

# ELASTOTEC CERAMIC WEAR PANELS – CASE STUDY LARGE QUARRY – TRAIN LOADOUT DEFLECTOR



#### **BACKGROUND:**

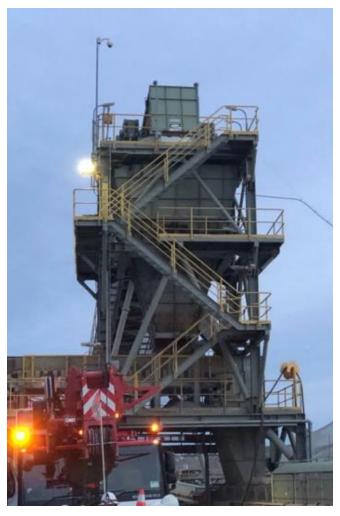
Located in southwest of Sydney this hard rock quarry can produce up to 5 million tonnes per annum of products (ballast, aggregate, manufactured sand and road base). The majority of production from the site is used for construction projects in concrete and road building.

The quarry operates a train load out station for transporting quarry products to a Sydney distribution centre.

## **C** magnefast<sup>™</sup>

#### **APPLICATION:**

Following a presentation to site maintenance personnel on the Magnefast Wear Panel System, the train load out transfer chute deflector was selected for an initial installation. Ceramic Magnefast panels were chosen to replace the existing rubber wear liners with the expectation that this would provide longer service life. The liners used were 300 x 300 x 63mm that are made up with 50mm thick aluminium oxide tiles bonded to rubber and with an engineering thermoplastic backing plate containing nine high strength magnets. Each wear panel was held in place with nine magnets giving a total holding force of > 450kg per panel.

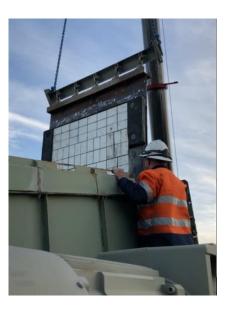




### **ELASTOTEC CERAMIC WEAR PANELS – CASE STUDY** LARGE QUARRY - TRAIN LOADOUT DEFLECTOR



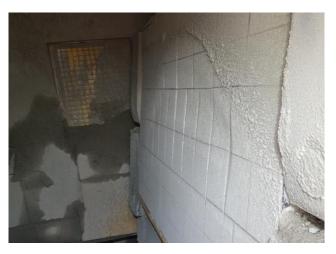


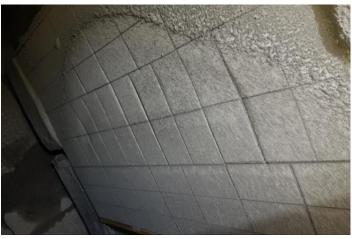


The deflector for the train load out station is mounted at the top of the chute approximately 25 metres in the air. This means that for liner changes craneage is required. The quick change out time for the Magnefast panels with the single sided attachment system, greatly reduces the liner change time which in turn reduces the time that the crane is required on site - this provides a substantial reduction in the cost of these shutdowns.

#### **RESULTS:**

After 3 months service wear in the impact zone was approximately 5mm - this equates to an estimated service life of 30 months compared to the previous rubber liners 10 month change out time.





### Contact Elastotec for further information on these products or to enquire about our full product range:

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