



Mill Lining Questionnaire

Customer: _____

Type of material/ore: _____

Application _____

Phone: _____

Email: _____

Date: _____

1. Mill Parameters

Dimensions inside the mill

Diameter, [m] _____

Length, [m] _____

Mill Drive Power [kWt] _____

Capacity [tph] _____

Max Temperature Inside The Mill [°C] _____

Type Of Mill

Autogenous Grinding Mill (AG)
 Semi-Autogenous Grinding Mill (SAG)
 Ball Mill W/Grates
 Ball Mill Overflow
 Rod Mill (RM)
 Multi-Section Mill*

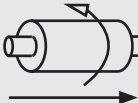
Stage Of Grinding

Primary
 Secondary
 Regrinding

Process

Wet
 Dry

Direction Of Rotation

 Clockwise
  Counter-clockwise

Rotation speed

Constant
 Variable

RPM

% of critical speed

2. Grinding Media

Type

None
 Balls
 Cylpebs
 Rods
 Pebbles
 Special

Material

Steel
 Cast Iron
 Ceramics

Media Size, [mm]

Volume Of Grinding Media Inside The Mill, [%]

Total Load Volume, [%]

3. Feed Material

Mineral Composition

Silicium Concentration, [%]

Ore Toughness, [f]

Bond's Working Index, [kWt*h/t]

Slurry density, [kg/m³]

Feed Size

Max, [mm]

80%, [mm]

Acids, oils, and other additives present in feed

Concentration, [g/t of feed]

pH

Recirculation load

% _____

tph _____

*Fill in the form for each cell

4. Mill Lining Used

Feed End

Material					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manganese Steel	Cro-Moly Steel	High Chrome White Iron	Rubber	Rubber-Metallic	Metallic Composite
Hardness (new/used)*	Number of rows	Lifetime**, [h]	Supplier	Price, \$/kg	

Shell

Material					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manganese Steel	Cro-Moly Steel	High Chrome White Iron	Rubber	Rubber-Metallic	Metallic Composite
Hardness (new/used)*	Number of rows	Lifetime**, [h]	Supplier	Price, \$/kg	

Grate wall or Discharge End

Material					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manganese Steel	Cro-Moly Steel	High Chrome White Iron	Rubber	Rubber-Metallic	Metallic Composite
Hardness (new/used)*	Number of rows	Lifetime**, [h]	Supplier	Price, \$/kg	
Grate Slot Size, [mm]	Pebble Port Slot Size, [mm]	Total Grate Area, [m ²]			

Pulp lifter

Material					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Manganese Steel	Cro-Moly Steel	High Chrome White Iron	Rubber	Rubber-Metallic	Metallic Composite
Hardness (new/used)*	Number of rows	Lifetime**, [h]	Supplier	Price, \$/kg	

5. Elements Loading Method

Relining Machine	Load Capacity	
Yes <input type="radio"/> No <input type="radio"/>		
Through Feed Trunnion	Feed Trunnion Size, [mm]	
<input type="radio"/>		
Through Manhole	Qty. of manholes	Manhole size, [mm]
<input type="radio"/>		
Relining is done on a stand		
<input type="radio"/>		

6. Comments

Describe the problems with the lining used. For example: uneven wear, pinning of grates, chips and cracks appear, partial replacements needed, problems with relining, etc.

* The hardness of the new and the worn lining shall be measured, the hardness-testing method must be indicated.

** The average of the last three