

PROJECT PROFILE – SUMMARY SHEET

Project Introduction
1. Project title: Artificial stone production
2. Sector: Manufacture of other non-metallic mineral products (26) Sub sector: Manufacture of other non-metallic mineral products n.e.c (2699)
3. Products/Services: Artificial stone
4. Location: Free zone <input type="checkbox"/> Economic special zone <input type="checkbox"/> Industrial Estate <input checked="" type="checkbox"/> Main Land <input type="checkbox"/>
5. Project description: Dowreh Chegeni is one of the counties with significant capacities in different industrial, economic, cultural, historical and humanistic area. This town with diverse stone mines has the largest province building decorative stone mines and is one of the centers of decorative stone mines in Iran. It is more than 30 years that in this town industrial and constructive stones are extracted. This capability is the employment factor for many of job searching people. The main goal of this research is to establish artificial stone production unit to prevent from loss of investment and optimal use of the stone mines wastes in this town.
6. Annual capacity: 30000 t/year

Project Status	
7. Local / internal raw material access: 100 %	
8. Sale: Anticipated internal market: 100% Anticipated export market: 0 %	
9. Construction Period: 24 months	
Schedule	Beginning of activity: In-site beginning of activity: End of project: Commercial activity beginning:
10. Project Status:	
- Feasibility study available?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Required land provided?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Legal permissions (establishment license, foreign currency quota, environment, etc) taken?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Partnership agreement concluded with local/foreign investor?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Financing agreement concluded?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Agreement with local / foreign contractor(s) concluded?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Infrastructural utilities (electricity, water supply, telecommunication, fuel, road, etc) procured?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- List of know-how, machinery, equipment, as well as seller / builder companies defined?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
- Purchase agreement for machinery, equipments and technology concluded?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Financial Structure

11. Finance

Description	Local Currency Required			Foreign Currency Required Million Dollar	Total Million Dollar
	Million Rials	Rate	Equivalent in Million Dollar		
Fix Capital	214126.01	32500 Rials for each Dollar	6.58	0	6.58
Working Capital	11453.70		0.35	0	0.35
Total Investment	225579.71		6.93	0	6.93

- Value of foreign equipment/machinery: million dollar
- Value of local equipment/machinery: 1.69 million dollars
- Value of foreign technology: million dollar
- Value of local technology: million dollar

- Net Present Value (NPV): 231337.87 Million Rials for 10 Year, discount rate: 20%
- Internal Rate of Return (IRR): 39.89
- Payback Period (PP): 46.94%

General Information

12. Project Type: Establishment Expansion and completion

13. Company Profile:

-Name (legal /natural persons):

-Company Name:

-Address:

-Tel: Fax:

-E-mail: Web site:

- Sector: private sector public sector other

Please attach follow documents if available

- Pre-feasibility study
- Feasibility study
- Legal permissions (establishment license, foreign currency quota, environment, etc)

Foreign Investment Center of Lorestan Province
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Management and Planning Organization of Lorestan Province

Plan

Artificial stone production

Product's introduction

The main goal of this plan is to establish an artificial stone production factory in Lorestan province. The ISIC code of this product is 2699312319 of the group of producing non-metallic stone products (26) and subgroup of other stone non-metallic products which are not classified in other places (2699).

The artificial stone is imported and exported based on sub-chapter 6810 of the Iranian custom regulations entitled as objects made of cement, concrete or artificial stone even the strengthened samples.

The conditions under which this is permitted to be imported obtained from trade ministry and mines and industries ministry are to pay 15% import fees in 2016 (custom fee:4% and trading fee:11%).

Tariff	Tariff description
68109900	Other stone non-metallic, concrete or cement products which are not classified in other places
68101990	Other stone non-metallic, concrete or cement products in brick tablet or similar objects which are not classified in other places
68109110	Pre-constructed parts or cement or artificial stone for floor

The artificial stones are obtained from recombination of natural stones with additives with lower weights and more rapid usage. These stones are made of combination of cement, clays, waste stones aggregates and light soils. The materials used in these stones have quality based on environmental and human considerations. The iron oxide pigments provide these stones with particular color. The product obtained from this process is casted with natural designs and make their view more natural. In term of price, the artificial stones are cheaper than the natural stones since there is no difficult work on these stones which are necessary for natural stones to sell them in markets and they are of lower weight and thickness which allows us to use them 3 times more than natural stones. In addition to their structural strength, they can carry large loads in particular foundations.

Product's application

The antique stone is produced from putting together the broken parts, wastes and decorative stones wastes and sticking them to with mortar which are of decorative uses. This idea of producing the antique stones originates from the fact that designers and architects required stones with their considered factors for making the spaces more beautiful in outdoor and indoor places of building as well as floors and outdoor spacing. Besides, the construction industry advances and different tastes led to this need that stones with different designs and physical and mechanical high quality factors and suitable prices would be available.

Proposed places for plan

The place of implementing this plan based on infrastructural facilities and making use of industrial motivations is one of the industrial parks of Lorestan province. The closeness to stone mine wastes can reduce the production costs. Hence, in selecting the place of plan one has to consider the capacity and activity of the stone mines.

Raw, auxiliary and consuming materials

The main raw material required in this plan is the mineral wastes and accordingly, in order to reduce the costs, it would be better to establish the unit near the stone mines.

Annual cost (million rials)	Unit price (rials)	Consumption level/year	Scale	Raw, auxiliary and packing materials	No.
4,050	150,000	27,000	t	Stone	1
19,500	65,000,000	300	t	Resin	2
7,200	24,000,000	300	t	Silicate materials	3
10,800	90,000,000	120	t	Pigments	4
900	750,000	1,200	t	Lime	5
1,440	960,000	1,500	t	Cement	6
219	110	-	-	Packing	7
44,109					Total

Sales plan and target market

The factory sales prices are as follow which are the domestic markets due to lack of enough supply and high demand level in Iran.

Sales price

Annual sales (million rials)	Unit price (rials)	Capacity (t)	Description	No.
231,000	7,700,000	30,000	Artificial stone	1
231,000		30,000	Total	

Nominal and practical capacities

Studying and investigating different units as well as economic plan study confirm that the optimal production capacity is about 30000m³ annually. Considering the unpredictable factors such as work stop and repair and maintenance, the efficiency of this unit is 90% which is set to be 270000 m³ annually.

Production procedure and technology used

The artificial stone production system is to compressing under the vacuum conditions and pressing and vibrating which allow forming the mixture dry combination and changing it to the combined high quality stone. The artificial stone can be changed directly to slabs with different dimensions and thicknesses or can be cut in different blocks which are of different thicknesses.

The plan investment costs

The fixed plan investment cost is estimated as 214.126 million Rials and the working capital is lower than 11453 billion Rials.

%	Total (million rials)	Required				Description
		Total required (million rials)	Rial (million rials)	Rial equivalence	Currency	
9%	21,000	21,000	21,000	0	0	Land
3%	5,664	5,664	5,664	0	0	Landscaping
47%	108,808	108,808	108,808	0	0	Building
24%	55,000	55,000	55,000	0	0	Machineries
6%	10,165	10,165	10,165	0	0	Installations
0%	0	0	0	0	0	Laboratory equipment
0%	400	400	400	0	0	Vehicles
0%	87	87	87	0	0	Workshop equipment
0%	353	353	353	0	0	Service and administrative equipment
4%	10,074	10,074	10,074	0	0	Unexpected and miscellaneous

Plan summary

%	Total (million rials)	Required				Description
		Total required (million rials)	Rial (million rials)	Rial equivalenc e	Currency	
93%	211,550.6 7	211,550.6 7	211,550.6 7	0	0	Total fixed assets
2%	2,575.34	2,575.34	2,575.34	0	0	Pre- exploitation costs
95%	214,126.0 1	214,126.0 1	214,126.0 1	0	0	Fixed investment costs
5%	11,453.70	11,453.70	11,453.70	0	0	Working capital
0%	0	0	0	0	0	Other assets
100 %	225,579.7 1	225,579.7 1	225,579.7 1	0	0	Total plan investment costs

The plan production costs

The annual production costs are estimated to be 96.5 billion Rials.

Costs (million rials)	Description	No.
44,109	Consumer materials and packing	1
13,530	Production salary and wage	2
10,391	Water, electricity, fuel and communication	3
375	Insurance	4
5,630	Repair and maintenance	5
4,620	Marketing and ads	6
3,702	Production unpredicted and miscellaneous	7
14,145	Depreciation	8
96,502		Total

Economic indices

Value-measurement scale	Description
231337.87 million rials	NPV
39.89%	IRR
2.13 years	PBP