Technical and operational performance

<table>
<thead>
<tr>
<th>No</th>
<th>BRAND</th>
<th>Productivity t/h</th>
<th>kW drive performance</th>
<th>Specific performance t/m³ h</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>VM-400</td>
<td>2,2</td>
<td>11</td>
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</tr>
<tr>
<td>2</td>
<td>MAPP-900-900</td>
<td>0,4</td>
<td>18,5</td>
<td>6,85 4 68,50 50 342,5 0,6</td>
</tr>
<tr>
<td>3</td>
<td>PSMM</td>
<td>1,0</td>
<td>36,4</td>
<td>13,47 10 20 269,4 5,6</td>
</tr>
<tr>
<td>4</td>
<td>Palla 3SU</td>
<td>1,4</td>
<td>10,5</td>
<td>3,89 14 38,90 14,3 55,63 7,9</td>
</tr>
</tbody>
</table>

The results of the calculations are summarized in the tables. These are real technical and economic parameters of traditional mills and new vibration mill VM-400, offered for comparison, the dimensionless value of the individual indicators and general indicators of each machine derived from calculations in two ways DI and DII.

The degree of significance indicators

<table>
<thead>
<tr>
<th>No</th>
<th>BRAND</th>
<th>Productivity t/h</th>
<th>kW drive performance</th>
<th>Weight tons</th>
<th>Volume occupying machine</th>
<th>Specific performance t/m³ h</th>
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<tr>
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<td>1,92 10,5</td>
<td>10 16 0,6</td>
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</tr>
</tbody>
</table>

COST STRUCTURE AND FINANCIAL INDICATORS

- Marketing, 15%
- Logistics, 17%
- Manufacturing, 60%
- Other cost, 8%
Developers

GRYGORII KALETNIK – Dr. of Economics, Prof., Academician, President of VNAU, Accelerator

INNA HONCHARUK – Ph. D of economics, assoc. prof., responsible executor

OLENA SOLOMA - Ph.D., Associate Professor, VNAU, Project Manager

IGOR KUCHUK - Ph. D of Engineering, Assoc. Prof.

CONCEPT OF OUR SUCCESSFUL STARTUP:

The idea of the project is to create highly effective vibratory mills of continuous action for the implementation of the process of highly-performance grinding of loose raw materials in the conditions of its mechanoaetivation. This processing technology will give the possibility to create a number of new products for the consumer.

Vibrating grinding is one of the most effective methods of changing the structure of raw materials due to its mechanoaetivation. This phenomenon is characterized by a significant increase in the dispersion of the treated material and promotes the generation of more soluble polymorphic modifications.

A series of experimental models of vibration mills of different technological directions are developed: a gyroratory mill, a toroidal mill, an angular vibration mill and a two-container mill. It can be used in agrarian sector of economy, food, pharmaceutical, chemical and construction industries, etc.

Strategy of the startup: formation of industrial clusters for the development and production of enterprise models; creation of marketing systems for commercialization of the scientific development and the network services of a series of vibration mills.

This brochure gives You an idea of what the VIBRO Mill actually is as well as demonstrates the technical level of a NEW Continuously Vibration Mill compared to existing mills

The aim of the VIBRO Mill Team is to attract as many people as possible to support young people, introduction of innovative ideas of Ukrainian scientists, realization of startup projects and implementation of a series of universal vibration mills at industries around the world.

THE DEVELOPED VIBRATION MILL WILL ENABLE TO PROVIDE FINE GRINDING FOR:
- plant raw material in the production of high-efficiency pellets;
- phyto-raw materials in the production of homeopathic medicine;
- glauconite in the production of entero- and immunosorbent powder, that is characterized by radio-sorbent properties;
- minerals in the production of high-efficiency premixes;
- limestone in the production of environmentally friendly building blocks.

How does it works? (Functional Principle)

UNIVERSAL VIBRATORY MILL

BASIC OUTLINE OF THE MILL:
1- reloading gutter; 2 - conveying trough; 3 - unloading grille; 4 - grinding chamber; 5 - loading movement trajectory; 6 - transition trough.

VIBRO MILL TIMELINE

The idea of creation 1998
Scientific substantiation, registration of patents 2006
American agribusiness company wants to buy a vibro mill 2012
Victory at the festival of innovations 2014
Production customization 2016
Conquering the market 2019

POTENTIAL POSSIBILITIES:
2. Uses less electricity.
3. Doesn’t require expensive maintenance.
4. High efficiency.
5. High technological capabilities.