Production of High-Quality Pharmaceutical Glass Packaging

Investment Project v 2.4

February 2014
Dear Sirs,

we are bringing to your attention an opportunity to invest in equity of a project company Voronezhmedsteklo, which will be set up to organize first in Russia and CIS full-cycle production of high-quality pharmaceutical glass packaging, i.e. production of borosilicate 1st hydrolytic class (hereafter 1 HC) tubular glass and subsequent manufacturing of medical glass products (ampoules, vials, cartridges) out of it.

This investment project is aimed at substitution of expensive imported products, the price of which besides higher production costs includes losses due to breakage during transportation (25%) and customs duty (15%). It is expected that Russia’s consumption of high-quality 1 HC tubular glass products will increase several times in the next 3-5 years due to introduction of mandatory compliance with GMP standards for pharmaceutical producers starting from 2014 as well as due to strategic state program supporting domestic pharmaceutical producers “Pharma-2020”.

Estimated required project financing is 3.3 billion rubles. The project assumes installation of two furnaces to produce borosilicate tubular glass with aggregated capacity of 17,500 tons p.a. It is planned to complete the project in 2 stages: 1st stage – construction of plant buildings and the 1st furnace with respective equipment (capex of 2.0 billion rubles), 2nd stage – installation of the 2nd furnace with respective equipment (capex of 1.0 billion rubles), operating costs during investment period are estimated at 0.3 billion rubles.

The project initiators intend to take 2.3 billion rubles bank loan and attract 1.0 billion rubles equity investment in order to finance both project stages.

This document shortly presents key project information. A more detailed Investment Memorandum with description of Russian medical tubular glass market, project details and financial forecasts (including financial model in Excel) will be provided on request.

If You are interested in this opportunity, please, contact the financial advisor of the project initiators by the contacts listed below. We suggest to organize an introduction meeting with the project initiators to present the project and discuss further questions.

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Investment Project: Production of Tubular Glass for Pharmaceutical Purposes
## Key Investment Considerations

**Attractive market niche (import substitution) with high growth potential**
- Currently there are no producers of high-quality 1st hydrolytic class (1st HC) medical glass packaging with full production cycle, i.e. producing both tubular glass and respective products out of it, in Russia and CIS
- Demand for 1st HC medical glass is currently satisfied by imported products, the price of which besides higher production costs includes losses due to breakage during transportation (25%), customs duty (15%) and logistics expenses
- Demand for high-quality medical glass packaging will increase several times during the next 3-5 years due to planned mandatory adoption of GMP standards by pharmaceutical producers starting from 2014 and due to state program of domestic pharmaceutical industry development “Pharma - 2020”

**Strong support of the project by the state and regional government**
- **On the federal level**: this project is aimed at substitution of import, is in the framework of state strategy to develop highly technological domestic production and is essential to fulfillment of the state program to support domestic pharmaceutical manufacturers (Pharma – 2020)
- **On the regional level**: Government of the Voronezh region is interested in location of the future production in industrial park “Maslovsky” and is ready to provide a land plot for rent, free connection to electricity and gas networks as well as tax benefits. Total cost of resources provided by government is estimated at 0.5 billion rubles.

**Unique modern production facilities**
- Furnaces for production of glass will be constructed by Horn Glass Industries AG, which is a main industrial supplier of the leading global borosilicate glass producer Schott AG. Similar level production facilities are non-existent in Russia and CIS
- The furnaces structure will be based on high-quality refractory blocks made of zirconium dioxide; glass melting process will be controlled automatically by electronic systems
- Location at the selected site in Voronezh region will provide access to energy resources as well as convenient logistics with major consumers (producers of medicines packaged in ampoules and vials) and suppliers (main raw material is quartz sand)

**Motivated and experienced project initiators**
- Management and development of business in the area of pharmaceutical cardboard packaging for more than 10 years, obvious synergies with production of medical glass packaging
- Established personal relationships with management of pharmaceutical producers, who are potential buyers of the medical glass packaging (ampoules, vials)

**Large industry player, high expected profitability**
- It is expected that already in the 4th year from the project start revenue will reach 2.5 billion rubles with 64% market share in the segment of 1st HC medical glass (in volume terms)
- Expected average gross margin during 10-year forecast period is 59%, EBITDA margin – 56%, net profit margin – 36%
- Potential Enterprise Value is estimated at 9 billion rubles as of end of the 4th year

**Excellent exit prospects (3-5 years horizon)**
- **Sale to PE fund**: a number of Russian and foreign Private Equity funds might be interested in buy-out of a large industry player with high profitability indicators and unique for Russia modern production facilities. Potential candidates include 3i, Apax Partners, New Enterprise Associates, Capital International, etc.
- **Sale to strategic investor**: leading European producers (Schott AG, Gerresheimer AG) will be interested in acquisition of a large Russian competitor manufacturing products of comparable quality
Russian Pharmaceutical Market

- Consumption of medical glass packaging is directly related to development of the pharmaceutical market, which will be strongly influenced by the realization of the state Strategy on development of Russian pharmaceutical industry for the period till 2020 (Pharma-2020) in the short and medium term.
- According to Pharma-2020, the pharmaceutical market should reach 400-500 billion rubles by 2011 and in 2020 it should reach 1-1.5 trillion rubles, i.e. more than triple.
- Major growth drivers for the pharmaceutical market besides Pharma-2020 in the next 10 years will be the following:
  1. Development of the additional pharmaceutical support (DLO) program
  2. Introduction of voluntary pharmaceutical insurance
  3. Modernization of the hospitals’ pharmaceutical supply system
  4. Increase of pharmaceutical consumption per capita

Retail sales of domestically produced medicines, in billion units (packs)

Source: Pharmexpert

Russian pharmaceutical market dynamics 2004-2020F, billion rubles, in consumer prices including VAT

Source: State strategy on development of the Russian pharmaceutical industry for the period till 2020, as of October 2009

Structure of the Russian pharmaceutical market in 2009, in USD million

Source: Pharmexpert

* LLO – medicines provision on benefit basis
The purpose of the state policy, described in Strategy on development of Russian pharmaceutical industry for the period till 2020, is to increase the share of domestic pharmaceutical producers to 25% by 2015 and to 50% by 2020.

Government approved a list of 57 strategically important medicines (to cure oncologic and cardiovascular diseases, hepatitis B and C, Gaucher’s disease, multiple sclerosis), production of which should be launched on the territory of Russian Federation by 2015. 31 out of this medicines (54%) are packaged in medical glass.

The program assumes financing in the amount of 177 620 million rubles (in prices of February 2009) for the period of 2009-2020, part of which will be provided by the state as well as by Russian venture company, Rusnano, and VEB.

Among others, 36 billion rubles will be spent on support of GMP standards adoption, which will lead to tougher requirement toward medical glass packaging.

The Russian pharmaceutical industry will drastically toughen its requirements to glass packaging in the nearest future. New medicines more often require packaging out of the 1st hydrolytic class, which is currently not produced in Russia.

Thus, development of the pharmaceutical industry in the framework of the approved state strategy will lead to:

1. Overall increase of the potentially available market of medical glass packaging due to increase of domestic pharmaceutical production;

2. Significant increase of the share of 1st hydrolytic class packaging due to enforcement of mandatory compliance of the Russian pharmaceutical industry with GMP standards starting from 2014.

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**Market shares of domestic and foreign producers in 2007 and as planned by the Strategy in 2020**

Source: State strategy on development of the Russian pharmaceutical industry for the period till 2020, as of October 2009

**Structure of Pharma-2020 financing funds by use**

Source: State strategy on development of the Russian pharmaceutical industry for the period till 2020, as of October 2009
Market of Medical 1st and 2nd HC Glass Packaging

There is no reliable statistics on the market of medical tubular glass and ampoules (because of the mistakes in the Federal State Statistics Service’s data on medical tubular glass and because of the lack of statistics data on ampoules)

Experts of the pharmaceutical market estimate total annual consumption of imported and domestically produced medicines packaged in ampoules and vials at 6 billion units with the share of local producers about 80%

This estimate in units is equivalent to 34.2 thousand tons assuming average weight of an ampoule at 4 grams and a vial – at 14 grams

Currently about 25% of the ampoules and vials market (8-9 thousand tons) belongs to the domestic producer Tuimazysteklo. The quality of glass produced by Tuimazysteklo correspond to 2nd hydrolytic class and thus it is 1.5-2 less expensive compared to 1st HC glass.

Currently, the share of 1st HC medical glass accounts for 15% of the ampoules and vials market. The market value given the current market structure in terms of volume is estimated at 4.0 billion rubles (~$140 million)

It is expected that share of 1HC glass will increase to at least 70% after enforcement of mandatory GMP compliance in 2014, which will result in increase of the total market value to 5.6 billion rubles (~$200 million)

It is worth noting that currently 1st HC medical glass is not produced in Russia. The project of Voronezhmedsteklo is aimed mainly at substitution of imported products due to offering of high quality medical glass packaging at the price lower than import and convenient logistics

Market share of Voronezhmedsteklo in the 4th year from the project start is expected to be 64% of the 1st HC segment and 45% of the total vials and ampoules market (1st and 2nd HC)

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Investment Project: Production of Tubular Glass for Pharmaceutical Purposes
Project Timeline

- The project assumes installation of 2 furnaces to produce borosilicate tubular glass with aggregated capacity of 17,500 tons p.a.
- It is planned to complete the project in 2 stages: 1 stage – construction of plant buildings and the 1st furnace with respective equipment (capex of 2.0 billion rubles), 2nd stage – installation of the 2nd furnace with respective equipment (capex of 1.0 billion rubles), current investment costs are estimated at 0.3 billion rubles.
- According to HORN Glass Industries AG, it will take 24 months to manufacture and install a furnace starting from the receipt of contracted 30% advance payment.
- Thus, launch of production at the first furnace will take place in 24 months from start of financing, of the second furnace- in 36 months.

- It is planned to maximally save on construction of buildings by using modern fast-building technologies. Temporary roads, paved at first, will be later reconstructed into fundamental.
- The project costs will be adjusted at least 7 times in the period of its realization in order to decrease total costs.

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Investment Project: Production of Tubular Glass for Pharmaceutical Purposes
## Projected Profit and Loss Statement

### Voronezhmedsteklo

**Projected Profit and Loss Statement**

*In '000 rubles*

<table>
<thead>
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<th></th>
<th>1 year</th>
<th>2 year</th>
<th>3 year</th>
<th>4 year</th>
<th>5 year</th>
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<td><strong>Revenue</strong></td>
<td>--</td>
<td>--</td>
<td>1 347 305</td>
<td>2 546 856</td>
<td>2 979 822</td>
<td>3 486 392</td>
<td>3 346 936</td>
<td>3 633 982</td>
<td>4 113 175</td>
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<td><strong>Growth, %</strong></td>
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<td>89%</td>
<td>17%</td>
<td>17%</td>
<td>(4%)</td>
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<td><strong>COGS</strong></td>
<td>(21 060)</td>
<td>(110 954)</td>
<td>(633 911)</td>
<td>(1 087 878)</td>
<td>(1 187 705)</td>
<td>(1 300 611)</td>
<td>(1 381 357)</td>
<td>(1 482 619)</td>
<td>(1 609 378)</td>
<td>(1 703 914)</td>
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<td><strong>Gross profit</strong></td>
<td>(21 060)</td>
<td>(110 954)</td>
<td>713 395</td>
<td>1 458 978</td>
<td>1 792 117</td>
<td>2 185 780</td>
<td>1 965 579</td>
<td>2 151 364</td>
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<td><strong>Sales expenses</strong></td>
<td>(1 925)</td>
<td>(3 950)</td>
<td>(71 828)</td>
<td>(132 341)</td>
<td>(154 490)</td>
<td>(180 368)</td>
<td>(173 940)</td>
<td>(188 819)</td>
<td>(213 277)</td>
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<tr>
<td><strong>% of revenue</strong></td>
<td>(10 111)</td>
<td>(25 524)</td>
<td>(79 311)</td>
<td>(85 229)</td>
<td>(90 751)</td>
<td>(96 827)</td>
<td>(102 841)</td>
<td>(108 668)</td>
<td>(114 175)</td>
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<td><strong>Administrative expenses</strong></td>
<td>-</td>
<td>-</td>
<td>(6%)</td>
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<tr>
<td><strong>EBITDA</strong></td>
<td>(33 096)</td>
<td>(140 428)</td>
<td>684 122</td>
<td>1 419 990</td>
<td>1 725 458</td>
<td>2 087 167</td>
<td>1 867 380</td>
<td>2 032 458</td>
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<td><strong>Depreciation</strong></td>
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<td>(121 867)</td>
<td>(178 582)</td>
<td>(178 582)</td>
<td>(178 582)</td>
<td>(178 582)</td>
<td>(178 582)</td>
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<tr>
<td><strong>EBIT</strong></td>
<td>(33 096)</td>
<td>(140 428)</td>
<td>562 255</td>
<td>1 241 408</td>
<td>1 546 876</td>
<td>1 908 586</td>
<td>1 688 798</td>
<td>1 853 876</td>
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<tr>
<td><strong>Other income/expenses</strong></td>
<td>--</td>
<td>--</td>
<td>(51 343)</td>
<td>(49 177)</td>
<td>(46 031)</td>
<td>(44 528)</td>
<td>(44 804)</td>
<td>(43 599)</td>
<td>(40 586)</td>
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<td><strong>Interest expenses</strong></td>
<td>--</td>
<td>(120 000)</td>
<td>(276 000)</td>
<td>(276 000)</td>
<td>(156 000)</td>
<td>(36 000)</td>
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<tr>
<td><strong>Profit before taxes</strong></td>
<td>(33 096)</td>
<td>(260 428)</td>
<td>286 255</td>
<td>914 065</td>
<td>1 341 699</td>
<td>1 826 555</td>
<td>1 644 270</td>
<td>1 809 072</td>
<td>2 132 746</td>
<td>2 230 173</td>
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<td><strong>Income tax</strong></td>
<td>--</td>
<td>--</td>
<td>(40 076)</td>
<td>(141 283)</td>
<td>(268 340)</td>
<td>(365 311)</td>
<td>(328 854)</td>
<td>(361 814)</td>
<td>(426 549)</td>
<td>(446 035)</td>
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<td><strong>Net income/loss</strong></td>
<td>(33 096)</td>
<td>(260 428)</td>
<td>246 179</td>
<td>772 782</td>
<td>1 073 359</td>
<td>1 461 244</td>
<td>1 315 416</td>
<td>1 447 258</td>
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<td>1 784 138</td>
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### Investment Project: Production of Tubular Glass for Pharmaceutical Purposes
Brief summary

1. Implementation of this project will allow to solve the problem of supply of the Russian pharmaceutical market glass of the first hydrolytic class due to the appearance of Russian producers.
2. The investor of the project is JSC «International potash company».
3. The project is supported by Ministry of industry and trade of Russia, Ministry of health of the Republic of Belarus, Association of Russian pharmaceutical Manufacturers
4. Project crediting is ready to undertake the Sberbank of Russia.
4. The plant will be picked and delivered «turn key» under a single contract with the direct participation of Hornglass ind. Ag as a General supplier.
5. Compliance of the quality of the glass of the first hydrolytic class ISO 3585 type 3.3 - will be the main result of the project.