Case Study: Meeting the Challenges to Processing Potash

Intrepid Potash, a TerraSource Customer based in Utah, was looking for innovative ways to increase the profitability and productivity of their operations. The company needed the TerraSource engineering team’s expertise to improve their processes to ensure customers’ expectations for a very fine end product could be met in an efficient and consistent manner.

Challenges
- Consistently process wet, caking material
- Reduce large, uneven clumps
- Eliminate overs and minimize fines
- Dependably run high capacities over a long distance (5-mile slurry line)

Solution
Intrepid Potash chooses TerraSource Global to provide application expertise, service and the right machinery to maintain significant product throughput. A key factor of this successful long-term partnership with Intrepid Potash is a mutual trust that TerraSource is invested in building an enduring relationship with our customers and ensuring their long-term success.

The Intrepid Potash team was previously using an impact crusher to carry out size reduction. The TerraSource team determined that the impact crusher was effective at reducing the size of the material, but not as efficient for eliminating overs that provided rolling resistance in the five-mile slurry line back to the mill. The TerraSource team identified the Gundlach Crusher NanoSiz-R Roll Mill as the ideal solution in large part due to the increased size of the crusher rolls and the enhanced flexibility and safety offered by hydraulic adjustment technology. Intrepid Potash gained end-product with exact size specifications without the large material that is often bypassed with an impact-type crusher.

These improvements led to a 20% reduction in electrical usage and 100% of end-product below the gap set specification. This solution also generated more even wear of their crusher rolls, which extends equipment and OEM part wear-life.

The flexibility, durability and precise sizing capability of the NanoSiz-R helps explain why nearly 40 of these machines are in use around the world for a variety of applications, with many more machines on order. Talk to us today about what TerraSource can do for your Potash operation! We also offer one-on-one consultations at our Demonstration and Testing Center so our customers can see first-hand how our equipment, like the NanoSiz-R, affects your raw materials.

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Contact us through our website at www.terrasource.com