

## INCREASING WEAR LIFE OF CYCLONE DISTRIBUTOR

Cyclone Distributor / Alumina & SiTech / Gold

**Location** Central Queensland  
**Industry** Gold Processing

### THE CHALLENGE

HMA Wear Solutions was approached by the client to provide a solution to increase the life of the cyclone distributor used on site. The way our competitor had lined the distributor was allowing for premature failure at the junction of the arms to the distributor body. With the plant going 6 months between shutdowns, our client needed a better solution. We needed to eliminate the requirement for maintenance between the shutdowns.

### THE SOLUTION

HMA Wear Solutions offered fully lined arms with SiTech (Silicon Carbide). These arms would extend into the main body with radius plates to protect the main wear area of the junction of the body and arms.

HMA also offered tight tile joints for the balance of the distributor body, with Monolithic Alumina cylinders at the feed into the distributor which matched IDs with the Alumina lined feed pipe.

### THE OUTCOME

HMA Wear Solutions is now the preferred supplier of Class cyclones at site. The liners now being used will give the client a huge increase in wear life and lower on going costs associated with maintaining these cyclones. We are working with site with our in house process engineers to assist with changes to nozzle sizes that may be used to give the client changes to cut points as requested.



Previous distributor had a poor lining method used by a competitor



HMA distributor with full SiTech arms that extended into the main body with a radius plate as a one piece design

Overview	
<b>Application</b>	Gold
<b>Product Handled</b>	Ball mill discharge
<b>Plant Production</b>	Conventional crush-grind-CIP to produce gold
<b>Duty</b>	Distribution to class cyclones
<b>Issue Being Resolved</b>	Extend wear life
<b>Material Replacement</b>	Alumina tiled
<b>Maintenance Frequency</b>	Previously less than 6 months
<b>What was installed</b>	SiTech liners (Silicon Carbide) SiSiC into arms and Alumina tiled body.
<b>Study Results</b>	Improved wear life to client can be confident of equipment lasting between the 6 month shutdowns.

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