

Important Considerations for Designing a Bulk Conveying System



Compared to package conveyors, the design requirements of bulk conveying systems can present a whole new range of complex issues.

The key to the successful conveying of bulk materials is giving ample and knowledgeable consideration to the physical, chemical and handling characteristics of the materials involved. These include: size, abrasiveness, flowability, weight, corrosiveness, etc.

This series of questions will ensure no details slip through the cracks in the design phase of your next bulk conveying system. »

- What is the material?
- What is its weight per cubic foot?
- What is its temperature? Its percentage of moisture?
- What is the maximum size of hard lumps? What percentage of the material is lumped?
- What is the volume to be conveyed? (volume or weight per hour)
- What is the distance?
- Is it horizontal, inclined or declined?
- How will the material be fed into the system?
- What are the duty requirements? (hours per day; stops and starts)
- What is the system feeding into?
- Any special requirements? (voltage, explosion proof, mountings, power sources, etc.)
- What other considerations need to be taken into account? (space requirements, environmental conditions, MFG preference, etc.)

The Next Step? Choosing the Toughest and Best Equipment for the Job

Martin is a long-time IBT resource for both bucket and screw conveying equipment of bulk products. Their Idlers and Heavy-Duty Conveyor Pulleys are manufactured to deliver optimum performance and longevity in some of the most demanding industries that include cement and aggregate, sand and gravel quarries, coal mines, unit packaging, food processing and recycling.

Martin's Elite Series Pulleys are designed to meet today's demanding applications by offering the following standard benefits:

- **Profiled Integral End Plates:** True-Turbine profile end plates that distribute stress more evenly, and moves stress away from the hub, reducing the risk of failure
- **Weldment:** Submerged arc welding with machined-in preparation provides maximum weld penetration
- **Optimization:** Stocked with MXT bushings but available for Keyless Locking Devices



You Can Count On Team IBT-Martin For All Of Your Conveying Needs!

With the answers to the listed questions above, IBT and Martin can begin their work engineering your next bulk conveying system. Once the designs are done, Martin builds it, ships it and it is installed and started up with IBT's assistance, at the customer's request.

IBT Conveying Systems can work with you to completely solve your belt conveying needs; Our engineering staff is prepared to assist you with the right solution for your operations. We offer exceptional delivery times on stock and made-to-order products! **Contact our IBT Conveying Systems Manager, to learn more about our engineering capabilities – or give us a call at 913-677-3151 today!**