the Saudi industrial base due to KSA's rich deposits of minerals. KSA is considered the largest in the GCC market in terms of mineral resources availability – USD 1.3 Tn untapped mining potential
- First mover advantage given limited presence of local production facility of leading global manufacturers of DIP
- KSA is working to develop sustainable and globally competitive value-added semi-finished and finished downstream metal industries that support the Kingdom's goals of diversification

KEY DEMAND DRIVERS

- Demand for Ductile Iron Pipe (DIP) is mainly driven by three factors – growth in the construction market, replacement and repair of current water pipelines and growth in other sectors such as irrigation and infrastructure
- Infrastructure and construction industry in KSA is the largest in GCC region, with more than USD 825 Bn worth of planned and unawarded projects reported in early 2020
- Some of the key infrastructure investment projects are Neom, the Red Sea Project, Qiddiya Entertainment City, King Abdullah Financial District and Amaala
- Strong and rising infrastructure sector in neighboring countries like Iraq, Kuwait and Qatar

MARKET OVERVIEW

GLOBAL TRENDS

- Global ductile iron pipes market reached USD 10.2 Bn in 2019 and is estimated to reach USD 14.9 Bn by 2028, registering a CAGR of 4.4% between 2020 and 2028
- DIP is commonly used for potable water transmission and distribution.
- DIP market has witnessed increasing investment across the globe due to overall rise in population and living standards
- Based on the product type, the main categories of the market include DN 80mm, DN 350mm-1000mm, DN 1100mm-1200mm, DN 1400mm-2000mm, and others. The market classification by end-user or application comprises of water supply and treatment pipe, mining, gas and oil supply, trenchless application, and others
- Global leading players in this market are Saint-Gobain, Kubota, Xinxing, US Pipe (Forterra), Jindal SAW, Tata Metaliks, Duktus GmbH among others.





SCALABILITY AND LOCALIZATION

Grade:

Low



High

- Low cost of construction, labor wages and utility fees to support low capital and operating expense for the investor and enable extending geographic footprint within the region
- Easy and consistent of key raw materials such as pig iron, scrap and magnesium through imports from neighboring countries with strong business and government relations

IMPORT DEPENDENCY

In 2019, KSA imported Ductile Iron Pipe valued at ~USD 37.1 Mn

Country	% of Saudi imports in 2019
China	20.6%
USA	11.5%
Japan	11.4%
Others	56.5%
Source: UN COMTR	'ADE

PRODUCTION VALUE CHAIN ANALYSIS

Melting

Steel scrap and pig iron are charged into an induction furnace to convert into molten

Pure magnesium added to molted iron

state

- **Spinning**
- Molten metal is poured into the spinning moulds by means of a pouring trough
- Uniform water circulation allowed

Heat treatment

The cast pipes are heat treated in an annealing furnace to optimize mechanical properties of the pipes

Zinc coating

- Ductile Iron pipes are given an external zinc coating for extra corrosion protection
- Prior to zinc coating, pipe surface is kept dry and free from rust

Cement mortar lining

- All Ductile Iron Pipes are given an internal cement mortar lining
- Mortar shall contain at least 1 part of cement to 3.5 parts of sand by mass

Warehousing / transporting

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- Pipes are stored in the warehouse and carefully packaged to avoid damage during shipment
- Pipes are loaded into containers and shipped

KEY STAKEHOLDERS















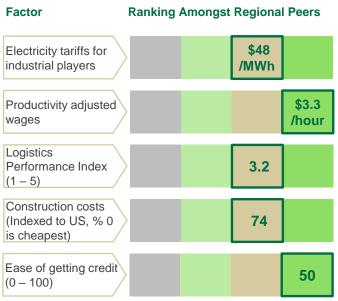
هيئة المحتوى المحلي والمشتريات الحكومية Local Content & Government Procurement Authority

ENABLING FACTORS

ENABLERS

- Up to 75% of project financing by Saudi Industrial Development Fund (SIDF)
- 2-year grace period for the repayment of loans
- Human Resources Development Fund (HRDF) provides 30%, 20% and 10% of Saudi nationals' salaries for their 1st, 2nd & 3rd years of work, respectively

COST OF DOING BUSINESS IN KSA



Top

75%

DEFINITIONS

#	SCORECARD SECTION	DEFINITIONS
1	Market size	Size of market in value/volume in KSA and/or Region (MENA/GCC) covering future projections based on available estimates from published /government sources
2	Demand drivers	A select number of factors that will influence future demand for the related product/service
3	Investment highlights	An overview of key financial metrics summarizing the investment opportunity along with the expected return based on the suggested investment size
4	Value proposition	Summary of key differentiators that position KSA as a strategic choice over other regional/global peers
5	Market readiness	An overview of KSA market structure, market maturity and level of participation by local and global players
6	Competitor analysis	List of the local & international players manufacturing the underlying product in Saudi Arabia and their market share
7	Global trends	Latest business developments within the sector/product category
8	Scalability and localization	Ease of scaling the business across the value chain or into new adjacent products or geographies that would maximize the opportunity's investment returns and the ability and potential to locally manufacture the product and its components
9	Import dependency	An overview of the countries from which Saudi Arabia is importing the product and their value/volume and share in total imports
10	Value chain analysis	The process or activities that would potentially need to be carried out to deliver the underlying product or service
11	Key stakeholders	Government institutions, organizations, and/or authorities that participate or influence the market for the underlying product/service
12	Enablers	Factors that enable investment in the underlying opportunity
13	Cost of doing business in KSA	Key factors that position KSA as a competitive destination for investment in the region. Productivity adjusted wages do not include cost of \$1.23/hour towards annual recurring charges including work permit, resident identity (iqama) and health insurance



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