



**LV INTERNATIONAL CO., LTD.**

**QUESTIONNAIRE**

**FOR**

**VERTICAL CEMENT/SLAG MILLS**

Date	:	
Customer Name	:	
Address	:	
Contact Person	:	

**LV International Company Limited**

No. 9/148 14th Floor UM Tower, Ramkhamhaeng Road, Suanluang, Suanluang, Bangkok 10250. Thailand  
Tel: +66-2-3183244-5

No.	Question	Unit	Answer
	<p><b><u>PLANT SITE AND KILN</u></b></p> <p>+ Altitude, meter above sea level            + Kiln capacity aver.            + No. of stage of SP            + Kiln exhaust gas temperature            + Type of cooler            + Operation days per year</p>	<p>m            t/d            -            °C            -            d/y</p>	
1	<p><b><u>TYPE OF MILL</u></b></p> <p>+ Name of original mill supplier            + Mill size            + Mill table diameter            + No. of rollers            + Roller diameter x width            + Mill external circulation system            + Dam Ring Height</p>	<p>mm            -            mm            yes / no            mm</p>	
2	<p><b><u>YEAR OF INSTALLATION</u></b></p>		
3.	<p><b><u>CAPACITY IN TPH</u></b></p> <p>+ Present production and fineness</p> <p>+ Production guaranteed by supplier and fineness</p> <p>+ Average production (last 12 months) and fineness</p> <p>+ Max production (last 12 months) and fineness (after exchanging rollers to new one)</p> <p>+ Min. production (last 12 months) and fineness (before exchanging worn-out rollers to new one)</p>	<p>t/h (Dry)            Blaine 45μ            %</p> <p>t/h (Dry)            Blaine 45μ            %</p> <p>t/h (Dry)            Blaine 45μ            %</p> <p>t/h (Dry)            Blaine 45μ            %</p> <p>t/h (Dry)            Blaine 45μ            %</p>	
4	<p><b><u>MILL MOTOR DETAILS</u></b></p> <p>+ Mill motor power installed. (name plate)</p> <p>+ Actual mill motor power consumption (avg)</p>	<p>kW</p> <p>kW</p>	

No.	Question	Unit	Answer
5	<p><b><u>MILL IDF DETAIL</u></b></p> <ul style="list-style-type: none"> <li>+ Fan motor power installed (name plate)</li> <li>+ Fan gas flow design</li> <li>+ Fan pressure design</li> <li>+ Actual fan motor power consumption</li> <li>+ Actual gas flow at fan inlet</li> <li>+ Actual pressure at fan inlet</li> <li>+ Speed Range</li> <li>+ Fan speed variable</li> <li>+ Recirculated gas flow</li> </ul>	<ul style="list-style-type: none"> <li>kW</li> <li>Am<sup>3</sup>/h</li> <li>Mbar</li> <li>KW</li> <li>Am<sup>3</sup>/h</li> <li>Mbar</li> <li>RPM</li> <li>yes / no</li> <li>Am<sup>3</sup>/h</li> </ul>	
6	<p><b><u>FEED DETAILS</u></b></p> <ul style="list-style-type: none"> <li>+ Size of Feed</li> <li>+ Feed size distribution</li> <li>+ Cement Type</li> <li>+ Feed Composition <ul style="list-style-type: none"> <li>- Clinker</li> <li>- Gypsum</li> <li>- Limestone</li> <li>- Additive</li> </ul> </li> <li>+Moisture for each feed composition <ul style="list-style-type: none"> <li>- Clinker</li> <li>- Gypsum</li> <li>- Limestone</li> <li>- Additive</li> </ul> </li> <li>+ Moisture in total Feed (Max. &amp; Min)</li> </ul>	<ul style="list-style-type: none"> <li>mm</li> <li>% &amp; mm</li> <li>OPC/Mixed</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> <li>%</li> </ul>	

7	<p><b><u>OPERATION DATA</u></b></p> <ul style="list-style-type: none"> <li>+ Mill operation hours / day aver.</li> <li>+ Mill Inlet Pressure</li> <li>+ Mill Inlet gas temp.</li> <li>+ Maximum available gas inlet temperature</li> <li>+ Mill Outlet Pressure</li> <li>+ Mill Outlet gas temp.</li> <li>+ Actual airflow (mill outlet)</li> <li>+ DP across mill (pressure outlet-inlet)</li> <li>+ Residue 90 micron Mesh</li> <li>+ Residue of 212 microns Mesh</li> <li>+ Average power consumption for mill for IDF for total (mill + IDF) for separator</li> <li>+ Average operation hours per day</li> <li>+ Average working hours for roller segments (for exchange) and table liners (for exchange)</li> <li>+ Wear rate of table segment</li> <li>+ Wear rate of roller segment</li> <li>+ Area of nozzle ring</li> <li>+ Water injection and location</li> <li>+ Mill vibration</li> <li>+ Revolution speed of separator</li> </ul>	<p>H/d mbar °C °C mbar °C Am<sup>3</sup>/h mbar % % kWh/t</p> <p>h/d h</p> <p>h g/t g/t m<sup>2</sup> t/h mm/sec RPM</p>	
8	<p><b><u>GRINDING PRESSURE</u></b></p> <ul style="list-style-type: none"> <li>+ Mill operation grinding pressure</li> <li>+ Mill max allowed grinding pressure</li> </ul>	<p>bar bar</p>	
<b>No.</b>	<b>Question</b>	<b>Unit</b>	<b>Answer</b>
9.	<p><b><u>CLASSIFIER DETAILS</u></b></p> <ul style="list-style-type: none"> <li>+ Type</li> <li>+ Installed motor power (name plate)</li> <li>+ Speed Range</li> <li>+ Have Invertor?</li> </ul>	<p>kW RPM Yes/no</p>	
10	<p><b><u>CLASSIFIER GEARBOX DETAILS</u></b></p> <ul style="list-style-type: none"> <li>+ Maker</li> <li>+ Size</li> <li>+ Gear Ratio</li> <li>+ Type</li> <li>+ Safety factor</li> </ul>	<p>kW</p>	

11	<b><u>TYPE OF DEDUSTING EQUIPMENT</u></b> + Cyclones before BF + Bag Filter (filter bags area) + E.P.	yes/no m <sup>2</sup> yes/no	
12	<b><u>PREFERRED BENEFIT</u></b> (give priority from 1 to 4, 1 is highest priority) Production increase : Residue improvement : Power saving : Less vibration:		
<b>No.</b>	<b>Question</b>	<b>Unit</b>	<b>Answer</b>
13	<b><u>ELECTRICITY AND CONTROL</u></b> + Cycle + High Tension + Low Tension	Hz Voltage for more than kW Voltage for less than kW	
14	<b><u>ANY ADDITIONAL INFORMATION</u></b> <b><u>AND SPECIAL REQUIREMENTS</u></b>		

**DRAWINGS REQUIRED**

+ **PROCESS FLOW SHEET**

+ **MILL GENERAL DRAWINGS**

+ **CLASSIFIER DRAWINGS**

## + FAN CHARACTERISTIC CURVES