

## Spiroflow T6 Bulk Bag Discharger Discharges Decaffeinated Tea Into Tumble Blender Containers

### Customer Requirements

**Tetley GB Ltd.** is a subsidiary of Tata Tea, one of India's best know tea brands and one of the largest processors in the worldwide tea market. Tetley is also one of Britain's favorite cups of tea. Their entire range of teas are blended and packed at their Eaglescliffe, Teeside plant in the U.K. where output is running at 50 million tea bags a week! In 2006, Tetley decided to improve the efficiency of their Decaffeinated Tea handling facility by having tea delivered in 1,100 lb. (500 kg) bulk bags (FIBC's) instead of in 55 lb. (25 kg) sacks. For transportation efficiency, the bulk bags are delivered to the plant stacked two high on a single pallet. An average of 11 bags need to be emptied daily at the plant that operates 24 hours, 5 days a week.

### Spiroflow Solution

Even though lift trucks are used to deliver the loaded pallets to the discharger, Spiroflow supplied a Type 6 Bulk Bag Discharger (BBD) – that comes complete with its own bag hoisting system. Once the loops of the upper bags are attached to a lifting frame, the bag can be hoisted up, traversed across and then lowered in position on the discharger, leaving the lift truck free for other tasks.

Once the first bag is unloaded and returned to the ground, the second bag can be installed into the discharger.

To ensure the dust-free transfer of tea, the T6 Discharger is furnished with a containment cabinet in which the neck of the bulk bag can be untied - once it has been restricted by a pair of pneumatically powered "V" shaped closure bars. With the interlocked dust cabinet access door closed, the Vee closure bars can be opened to allow flow to commence from the bag, through the central feed spout of the docking connection into the container below.

Both the dust cabinet and the docking device are connected to the plant's central dust collection system. This prevents any dust from escaping into the atmosphere during filling of the rigid containers or each time the hopper doors are opened to untie or re-tie the neck of the bulk bag.

The Spiroflow Type 6 BBD incorporates a pneumatically-operated telescopic docking connection that makes a dust-tight connection with the inlet of the container below. An easily removable magnet is fitted above the docking system to trap any foreign metal that may have become mingled with tea at the point of origin.



Rigging bulk bag on to lifting frame



Hoisting bulk bag into the Discharger