Summary of comparison & Benefit of high alumina grinding media/Lining

- Wear & tare of high alumina grinding media about 0.2 % very less in compare to natural media i.e. about 2.0 %
- Power energy cost reduce it is help for reduce in overall cost of production by power energy saving.
- Glaze making grinding time near about 55 % so it is help full to take more charge by using same ball mill.
- Approximately45 % energy saving of power by using high alumina grinding media/lining for glaze grinding..
- No any contamination of media harm full because it made from same type of ceramic material.
- Due to less grinding time, less contamination added in glaze material.
- Lining life is very long, no needed to erect lining in two years its life is about 5 to 7 years.
- Shape of media even round or cylindrical as per requirement.
- Size can be available as per requirement from 25 mm to 50 mm.
- Due to thickness of high alumina lining is less than natural stone lining 10% more space available for loading.

NATURAL GRINDING MEDIA / HIGH ALUMINA GRINDING MEDIA			
BALMILL SIZE 6FT X4FT 3 H.P MOTOR	NATURAL MEDIA	HIGH ALUMINA MEDIA	Kwh consumed per charge natural/high alumina
Total weight of grinding media kg	1200 kg	1200kg	
Lining life	2 years	7 years	
Grinding time hours for one charge	22	12	49kwh/ 26 kwh
Shape & Size	Uneven	Even	
Specific gravity of material gr/cc	**2.4 gm/cc**	**3.7 gm/cc**	
Wear & tare ratio of pebbles	**2%**	**0.2 %**	
Electrical energy saving per charge			**47 %**

COMPARISON TABLE

Table shows that by adopting new technology 10 hours grinding time reduce saves more than 45 % electrical energy.

After implementing & commissioning above technology at M/s oswal pottery works at Thangadh Gujrat as demo project, all data recorded before & after to show practical result for cluster in next pages of this report.

Oswal Pottery Works

Partner