

NANOMETAL STEEL PLANT PROJECT

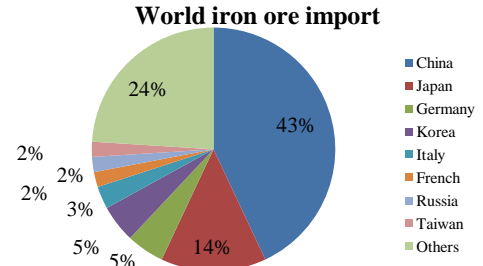
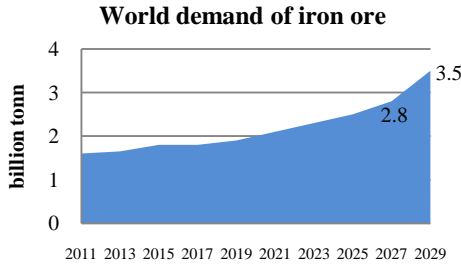
Investment highlights	✓ The company as Project leader	The Nanometal LLC, a newly established local company privately owned by Mrs. S. Baasantseren at 100%, is conducting the project		
		The Nanometal’s head office is located at Central palace of Culture, G13 floor, Amar street, SBD 14200 Ulaanbaatar, Mongolia.		
	✓ Sector and Industry overview	World iron ore demand is increasing		
		Neighboring with China 46% importer of world iron ore import		
		One of the fastest growing emerging economy, experienced economic growth with double digit last several years		
		Steel consumption in Mongolia has grown 3 times since 2010		
		Importing more than 60% of steel consumption		
		Steel consumption demand is expected to surge on back of building mega projects such as Oyu-tolgoi, Tavantolgoi, Cement factories, Industry parks and infrastructures		
		Very few domestic competitors		
		Supported by strategic policy of Mongolian government		
	✓ Project overview	Located in the Darkhan city, Mongolia which is the region dedicated to develop heavy industry by Government of Mongolia and having well-developed infrastructure region		
		Producing 3 key steel products including steel ball, rebar and billet		
	Having capacity of 150.000 tn per year			
	Using Nano mill technology			
	Daehansteel LLC, Korea as strategic investor			
	Posco E&C , Korea as construction investor			
	Technology provider – Danieli group Italy “EAF based steel making plant”			
	Posco E&C as Project EPC contractor			
	HWC SWISS AG as Project management advisor			
	Supported by Government			
✓ Financial overview	By 2025, project term	Annual average	In Total	
	Total revenue	145.4million \$	1.6 billion \$	
	Total expenses	95.4million \$	1.05 billion \$	
	EBITDA	49.1million \$	0.54 billion \$	
	EBITDA margin	34.1%	34.1%	
	Net income	27.3million \$	0.3 billion \$	
	Net income margin	20.3%	20.3%	
✓ Investment overview	Total investment	129.7 million \$		
	Equity funding	52.3 million \$		
	Debt Funding	77.4 million \$		
	NPV	99.1 million \$		
	IRR	25.8 %		
	Payback Period	3.68 years		

Company overview

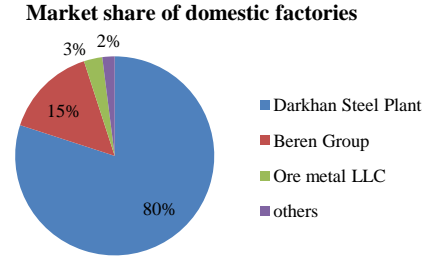
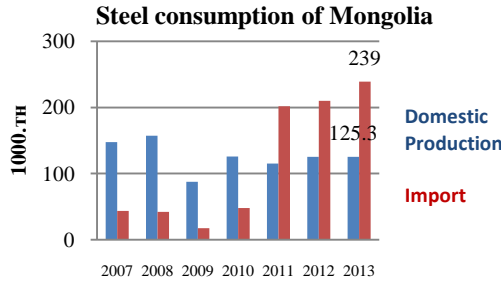
The Project is foreseen by the company Nanometal LLC, a newly established company privately owned by Mrs. S. Baasantseren at 100%.

The business purpose of Nanometalis to produce various types of steel products, and to import scrap metal and HBI to the domestic Mongolian market. Nanometal’s head office is located at Central palace of Culture, G13 floor, Amar street, SBD 14200 Ulaanbaatar, Mongolia.

Sector and industry overview



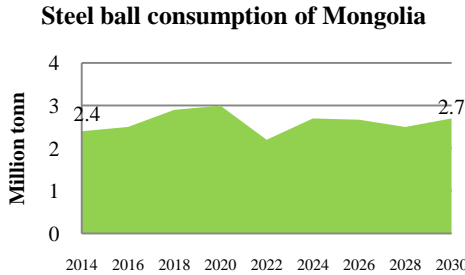
Source: World iron ore forum, 2012



Source: NSO

Last few years, Mongolia has imported more than 60% of total steel consumption.

Darkhan steel plants is only main steel producer and Beren group is building the factory producing 100,000 ton/year in Erdenet city, Mongolia



Source: Glogex LLC

Historic economic data and projections by IMF

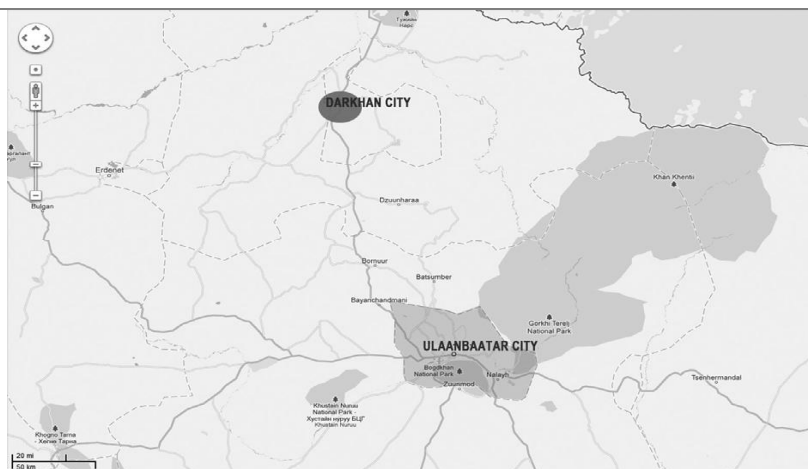
	2011	2012	2013	2014	2015	2016	2017
GDP growth rate, constant prices	17.3%	17.2%	11.8%	12.2%	4.5%	14.0%	9.1%
Gross domestic product at current prices - in bn. USD	8.51	10.92	14.63	18.03	20.86	25.47	29.55
Gross domestic product per capita at current prices in USD	3,042	3,848	5,080	6,165	7,028	8,456	9,667
Total investment - Share of GDP	70%	64%	48%	42%	37%	35%	35%
Inflation, average consumer prices	9.5%	13.6%	12.5%	9.7%	8.2%	7.6%	7.0%

Projected demand scenarios for Mongolian steel consumption by IMF

	2013	2014	2015	2016	2017
Projection based on minimum specific consumption - K ton	216	266	307	375	435
Projection based on maximum specific consumption - K ton	488	601	695	849	985
Projection based on average specific consumption - K ton	364	448	519	633	735

Project introduction

Location	Located in the Darkhan city, Mongolia which is the region dedicated to develop heavy industry by Government of Mongolia and having well-developed infrastructure region
Production	Steel ball, Rebar, Billet
Capacity	150,000 ton/per year
Technology	Nano mill, no negative effects for environment
Total employees	407 employees
Target market	Mining companies especially Oyu-tolgoi LLC, construction companies and cement plants
Raw material	Scrap would be imported from Russia in short term and then use domestic iron ores. The final products will be from primary iron ore therefore product quality should have meet requirements of international standards.
Infrastructure	Well-developed railway, highway,
Advantage	Compact size, high efficient, lower consumption electricity and water, less environmental impact.
EPC contractor	Posco E & C
Strategic Supporters	Government of Mongolia, Local government of Darkhan province


Financial snapshot

INVESTMENT /million US\$	
Machinery & equipment	66.7
Civil works	37.4
Other investment cost	17.5
Mobile equipment	0.5
Fixed Investment	122.1
Interest during construction and fees	2.8
Initial working capital	4.7
Total Investment	129.7
Equity financing	52.3
Debt financing	77.4

	2015	2016	2017	2018	2019
Revenue(US\$ K)	-	75 710	157 025	162 889	161 730
COGS(US\$ K)	(543)	(48 034)	(99 563)	(103 729)	(103 469)
Gross margin (US\$ K)	(543)	27 676	57 462	59 160	58 260
Margin %		36.5%	36.6%	36.3%	36%
SG&A (US\$ K)	(496)	(1 349)	(2 412)	(2 444)	(2 364)
EBITDA(US\$ K)	(1 039)	26 327	55 050	56 716	55 896
EBITDA %		34.8%	35%	34.8%	34.6%
Net income (US\$ K)	(12 804)	9 784	31 320	32 571	32 796

Debt Ratios and Covenants	2015	2016	2017	2018	2019
Current Ratio		12,6x	21,4x	30,8x	36,5x
EBITDA margin		0,3x	0,4x	0,3x	0,3x
Total Debt/EBITDA		2,9x	1,4x	1,1x	0,7x
Total Debt / Equity	1,5x	1,5x	1,5x	1,2x	0,7x
Senior Annual DCSR	-0,54x	4,43x	10,79x	3,24x	1,92x

Financial

Return on Assets (ROA)	8%	19%	18%	17%
Return on Equity (ROE)	19%	60%	62%	63%
Profit Margin	13%	20%	20%	20%

DCF Valuation

	Estimated	Min	Average	Max
WACC	10,62%	12%	11%	10%
NPV (US\$ K)	99 087,74	84 678 \$	99 088 \$	106 149 \$
IRR	25,8%	25,8%	25,8%	25,8%
Payback Period	3,68 year	3,68 year	3,68 year	3,68 year

Price sensitive analysis and DCF valuation

<i>Price</i>	<i>Price, US\$</i>	<i>WACC</i>	<i>NPV /million US\$/</i>	<i>IRR</i>	<i>Payback Period</i>
+30		10,62%	282.7	47,8%	2,31 year
+20		10,62%	221.5	40,9%	2,61 year
+10		10,62%	160.3	33,7%	3,03 year
0	planned	10,62%	99.9	25.8%	3.68
-10		10,62%	37.9	17%	4,81 year
-20		10,62%	(24)	6,1%	7,37 year
-30		10,62%	(92.2)	(12,7%)	-

Management team	<ul style="list-style-type: none"> ✓ S.Baasantseren – CEO, Nanometal LLC graduated from university of Irkutsk in Russia and institute of finance and economics in Mongolia ✓ B.Tserennadmid – CTO, Nanometal LLC ✓ B.Enkhbat – CFO, Nanometal LLC
Project management	<ul style="list-style-type: none"> ✓ Project leader – Nanometal LLC, executive director S.Baasantseren ✓ Project investor and strategic investor - Daehansteel LLC, Korea and Posco E&C construction investor. ✓ Project technical advisor - Danieli group, Italy ✓ Project EPC contractor – Posco E&C ✓ Project management advisor - HWC SWISS AG <p>Other participants – Ministry of Industry, Mongolian construction companies</p>
Contact Address	<p>Invest Mongolia Agency</p> <p>Name : Mrs. Onon Khanoi Position/department : Senior Officer/ Division for Promotion and Consultancy Services Phone : (976)-11320706; (976)-88090959 Email : onon@investmongolia.com</p> <p>Development Bank of Mongolia</p> <p>Name : Mr. Enkhbayar Davaatseren Position/department : Head of strategic investment and asset allocation Phone : (976)-99007069 Email : d.enkhbayar@dbm.mn</p>