# ASGCO APPLICATION CASE STUDY SOLUTIONS / RESULTS



# **Armorite Wear Liners Drastically Reduce Maintenance Costs at Copper Mine**

**Application** Copper Ore Tripper Tertiary Crusher Feed System **Material** 2 ½" minus Secondary Crushed Copper Ore

Material Spec 105#/cuft @ 2.5% moisture

Capacity 6800 TPH

Liner Installation Location Tripper Car "Pant Leg" Chutes

Original Liner AR400, 1" Thick Cast Type

Original Liner Life 7-10 Days Maximum NOTE: Liners were being changed out every

down day (7 day interval) due to excessive wear.

# **Customer Solution**

Install AR500 1" Thick Cast Type Liner instead of original AR400.

## Results

Customer experienced a "longer" life out of the AR500 cast liners (approximately 3-4 weeks total life) –vs– the AR400. But it was still not what they were expecting. Unscheduled down time due to wear continued to be an issue in this application.

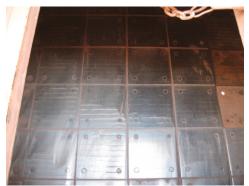
#### **ASGCO Armorite Solution**

The customer purchased "four test" (4) pieces of Armorite 700 Brinell Wear Liner (11  $\frac{3}{4}$ " X 11  $\frac{3}{4}$ ") in April 2008 and installed them in July of the same year. They were given a 5X life guarantee over the AR500 Liners, which meant it had to last for 5 months.

#### **Results of Armorite Test**

After 12 months (one year) the Armorite 700 Liners were still in service. The customer was convinced they had finally found a product that would "out perform" anything they had previously tried. We "exceeded" all expectations and were asked to come in to measure all of the liners to be used in this Tripper Car " Pant Leg" Chute.

<u>Note:</u> The original Armorite "test" liners were in service for approximately 16 months prior to being replaced, which equates to a 16+ times service life over the AR500 cast liner product.





### Conclusion

The customer has now standardized the Armorite 700 product in this application on all sizes of liners, and has mentioned that the cost savings in maintenance out weighs the additional cost of the product a minimum of 10 fold. They have now gone to a "visual" inspection of the tripper "pant-leg" once a month, instead of *daily* as previously required with the competitor's liners.

These results have been typical in most applications where Armorite has been installed, with a minimum life of 6-8 times that of AR500.

