

Regarding: Machinery and equipment for preparing glaze

as part of the project entitled:

Sub-measure 3.2.1 “Research to the Market”

3rd Priority Axis: “Supporting Innovation in Enterprises”

Smart Development Operational Programme for 2014 – 2020

The request for proposals concerns:

- Two mills of capacity 5000 litres
- One mill of capacity 2000 litres
- Two mobile vibration screens with a membrane pump
- Eight blade mixers
- Two fixed vibration screens
- Two magnetic separators

The main devices in the process line used for preparing glaze are ball–cyclic mills, whose internal walls are lined with profiles in the form of Alubit bricks. The machines are intended for wet glaze milling.

Mill components:

- Cylinder made of a thick steel sheet
- Cylinder support bearing
- Access door used to load the material and inspect the inside of the mill
- Discharge valve
- Internal lining – thickness at least 38.1 mm.
- Motor (engine, fluid coupling, reducer – fitting on “hinges”, allowing variable belt tension adjustment). Two pulleys are wedged on the free shaft of the reducer, one on the left and one of the right, and transfer movement directly to the cylinder through the v-belt.
- Brake system
- Control cabinet with a control panel and operation time counter. Two operation modes: manual and automatic.

The inside of the mill is shown in the attachment called Mill MTD.

Standard equipment:

- **Mobile vibration screens with a membrane pump (2")**
used for screening and transporting glaze. Stainless steel structure and trolley, pump drive pressure regulator.
- **Blade mixers** with an engine and reducer, stainless steel blade mixer,
Mixer speed 16 rpm.
Installed capacity 3kW
Control cabinet

The layout of mill attachments is presented in the file entitled BLADE STIRRER

- **Fixed vibration screens** of diameter 900 mm. Made of stainless steel.
- **Magnetic separators** with permanent magnets
Magnetic field value on rods (12.000 Gauss).
- **Grinding media:**

KORUND technical parameters:

- density	3.6 kg/dm ³
- alumina content	92 %
- Mohs hardness	9
- water absorption	< 0.1 %
- deep abrasion resistance, measured with Taber abrasion tester	< 13 mm ³

Grinding media quantity:

Mill of capacity 2000 litres:

Grinding media in (kg)	Size of grinding media in (inches)
500	1¾"
500	1½"
500	1¼"
500	1"

Mill of capacity 5000 litres:

Grinding media in (kg)	Size of grinding media in (inches)
1000	2"
900	1¾"
900	1½"

900	1¼"
900	1"

Information requested from the supplier: energy consumption, compressed air pressure, consumption.

The machines are equipped with mechanical and electrical safety devices to protect staff and the device itself.

Instruction manuals, technical documentation, list of spare parts in Polish.

Transport - packaging suitable for road transport.

ALUMINA GRINDING MEDIA technical requirements

- specific weight	3.6	kg/dm ³
- alumina content	92	%
- Mohs' hardness	9	
- water absorption	< 0,1	%
- deep abrasion resistance, measured with Taber abrasion tester mm ³	< 13	