



Spiroflow Type 6 Bulk Bag Discharger



Spiroflow Flexible Screw Conveyor and the Ejector Dosing Equipment

### Customer Requirements

*United Utilities is the largest listed water company in the United Kingdom. The company owns, operates and maintains numerous utility assets, including water, wastewater, electricity and gas.*

- At the new United Utilities Cowm water treatment facility located within the Watergrove Water Treatment Plant at Wardle, United Utilities needed to add Powdered Activated Carbon (PAC) to the water it draws from the Cowm Reservoir.
- Adding PAC neutralizes a naturally occurring material known as geosmin that literally translates as 'earth smell.'
- Geosmin is an organic compound produced by microbes and algae that give the untreated water a harmless but undesirable earthy taste and aroma.

### Spiroflow Solution

As an approved supplier to United Utilities, Spiroflow was well positioned to bid for the Powdered Activated Carbon (PAC) dosing system required.

- The dosing system included a Spiroflow Bulk Bag Discharger, with an integral lifting hoist on a runway beam to easily load bags of PAC into the discharger.
- A Flexible Screw Conveyor transfers PAC from the discharger up to a volumetric metering feeder with a buffer hopper above.
- From here it is transferred to a second buffer hopper, which maintains a constant head of material above a 'Transvac' venturi ejector.
- PAC is drawn under vacuum from the second buffer hopper and metered proportionately into a by-pass water stream to form a slurry.
- This then reenters and is mixed with the main water flow into the water treatment works and subsequently the distribution system that serves homes and businesses in the Rochdale area.

Spiroflow was selected based on price, according to Darren Glover of GCA. "The equipment is very good," Glover said. "We had an initial teething problem caused by unexpected clumps of PAC that Spiroflow quickly remedied by fitting a vibrator to the collection hopper. The system has worked well ever since."

## How Can Spiroflow Help Your Business?

Contact us today to discuss your specific applications and needs.