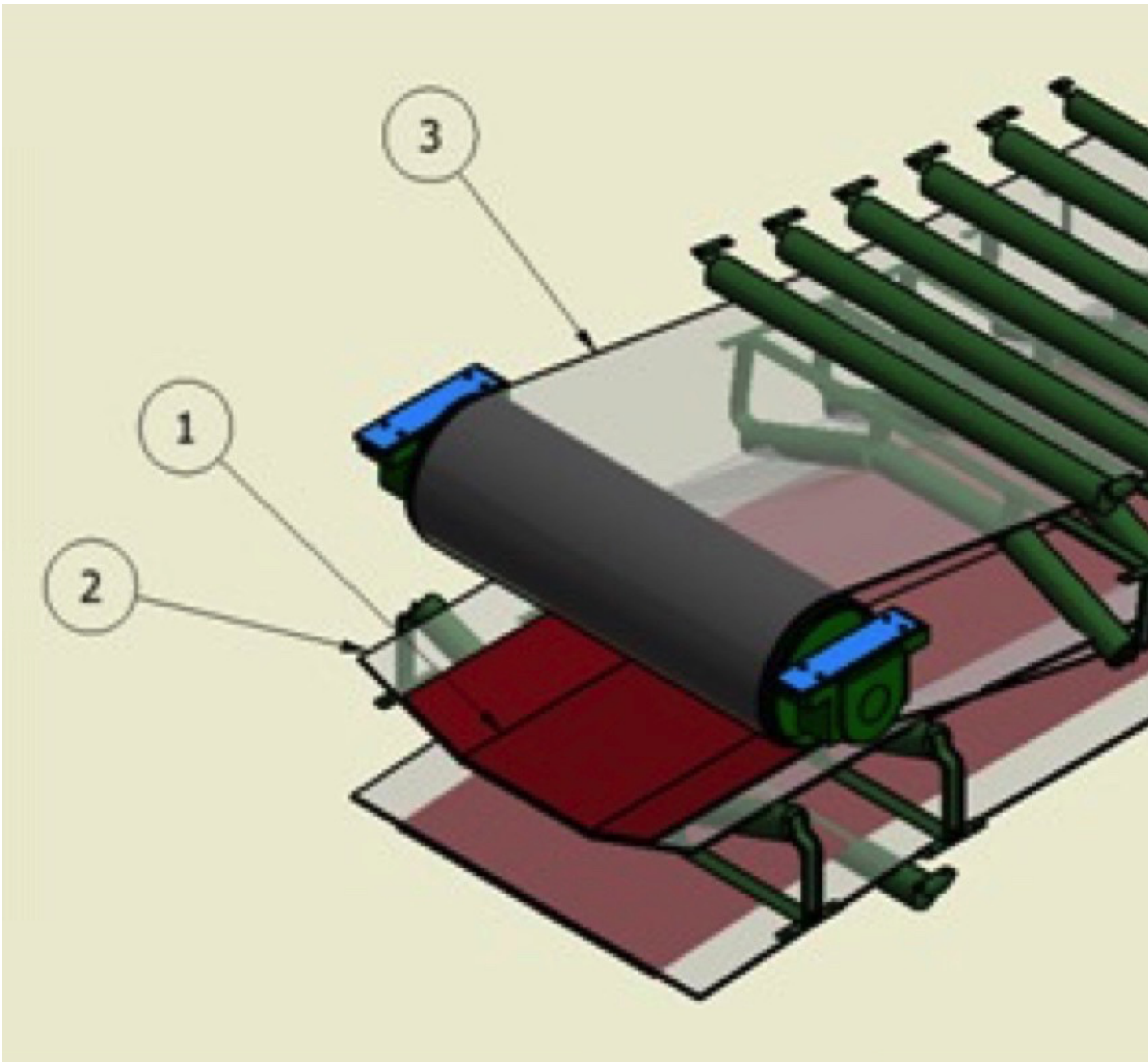


Company News

## **Dos Santos International awarded Patent and Order of newest Product**

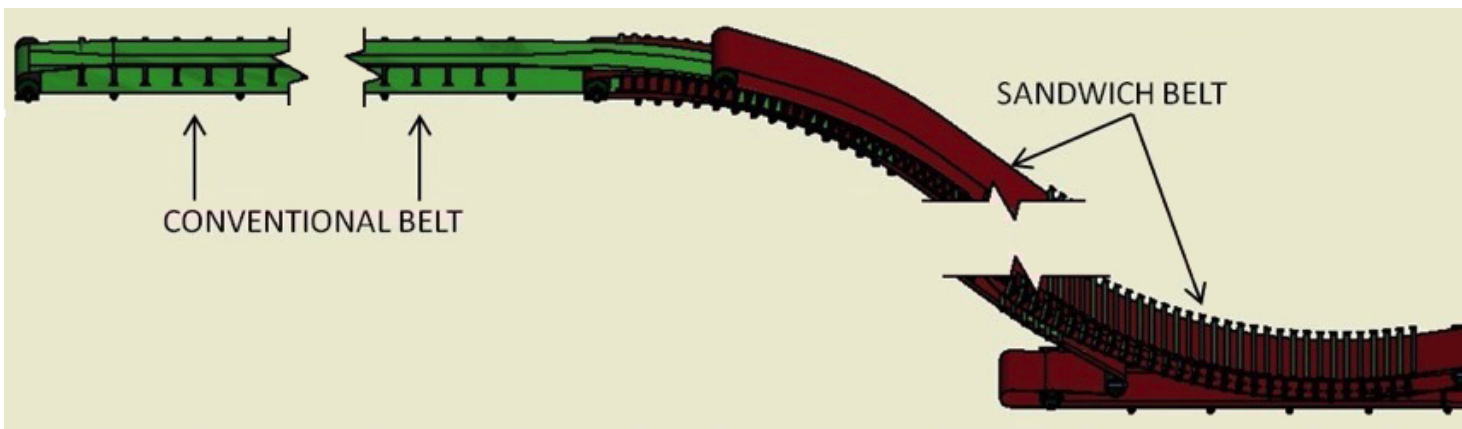
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*Marietta (GA), United States -*



Adder Snake generalized sandwich entry.

The concept of the DSI Adder Snake, invented by DSI's vice president, Marc dos Santos, was inspired by a specific application. The DSI Adder Snake swallows a narrower conventional belt, along with its material, into the two wider sandwich belts, allowing the material to enter the sandwich belts with minimal disturbance. It does this without the energy loss and additional equipment required for a standard transfer. The use of this technology extends to a wide variety of applications, including marine terminals, docks and shiploading. A particular shiploading application garnered the first order for the newly patented DSI Adder Snake for Yara Sluiskil in the Netherlands. In this upgrade project, as is typical,

the new shiploader is perpendicular to an existing dock conveyor. Its elevation is such that a high angle path is necessary to reach the height required within the horizontal space available. A standard sandwich conveyor was therefore integrated into the design. The initial design concept used a conventional conveyor “stinger” boom out from a tripper, to the tail of the high angle conveyor. This had the disadvantage of an additional transfer and extra equipment, so the client readily embraced the idea of extending the high angle conveyor tail to receive the material directly from the dock conveyor tripper. Attempted implementation of the new arrangement immediately revealed that sufficient tripper height did not exist to allow the tail of the sandwich belt high angle conveyor.



Adder Snake generalized layout.

The limitation was so severe that the minimum pulley diameter required for the standard sandwich conveyor belt consumed too much of the space. The solution is to employ the Adder Snake design, using a light, thin conventional belt that can be wrapped around a somewhat smaller tail pulley. This belt, which is also 400 mm narrower, will carry the material through the loading point and travel just under 7 m before being enveloped into the 1600 mm wide sandwich belt. The system will elevate 600 t/h of  $0.75 \text{ t/m}^3$  of sulfur prills around 12 m at a belt speed of 2 m/s. Dos Santos International is the world's foremost authority on sandwich belt high angle conveyors, founded and led by the inventor of the system, Joseph Dos Santos. DSI was founded on its extensive worldwide experience in sales, engineering, and construction of bulk materials handling systems and equipment. This has included major contributions that have expanded the range of bulk handling and transport solutions. Most notably advances in sandwich belt high angle conveyors have led to their worldwide utilization. The expertise of DSI spans a wide range of materials handling systems and equipment including high angle conveyors, high powered, high capacity, high lift slope conveyors and long overland conveyors utilizing the very latest technology.