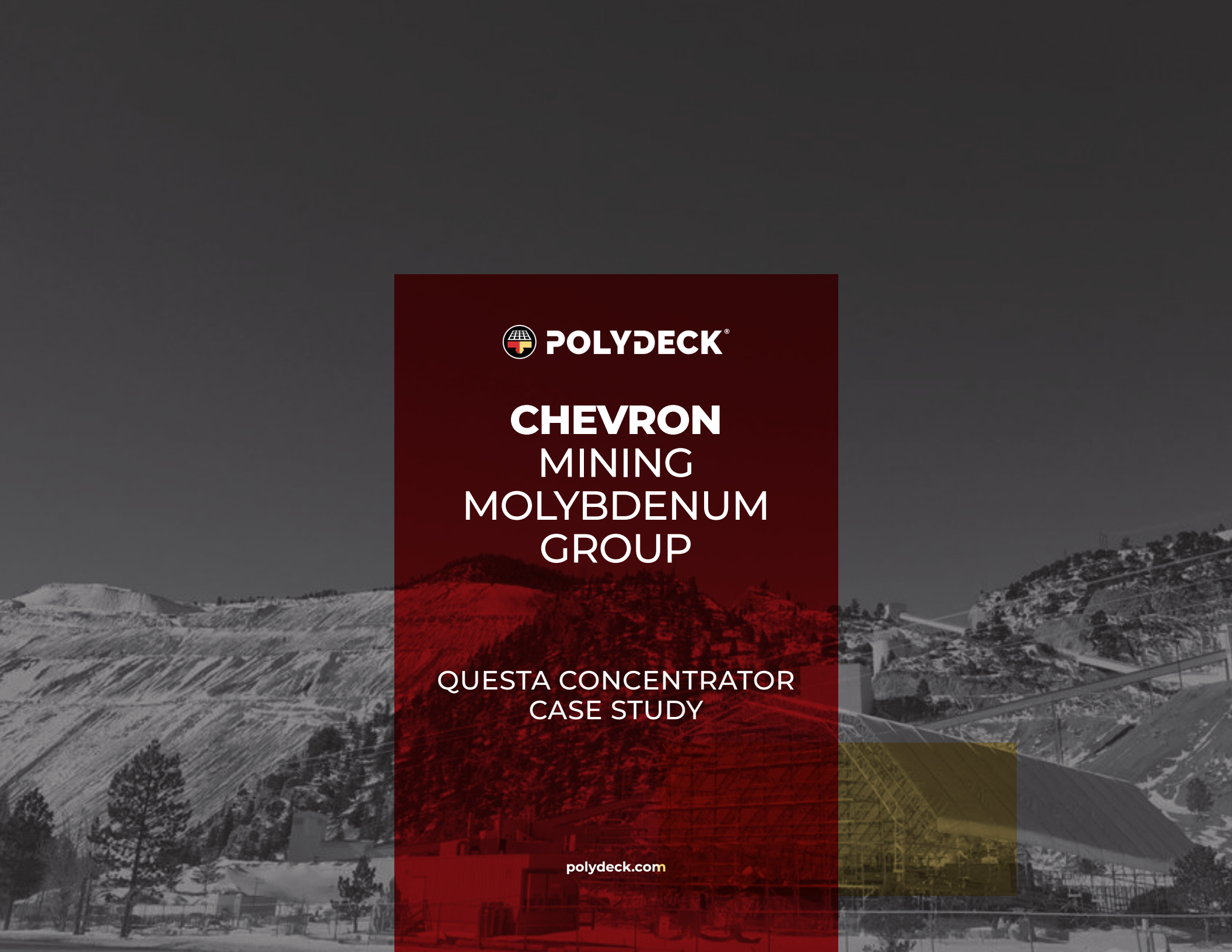


POLYDECK®

CHEVRON MINING MOLYBDENUM GROUP

QUESTA CONCENTRATOR CASE STUDY

polydeck.com

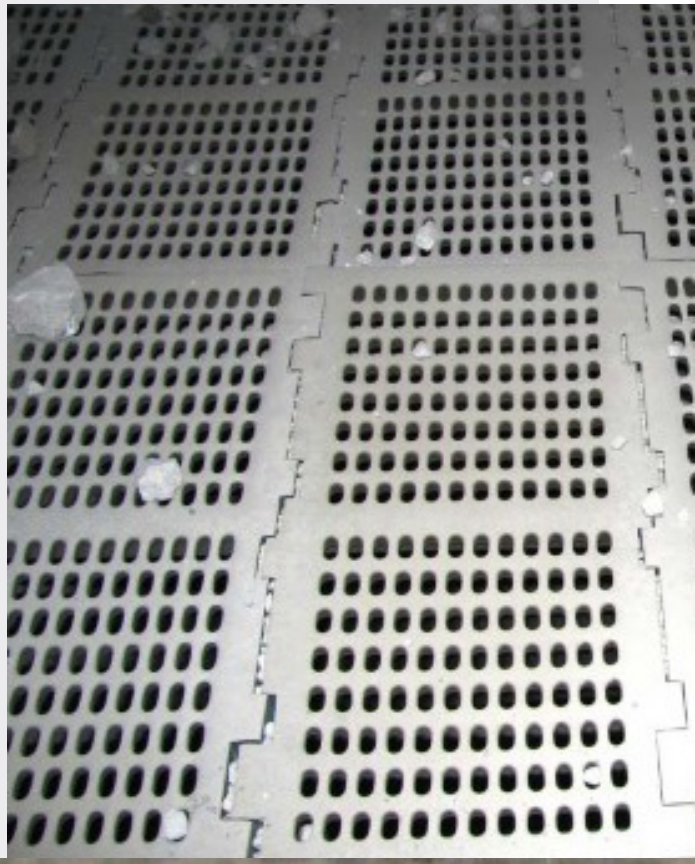
CHALLENGE

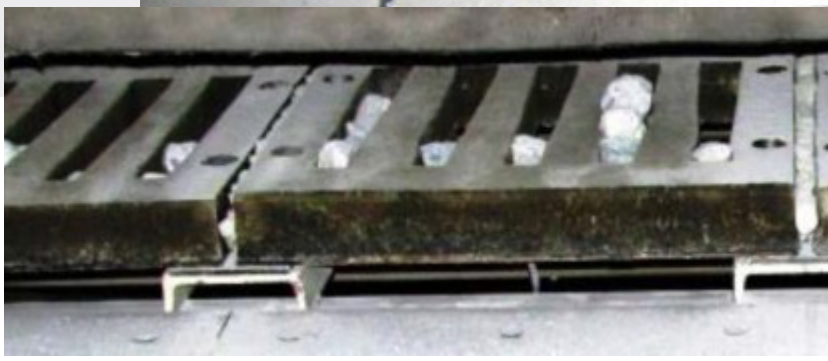
Polydeck's field expert conducted a screening evaluation and identified the opportunity to increase screen efficiency and reduce material volume on the site's crushers by switching to Polydeck's maxi panel from competitor panels.

The Questa Concentrator's tertiary crush and screen circuits are both open circuits. Their existing setup was processing crusher product, oversized and undersized product, tertiary product and more, causing significant maintenance and wear issues along with constant blinding.

- Secondary top deck effective open area = 20% - 30%
- Top deck shows a large amount of plugging
- Bottom decks effective open area = 20%
- Slot orientation for secondary screen bottom deck is against flow
- Bottom deck slot designs have rounded corners

** Image shows competitor panel with 20% open area.*

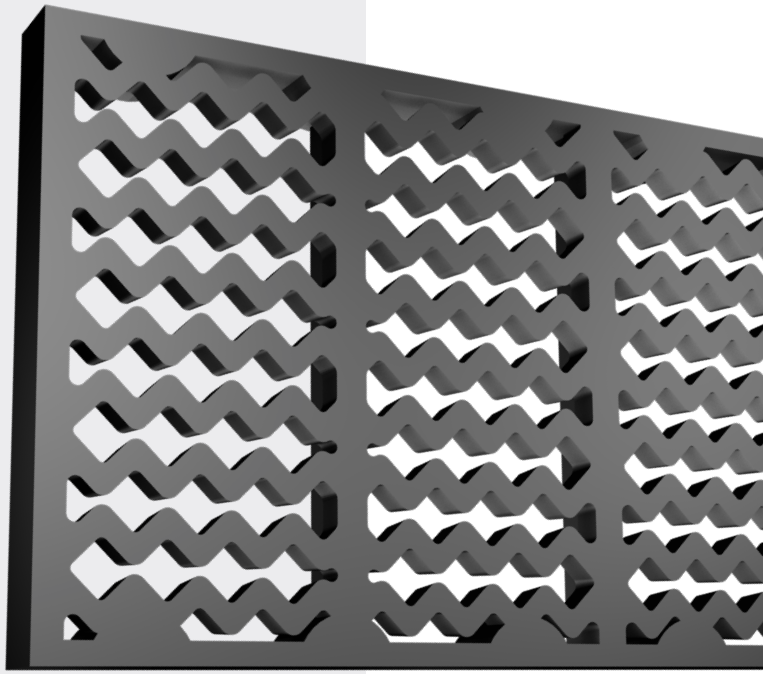




** Image shows plugging on competitor's panels that were used on the top deck of secondary screen.*

SOLUTION

- Upgraded to Polydeck's PipeTop stringer system for panel fastening versatility
- Upgraded to modular screens on the secondary screen and eliminate complicated hardware and costly panel change outs
- Implemented two types of panels on the secondary top deck to optimize wear life and increase screen availability
  1. **Heavy duty, low open area for feed zone (high wear area**)
  2. **Standard duty, high open are for discharge zone**
- Installed slot design with the flow of material to further increase screen efficiency
- Utilized a slot length minimum of 3:1 to increase screen efficiency
- Used a VR style panel on the top deck to eliminate plugging and blinding on secondary top deck



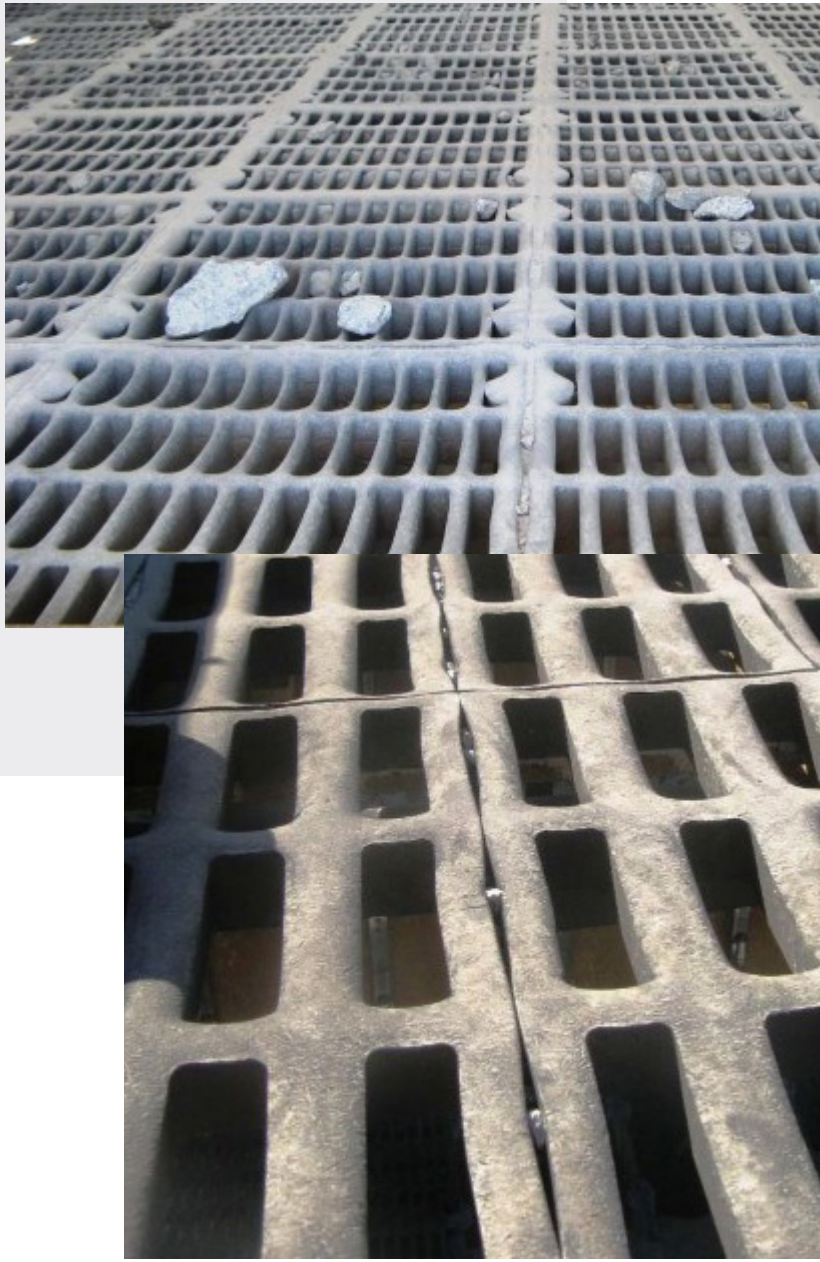
** Image shows Polydeck's Maxi VR style panel used to eliminate plugging on secondary top deck.*

RESULTS

Making the switch to Polydeck's Maxi panels increased open area by 80% and increased throughput by 50%, while decreasing the amount of material being fed into the crushers at the same rate. Each deck's open area was increased by 35% from the previous 20%.

- Screen efficiency increased by 50%
- Throughput capacity above 1000 TPH
- Decreased crusher feed tonnage @ 950 TPH, preserving wear life of crusher manganese & bushings

** Image shows Polydeck's high open area Maxi Slotted panels with 36% open area.*



** Image shows Polydeck's heavy-duty panels installed in feed zone to optimize wear life.*

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