



Deep Dive into Reliability

CASE STUDY: Copper Installation

THE SCENARIO:

Using the current footprint, the customer wanted to replace an existing screen in a Sag Mill copper installation with a General Kinematics STM-SCREEN™. To avoid unplanned downtime, the operations team swapped out their existing screen 4 times per year. The costs incurred due to the frequency of rebuilding the screen, including, replacement parts, downtime, and maintenance personnel were substantial.

By The Numbers:

- Parts spend annually \$550,000 USD
- Machine rebuild time annually – 400 total hours
- Reactive downtime – approximately 50 hours annually

ROI CALCULATION:

- \$550K in parts spend removed from reoccurring expenses
- Eliminated 4 rebuilds per year
- Removed 400 hours of labor hours for machine rebuilds
- Eliminated 50 hours of reactive downtime

SOLUTION:

Complete ROI in 8 months

The customer understood that the GK STM-SCREEN™ wasn't the "same screen" from a different OEM, but an entirely new design. After researching GK's STM-SCREEN™, the team came to the conclusion that this screen would run, without fail. The immediate benefit was the \$550K in parts spend removed from their reoccurring expenses. In this case, the customer redeployed their personnel to other projects and did not adjust headcount. However, they did calculate standard hourly rates multiplied by 400 hours of machine rebuild time to add to their ROI calculation. Lastly, their downtime per hour rate was defined by the average amount per work order with no loss production factored into the equation. This dollar amount was then multiplied by the historical 50 hours of reactive downtime. The total of these calculations provided a documented ROI in 6 months.

Intangible Business Benefits

Maintenance planners thrive on consistency and resources. By eliminating 4 rebuilds per year this customer was able to revise their maintenance plan and optimize their utilization. The time previously spent on rebuilds is now used to tackle other work orders. Additionally, with GK's STM-SCREEN™, the customer was able to reduce costs associated with spare parts and the management of parts inventory.



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CONCLUSION

Maintenance leadership knew they had an issue that needed solving. Spending such a large percentage of their budget repairing a single screen was not sustainable. Running the numbers demonstrated they could purchase GK's STM-SCREEN™, within the confines of their maintenance budget. Upon a successful startup, their new screen has been running without incident for 11 months. The maintenance team is being celebrated for their innovation and commitment to continuous operational improvement.